Curriculum Guide

2026-2027

Our Motto

PRO VITA NON PRO SCHOLA DISCIMUS

▪ LEARNING—NOT JUST FOR SCHOOL BUT FOR LIFE ▪

Our Core Values

CURIOSITY

INTEGRITY

RESPECT

INCLUSION

PERSEVERANCE

RESILIENCE

Guided by our Mission

With the Mountain as inspiration and our motto as the promise—Learning, not just for school but for life—Berkshire School creates an inclusive community where students are known well, provides an empowering educational experience, and prepares students for lives of purpose.

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Academic Program

Course of Study
The heart of Berkshire's academic program is a rigorous and comprehensive college preparatory curriculum that fosters critical thinking, problem-solving, and intellectual curiosity across all disciplines. Five academic courses are the standard courseload for most students. Students are encouraged to pursue a subject to the most advanced level possible, which for many means taking courses well beyond those required for graduation. Each student's course of study is formed in consultation with the advisor, Form Dean, Department Chairs, Dean of Academics and, when appropriate, College Counselors. Form Deans and the Dean of Academics oversee and support the academic progress and performance of each student.

Graduation Requirements
Students earn one credit upon successful completion of a yearlong course and one-third credit upon completion of a trimester course. To graduate, students must earn 18 credits and meet the following *minimum* distribution requirements:

- ***Arts***: one credit of visual and/or performing arts (all Third Formers take a full year of art)
- ***English***: four years of form-level English and required every year while enrolled.
- ***History***: two years, including U.S. History; in addition, Third Formers must complete World History Through Religion, and Fourth Formers must complete Modern World History.
- ***Languages***: three years of the same language through level III
- ***Mathematics***: three years of mathematics, including Algebra I, Geometry, and Algebra II; four years strongly encouraged
- ***Science***: two core laboratory sciences (Biology, Chemistry, Physics)
- ***Health and Wellness****:* required for Fourth Formers

To pass a yearlong course, the average of the three trimesters must be a passing grade. In addition, Sixth Formers must pass all course work undertaken during the spring trimester in order to graduate.

Advanced Courses
Students who have demonstrated a strong commitment and aptitude in a particular subject may be placed in an advanced section of a course. Advanced courses are accelerated and extend the curriculum of a college prep course, challenging the student to apply concepts and skills at a higher level. Placement in an advanced course is determined by the department in consultation with the Dean of Academics.

Advanced Placement Courses
Berkshire School offers a number of different Advanced Placement courses within its six academic departments and administers the corresponding College Board assessments in May. Selection for an Advanced Placement course requires the successful completion of all course prerequisites and is determined by the Department in which the AP course resides. Students enrolled in an AP course are required to sit for the corresponding exam in May unless there are extraordinary mitigating circumstances. Only the Dean of Academics, in consultation with the AP Coordinator and the student's Form Dean, may excuse a student from an AP exam. In cases where a student does not sit for an AP exam, absent extraordinary mitigating circumstances, they will be required to take a cumulative exam to receive credit for the spring trimester subject to the usual grade calculations involving cumulative examinations. Students who score successfully on their AP exams may be eligible for advanced standing in many colleges and universities. Students should note that when they elect to share their AP scores with colleges, all of their AP scores are sent, not individual scores of the student's choosing.

Berkshire will not facilitate students taking an AP exam in a subject where Berkshire offers the corresponding course unless the student is enrolled in that course. Exceptions might be granted in the following cases:

- Sixth Formers who cannot fit a particular AP course into their sixth-form year schedule, but who hope to self-study and sit for the corresponding AP exam in order to earn possible college credit or advanced standing, may do so with the permission of the Department Chair and the Dean of Academics.
- Native or heritage speakers of French, Spanish, or Chinese may sit for the AP exam in their native or heritage language without taking the corresponding AP course with the permission of the Department Chair and the Dean of Academics.
- In addition to the exams for AP classes currently offered at Berkshire, only the following supplemental exams may be administered based on interest for students who are enrolled in a similar course at Berkshire: Macroeconomics, Music Theory, Precalculus, and Psychology.

Health and Wellness
In Health and Wellness, fourth-form students focus on developing life skills to support their overall well-being. Through self-reflection and class discussions, students explore the many ways they can build healthy relationships with themselves and others. This pass/fail course comprises three units, each focusing on a different aspect of wellness: cognitive well-being and adolescent life skills, substances and healthy decision making, and human relationships and sexuality. Topics addressed include the teenage brain, mindfulness, stress management, decision making, substance use and abuse, gender and sexual orientation, sexual education and the reproductive system, consent, and healthy relationships. *This is a non-credit course required during the fourth-form year.*

Independent Study *(Forms V and VI)*
Independent Study is for motivated students who have exceeded all curricular offerings in a specific discipline(s) and are interested in developing an independent project to advance their knowledge in that discipline(s). An independent study must be taken as a sixth course, and it can run for one trimester, two trimesters, or the full year. Students must complete a culminating project or paper, which may include presenting the results of their project to members of the Berkshire community in the spring. *Prerequisite: independent study application and committee approval*

Arts

Visual arts students may pursue a wide range of artistic disciplines, including studio art, ceramics, photography, digital art, and sculpture. They may study a particular medium in depth or sample several from the broad offering of courses. While a strong technical foundation is stressed, equal emphasis is placed upon creative self-expression and developing the artist's unique voice. Advanced studies include a strong emphasis on critical and creative thinking, as well as portfolio preparation.

Performing arts courses offer students the opportunity to explore a variety of disciplines through both active participation in group ensembles and through classroom study. Courses of study are available for every level of student, from the beginner to the most advanced artist. The programs emphasize technical proficiency, collaboration, creative expression and stage presence, with the opportunity to perform in a variety of concerts, recitals and performances throughout the year.

One credit of visual and/or performing art is required for graduation.

Visual Arts

Note: Visual Arts courses are yearlong electives; however, students may request to switch visual art disciplines at the trimester break if scheduling allows.

Ceramics
(Fall, Winter and/or Spring Trimesters)
This course introduces the student to the many aspects of clay work. Students explore texture, form, and function through a variety of hand-built techniques such as pinch, coil and slab. Students gain an understanding of the many stages of clay from plastic to leatherhard, bone-dry, bisqueware and glazeware. They explore a variety of glazing and finishing techniques used in electric kiln firing. Students begin to explore throwing techniques on the wheel. With an eye toward ethnic, historic, and contemporary considerations, classroom assignments challenge the blossoming potter/sculptor to embrace creative thinking while developing basic skills.

Intermediate Ceramics
(Fall, Winter and/or Spring Trimesters)
This intermediate-level course allows time for the dedicated potter/sculptor to further develop and refine the skills begun in previous levels. It also provides an opportunity for students to take part in studio management through loading the kiln, pugging clay and making glaze test tiles. At this level, students begin developing more conceptual art, as well as refining their technique. The creative process is emphasized and expanded as each student risks failure to find success.

Advanced Ceramics
(Fall, Winter and/or Spring Trimesters)
Advanced Ceramics is designed for the especially motivated artist. A commitment to independent work and a high level of technical competence are expected, as students work with the instructor to develop and complete a series of original projects. We encourage students at this level to begin developing a portfolio, if they're interested in pursuing the Advanced Placement program in 3-D Art and Design. Projects are very open-ended and demand a high degree of critical and creative thinking, problem-solving and time to succeed.

Digital Art
(Fall, Winter and/or Spring Trimesters)
This course introduces students to techniques for making fine art through technological processes. Digital cameras, scanners, stylus and tablets, and professional software including Adobe Photoshop, Illustrator, and Flash are used to create both still and animated work. Student work is printed on large-format printers, including an Epson 9890 with a 44-inch span. The digital art curriculum is supplemented with exploratory lessons, field trips to museums and local design firms, and a graphic design competition.

Intermediate Digital Art
(Fall, Winter and/or Spring Trimesters)
Students continue to build upon their foundations in the elements of art and principles of design in Intermediate Digital Art. Exploration and experimentation are emphasized through projects that encourage independent research and original concept development. The curriculum is also supplemented with critiques, online investigations into the work of cutting-edge digital artists, and field trips to museums and local design firms.

Advanced Digital Art
(Fall, Winter and/or Spring Trimesters)
Advanced Digital Art is designed for the highly dedicated artist. A commitment to independent work and a high level of technical competence are expected as

students work with the instructor to complete their breadth portfolios and develop a concentrated body of work with a theme and technique(s) of their own. Advanced digital art students may also seek recommendations to the Advanced Placement program in 2-D Art and Design.

Photography
(Fall, Winter and/or Spring Trimesters)
This course is an introduction to basic digital photography. Utilizing digital SLR cameras, iMac computers and Photoshop software, students explore basic camera operation, editing techniques and aesthetic concerns. Through in-class projects and multiple off-campus field trips, they complete a variety of projects in both black/white and color. Digital cameras are provided for students during the course.

Intermediate Photography
(Fall, Winter and/or Spring Trimesters)
This intermediate-level course explores representation and visual interpretation through black/white and color photography. Through a series of short-term assignments, students develop their photographic "eye" and build their portfolios of work. Coursework is supplemented with field trips to museums and galleries, as well as onsite shooting trips. Cameras are provided, but students are strongly encouraged to have their own digital SLR camera.

Advanced Photography
(Fall, Winter and/or Spring Trimesters)
Advanced Photography is designed for the highly passionate photographer. Sophisticated techniques and thematic assignments are emphasized, and a commitment to independent work is expected. Students continue developing their unique artistic vision, with an eye toward enrolling in the Advanced Placement program in 2-D Art and Design. Cameras are provided, but students are strongly encouraged to have their own digital SLR camera.

Studio Art
(Fall, Winter and/or Spring Trimesters)
This course introduces students to a variety of fine art-making processes. Students develop conceptual and technical skills while studying drawing, painting, and mixed media. It is a survey course that teaches an understanding of the elements of art and principles of design. Studio work is supplemented with critiques, field trips to museums and local artist studios, as well as group public art projects.

Intermediate Studio Art
(Fall, Winter and/or Spring Trimesters)
This intermediate-level art course expands upon each student's understanding of the elements of art and principles of design. The course encourages self-discovery through individual assignments based on each student's unique interests and talents. Students continue to build their portfolios by examining their own strengths and weaknesses on a regular basis. Studio work is supplemented with critiques, field trips to museums and local artist studios, and group public art projects.

Advanced Studio Art
(Fall, Winter and/or Spring Trimesters)
Advanced Studio Art is designed for the highly motivated artist. A commitment to independent work and a high level of technical competence are expected as students work with the instructor to build their breadth portfolios and develop a concentrated body of work with a theme and technique(s) of their own. Advanced studio art students may also seek recommendations to the Advanced Placement program in Drawing, 2-D Art and Design, or 3-D Art and Design.

Advanced Placement 2-D Art and Design I
Advanced Placement 3-D Art and Design I
This Advanced Placement course is for committed and self-disciplined students with a strong interest in developing as artists and creative thinkers. Students concentrate on either two-dimensional media (drawing, painting, printmaking, photography) or three-dimensional work (ceramics, sculpture), with the goal of preparing and submitting a strong final AP portfolio.
Recommended for Form V or VI
Prerequisite: permission of the department

Advanced Placement 2-D Art and Design II
Advanced Placement 3-D Art and Design II
This Advanced Placement course is for students who complete Advanced Placement Art and Design in their fifth-form year and wish to continue developing their skills for a second year of artistic growth. The dedicated art student can further explore and expand his or her portfolio with an eye towards majoring in art in college.
Prerequisite: Advanced Placement Art and Design I and permission of the department

Performing Arts

**Note: Performing Arts courses are yearlong electives; however, students may petition to join at the winter and/or spring trimester as noted below if scheduling allows.*

A Cappella Ensemble | Advanced A Cappella Ensemble
(Fall, Winter and/or Spring Trimesters)*
This course focuses on a cappella style singing, covering genres from madrigals to jazz, rock, pop and more! Students learn basic musicianship skills, including intonation, vocal blending, diction, vocal production, breath control, and phrasing. The A Cappella Ensemble performs regularly throughout the year, both on and off campus. No audition is required; however, placement in Advanced A Cappella Ensemble is by audition only.

Guitar Fundamentals
(Fall, Winter and/or Spring Trimesters)*
Guitar Fundamentals is an introduction to guitar playing and is designed for students who have little to moderate experience on the instrument. The course covers the basics of the guitar including technique, scales, chords, rhythms, reading tabs and notes, improvisation, as well as learning guitar repertoire. No musical experience is required.

Improvisation
(Fall, Winter and/or Spring Trimesters)*
This dynamic, interactive course invites every student to explore the art of spontaneous performance in a collaborative, low-pressure environment. Designed for students of all experience levels, the curriculum focuses on the core principles of "Yes, And"—fostering adaptability, creative risk-taking, and effective communication. Through structured exercises and ensemble-based games, students develop the ability to think critically on their feet and build resilience through laughter. They experience the cognitive and social benefits of a classroom where high-level learning is fueled by creative joy.

Music Production: Introductory, Intermediate, Advanced
(Fall, Winter and/or Spring Trimesters)*
From beatmaking to songwriting, students master Ableton Live Suite, the premiere software for professional producers, DJs, and sound designers. This project-based course bridges the gap between traditional musicianship and cutting-edge technology, teaching students to view the computer as a powerful instrument for expression. From the rhythmic precision of house music to the avant-garde roots of *Musique Concrète*, students navigate the entire spectrum of digital sound. No musical experience is required.

Note: The Performing Arts courses listed below are yearlong electives.

Chamber Orchestra | Advanced Chamber Orchestra
This course focuses on chamber ensemble techniques, including musicianship, intonation, interpretation, and performance practice. Open to all string, brass, woodwind, and pitched percussion instrumentalists, the curriculum emphasizes the collaborative skills necessary for all-level musicianship. Students are encouraged to develop artistic autonomy through ensemble rehearsals and frequent public performances. Placement in Advanced Chamber Orchestra is by audition only.
Prerequisite: three-year study of an instrument or permission of instructor

Jazz and Rock Ensemble | Advanced Jazz and Rock Ensemble
Discover the intersections of jazz, rock, funk, and pop in this high-energy performance class. Designed for instrumentalists, this course emphasizes improvisation, stylistic versatility, and collaborative performance. Students study iconic repertoire while developing the ear and technique required to excel in modern musical settings. This course takes students from the practice room to the stage. Placement in Advanced Jazz and Rock Ensemble is by audition only.
Prerequisite: two-year study of an instrument or permission of instructor

Music Theory
This course allows students to explore music outside of our performing ensemble groups. It is an introduction to the study of functional harmony, including scales, intervals, chord constructions, harmonic progression, counterpoint, and ear-training. The curriculum also emphasizes music analysis to strengthen the practical application of theoretical concepts. Students apply these skills by creating original compositions, which culminate in a community performance by the Chamber Orchestra. No musical experience is required. *Open to Forms IV, V and VI.*

Private Voice, Instrumental and Dance Lessons
Private non-credit lessons may be arranged through the Music Director or Arts Department Chair. An additional fee will be charged.

English

The English Department emphasizes 21st century skills by building on traditional ones. We teach students to read carefully and appreciatively and to write clearly and expressively, emphasizing critical thinking and problem solving throughout our curriculum. Each Form has a course theme, which expands upon that of the year before and is developmentally consistent with the achievements and interests of our students. We use both canonical and more contemporary texts in the service of addressing these themes, scaffolding skills as our students prepare for study, work, and life in the world beyond Berkshire.

Consistent with our mission we keep close watch over our students' progress by assigning, evaluating and returning academic writing such as analytical, persuasive, and personal essays as well as original stories, poems, and scenes. Our students gain additional writing practice through frequent quizzes, short reading responses and journal entries.

Paying attention to the traditional building blocks of communication while engaging our students in research and interactive presentations, we prepare them for the varied demands of college and life. While reading important works of literature in a thoughtful manner, our students can develop a more informed and compassionate perspective toward the wider world. Our fundamental assumption is that by working with language, literature and ideas in a dynamic fashion, students will develop their abilities not only to communicate but also to think and reason critically. By stressing the relationship between writers and readers, we make our students more aware of the multiple aspects of communication in a complex world.

Four years of form-level English, taken every year while enrolled, are required for graduation.

Literature and Writing: Individual Voices
The third-form English curriculum focuses thematically upon essential elements of the individual and the individual's place in the world at a time when our students are setting forth on their own missions of self-discovery as readers, writers, and thinkers. Third Formers receive a thorough grounding in principles of grammar and vocabulary while practicing various types of writing, such as critical analysis, reflective writing, and creative writing. Throughout the year, third-form teachers stress fundamental study skills important to all Berkshire classes, including critical reading, annotating a text, organization of course materials, and timely completion and submission of work. Texts may include, but are not limited to: *Into the Wild, The Song of Achilles,* and *A Raisin in the Sun*.

Literature and Writing: Global Voices | Advanced Literature and Writing: Global Voices
In fourth-form English, students extend and deepen the skills and thematic insights through engagement with literary texts that focus on immigration, displacement, and social justice. Building on the third-form English theme of individual voices, Fourth Formers broadens their focus to a global context that, in addition to providing opportunities to develop skills in critical reading and analytical writing, allows them to better understand issues of human rights and equality within a transnational frame of reference. Students also learn how to work collaboratively and collectively through book group projects. They continue their study of the full range of literary genres and review grammar and usage, primarily in the context of strengthening and revising their own writing: students learn how to productively engage with the writing process through planning and drafting. The writing curriculum expands on the range of third-form assignments, focusing on more complex and formally structured expository and analytical essays; in addition to traditional literary analysis, this course includes units on the personal memoir, argumentative writing, and persuasive speeches, which each help students become more confident writers and eloquent speakers with a clear and distinct voice. Texts may include, but are not limited to: *Born A Crime, Night, A Thousand Splendid Suns*, and *The Tempest*.

Literature and Writing: American Voices | Advanced Literature and Writing: American Voices
Students in their fifth-form year explore the American experience through literature. By encountering a range of voices and perspectives they examine (and reexamine) what it means to be "American" and consider how that designation shifts depending on one's identity. Students read texts that invite them to contemplate the complex relationship between America's past and the present moment. They also consider whose voices have historically been silenced in the American story and aim to amplify them. Expanding on the genres studied in

previous courses, literary works in the fifth-form year include plays, epistolary novels, and creative nonfiction; representative texts may include *There There*, *The Color Purple*, and *The Things They Carried*. In addition, students continue to sharpen their writing skills through a variety of assignments, from journal entries, formal essays and persuasive pieces. Through each draft, students work on developing their unique voice and writing style with an eye towards drafting their college essay in the spring term.

Advanced Placement English Language and Composition
This course is designed for qualified Fifth Formers who wish to become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. The course emphasizes the expository, analytical, and argumentative writing that forms the basis of academic and professional communication, as well as the personal and reflective writing that fosters the ability to write in any context. In preparation for the AP English Language and Composition exam, students become acquainted with a wide variety of prose styles from many disciplines and historical periods, and gain understanding of the connections between writing and interpretive skill in reading.
Prerequisite: permission of the department

Advanced Placement English Literature and Composition
This course is designed for qualified Sixth Formers who want to undertake a rigorous and intensive literary study in preparation for the AP English Literature and Composition exam. Students in the course build on the skills developed in their prior English courses and focus their efforts on preparing for that assessment. They cultivate their understanding of literature by reading and analyzing texts as well as by exploring concepts like character, setting, structure, perspective, and figurative language. Through practice in writing and evaluating AP-style prompts, students become more familiar with the College Board's criteria for successful analytical writing. By considering elements such as figurative language, imagery, symbolism, and tone—in addition to a primary focus on diction, syntax, and structure—students develop and deepen critical and analytic skills as readers and writers by expanding their ability to interpret and make sense of complex literary texts. Representative texts include *Hamlet*, *Things Fall Apart*, and *Frankenstein*.
Prerequisite: permission of the department

Literature and Writing: Using My Voice | Advanced Literature and Writing: Using My Voice
(Fall Trimester)
Sixth-form English at Berkshire consists of two distinct parts: a term-contained course in the fall and elective offerings in both the winter and spring terms (noted in italics to follow). In the fall term, students contemplate the place they understand themselves to be as Berkshire School students and the major transitions they are undertaking in their lives as emerging adults. Through the study of various long and short form texts, students consider the complex relationship between individuals and communities they inhabit. Representative texts may include *On Earth We're Briefly Gorgeous, Horse*, and *The Nickel Boys*, as well as supplementary essays, poems, and short fiction. Students consider their own identities within the systems they live, culminating in the preparation of their Moth story that they present to their classmates.

Literature and Writing: Electives (Winter, Spring)
(Italicized offerings below will vary each year)

Dystopian Fiction
(Winter and Spring Trimesters)
Dystopian fictions – fictions that present frightening visions of the future of our world – have been surprisingly popular throughout the last century or so (think of Orwell's *1984*, or more recently, *The Hunger Games* or the *Divergent* series). Why have so many writers devoted their talents to producing such dark visions? And perhaps even more curiously, why have those visions proven to be so popular? In this course, students study some of the most important examples of modern dystopian fiction. Possible readings include: George Orwell's *1984*; Aldous Huxley's *Brave New World*; and Margaret Atwood's *A Handmaid's Tale*.

The Mountain and Me
(Winter and Spring Trimesters)
This course is designed to take a literary look at the relationship between the out-of-doors, specifically our local landscape, and the individual. Our place in the natural world and responsibility to it will guide our conversations as students read fiction and nonfiction by authors like Mary Oliver, Annie Dillard, bell hooks, Ron Rash, and Henry David Thoreau. Writing assignments ask students to engage with class texts through analytical, creative, and personal writing. In addition, the culminating writing assignment asks students to write about their own interactions with the natural world as those interactions relate to their experience under the Mountain. In keeping with the focus of the class, students have opportunities to venture outside of the classroom and should be prepared to explore!

Mystery and Thriller
(Winter and Spring Trimesters)
The world of suspense has a unique ability to engage readers, and, in this class, students play detective as they read and analyze various types of crime fiction, which may include traditional detective stories, espionage, and thrillers. The class looks at the ways in which mystery, in literature and film, plays into our fears. Students examine mystery narratives analytically and explore the genre creatively by writing a short mystery story. Texts may include short stories by well-known mystery writers such as Edgar Allen Poe and longer narratives by writers such as Agatha Christie.

Southern Gothic
(Winter and Spring Trimesters)
Southern Gothic is defined as Southern literature, rooted in the Gothic tradition, but uniquely focusing on the South's history, violence, tensions, desires, dark humor, and aberrations. Students in this course read works by authors such as William Faulkner, Flannery O'Connor, Tennessee Williams, Percival Everett, and Octavia Butler. They examine how and why this regional literature shapes and mirrors our national culture and ideologies. Writing assignments focus on close readings, analysis, and persuasive writing. Projects include examining connections to contemporary popular culture depictions in film, television, music, etc.

Additional English Offerings
(The offerings listed below may only be taken in addition to a core English course.)

Creative Writing
This yearlong course is designed for students who already have experience with or enjoy writing poetry, fiction or creative nonfiction on their own, and believe they would benefit from the structure and guidance provided by a workshop environment. Drafting, revision, and peer critique are emphasized as students develop a portfolio of their own writing across the entire year. *Open to students in Forms IV, V, and VI.*

Advanced Creative Writing
This yearlong course is open to students who have completed Creative Writing and are looking to further develop their craft in a genre of their choosing (*i.e.* poetry, fiction, creative nonfiction). Students build on the portfolio they completed in the first year by continuing to engage with drafting, revision, peer critique, and workshops. As a culmination of their studies, students present their work in a public reading during the spring trimester.
Prerequisite: Creative Writing and/or permission of the department; open to Forms V and VI

Journalism*
This course explores the myriad forms of fact-based storytelling we encounter in our daily lives, from traditional journalism, such as hard news and opinion pieces, to more modern forms such as podcasting. Students in this class consider what makes for effective and compelling true stories, as well as the ethics that circumscribe such storytelling. As part of their studies, students deepen their familiarity with current events and the contemporary news landscape, becoming more media literate and savvy in the process. Students can expect to experiment with different forms of nonfiction storytelling and hone their craft in the process by regularly sharing their work with their peers and receiving feedback. *Open to students in Forms IV, V, and VI. *Offering is subject to availability.*

History

The goal of the History Department is to introduce students to the rich cultural variety of the human community, to acquaint them with the development of the major traditions underlying civilization, and to provide them with an opportunity to read history in depth. Topics studied include the recent development of societies around the globe as well as the organization and dynamics of social, economic, religious, and political institutions that shape the world today.

Our students progress each year through a planned curriculum focused on maximizing reading and writing levels, while developing both the critical and creative thinking skills needed to meet the challenge of collegiate academics.

Two years of history, including U.S., are required for graduation. In addition, Third Formers must complete World History Through Religion, and Fourth Formers must complete Modern World History.

World History Through Religion
This third-form course helps students understand how five major world religions have shaped past, current, and future historical events on a global scale. More specifically, students study the basic tenets of Hinduism, Buddhism, Judaism, Christianity, and Islam in relation to historical examples and more contemporary events. While content plays an important role in this course, a great deal of focus is put on the development and utilization of the following core skills: effective notetaking, critical reading and writing, primary and secondary source analysis, cogent public speaking, and basic research methods.

Modern World History | Advanced Modern World History
Modern World History acquaints students with the major events, concepts, and trends that have developed around the world from the Scientific Revolution to the modern day. The course examines themes and events in Europe, Africa, the Middle East, the Americas, and Asia. The primary themes of the course include political and social systems, global interactions, religious and ethical systems, and scientific and technological innovations. Students develop the skills to read critically and research effectively through the use of primary and secondary sources; they also become comfortable with presentation technology and public speaking. Students master thesis-based essays and write a research essay on a topic in world history as a culmination of their studies. A portion of class each week is dedicated to studying current events, thus encouraging them to relate historical topics to the issues facing the modern world. Through demanding readings, group discussions, research projects and presentations, students come to learn about their roles in the larger global community.

United States History | Advanced United States History
Required for graduation and typically taken during the fifth-form year, this course takes a thematic approach to U.S. history. The themes include the foundations of America, the role of government in American society, and the role of the United States in the world post-World War II. Topics studied include the colonization of British America, the American Revolution, the establishment of the Federal Republic, territorial expansion and the growth of sectionalism, the Civil War, the development of the United States as a world power, and the Cold War. Although the course focuses on political development, students also examine the key economic and social developments in U.S. history. Students develop research skills and the ability to use documentary evidence in developing a thesis and are required to write essays, short papers and a significant, college-level research project.

Advanced Placement United States History
This course provides students with the analytical skills and enduring understandings necessary to deal critically with the problems and materials in United States history. Students are prepared for success on the AP exam as well as intermediate and advanced level college courses. Emphasis is on determining the relevance, reliability, and importance of evidence used in historical scholarship. Students develop the skills necessary to develop an informed judgment and to present reasons and evidence clearly and persuasively in an essay format. *Not recommended for students who have already taken United States History.*
Prerequisite: permission of the department

American Foreign Policy in the 21st Century
This elective course looks into the events leading up September 11th, 2001, and how that day shaped American foreign policy in the 21st century. Students study and evaluate America's War on Terror and how it has impacted its relationship with countries like Afghanistan, Pakistan, Yemen, Saudi Arabia, Syria, and Iran. Special attention is paid to how Presidents George W. Bush, Barack Obama, Donald Trump and Joe Biden have viewed what America's role in global politics should be.
Prerequisite: Modern World History or permission of the department

Ethics
This elective course encourages students to contemplate the nature of morally right behavior. After initial discussion and debate of the central ethical theories (including cultural relativism, utilitarianism, and Kantianism), students examine several applied topics. Controversial issues considered previously in the course have included abortion, euthanasia, animal rights, cloning, the ethics of war, world hunger, artificial intelligence, and the death penalty. Students are expected to formally direct much of the class during the final trimester of the course by selecting, researching, and leading a debate about a controversial ethical topic.
Prerequisite: Modern World History or permission of the department; open to Form VI and, pending availability, Form V

Exploring Race, Class, and Gender*
In this elective, students explore how race, social class, and gender are defined and how those ideas have changed over time and connect to power and inequality. There is an emphasis on race, class, and gender as socially constructed systems that shape individual identities and shared experiences. Students develop the vocabulary and analytical skills needed to participate confidently in thoughtful conversations about identity, power, and inequality, while also reflecting on how their own perspectives have been shaped by social, cultural, and historical influences. The course examines how different groups are represented in popular culture and the media, as well as which groups are often excluded. Students also explore how race, class, and gender are woven into social institutions such as housing, healthcare, education, criminal justice, immigration, and systems of wealth. **Offering is subject to availability.*
Prerequisite: Modern World History or permission of the department

Leadership: Theory and Practice
This elective course explores the underlying values and beliefs of successful leadership. Students examine the knowledge, dispositions, and skill sets that leaders need to drive change. Through case studies, readings, individual assignments, and group presentations, students are asked to connect theory to practice on topics such as leading change, developing intra/interpersonal skills, charismatic leadership, and leading teams. Students also complete a major research paper evaluating leaders using the theories studied in class.
Prerequisite: Modern World History or permission of the department

Economics and Philanthropy
This elective provides students with a foundation in micro and macro-economic principles in the first two trimesters: supply, demand, market equilibrium, subjective value theory, theory of production, theory of cost, and different forms of industrial organization. The final trimester turns toward a project-based curriculum focusing on the non-profit sector and the needs of our local community. Through field trips, visiting speakers, and exchanges with Berkshire alumni, students gain a better understanding of the important social role that charitable organizations play. Working with a Berkshire donor who has established an endowment for philanthropy, students invite local organizations to apply for the funds. Students ultimately determine where the funds will be applied, thus gaining real-world experience that can make an actual difference in the lives of those around us.
Prerequisite: Modern World History or permission of the department

Advanced Economics
Advanced Economics blends a traditional, theory-based approach to economics with the practical applications of business management and planning. In addition to discussing and debating micro- and macroeconomic concepts, students form groups to devise and write a business plan for a product or service of their own choosing. Groups compete for the Sabin Entrepreneurial Prize, to be awarded in the spring. Business plans are evaluated by a team of judges on the basis of their ingenuity, soundness, and sustainability.
Prerequisite: United States History or permission of the department

Advanced Topics: Reagan and Modern America
This elective explores how America transformed into a hyper-capitalist superpower defined by rugged individualism, "trickle-down" dreams, and a new brand of Christian nationalism. Led by a former actor, the Reagan Revolution was less a political shift and more a moral takeover that didn't just win an election but set the permanent battle lines for the modern culture war. "Reaganland" begins in the 1970s, a decade of hemorrhaging confidence. This class asks: how did Ronald Reagan fuse an aggressive new coalition marked by the cinematic power of "shining city" optimism? Students examine how the Reagan era never truly ended,

but instead cemented the "faith and flag" politics that define America's enduring move to the right.
Prerequisite: United States History or permission of the department

Advanced Placement Comparative Government and Politics*
This course introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Six countries form the core of the AP Comparative Government and Politics course: China, Great Britain, Iran, Mexico, Nigeria, and Russia. By using these six countries, the course can move the discussion of concepts from abstract definition to concrete example, noting that not all concepts will be equally useful in all country settings. **Offering is subject to availability.*
Prerequisite: United States History and permission of the department

Advanced Placement Microeconomics
Students in AP Microeconomics explore the principles of economics that govern the behavior of individuals, firms, and markets. Students study supply and demand, market structures, and how economic agents make decisions based on limited resources. The course also covers topics such as market failures, government intervention, and the role of incentives in shaping economic outcomes. Over the course of the year, students develop the analytical skills to understand and evaluate real-world economic issues, as well as prepare for the Advanced Placement exam in May.
Prerequisite: United States History, Algebra II, and permission of the department

Advanced Placement United States Government and Politics
This course gives students a critical perspective on government and politics in the United States. Students begin by briefly studying the history that led to the formation of the republic and the vision that the framers of the Constitution had for the United States. During the remainder of the course, students are expected to become familiar with the various institutions, groups, beliefs, and ideas that constitute the American political process. There is a focus on the three branches of the federal government, the relationship between the federal government and the states, and how actors in government and among the citizenry shape public policy. Analysis of general concepts used to interpret American politics is complemented by examination of specific case studies and participation in a Senate simulation and a moot court case. Students also have the task of preparing for the Advanced Placement exam in May.
Prerequisite: United States History and permission of the department

Advanced Humanities Research
Advanced Humanities Research is a full-year course for talented students who have a desire to pursue guided, but independent, research in the humanities. The first half of the course is a seminar on critical theory introducing students to the theoretical framework that shapes the work of humanities scholars. The fall trimester also includes an introduction to qualitative research methods to help students master the tools required for advanced research in the humanities. The second half of the course is more student-directed, with each student working on an intensive piece of research, along with an identified expert in their chosen field, with the goal being to submit their research for publication. Enrollment in the class is limited.
Prerequisite: permission of the department; open to Form VI and, pending availability, Form V

Languages

The Languages Department prepares students to engage thoughtfully and confidently in an increasingly interconnected world by developing proficiency, cultural understanding, and communicative competence. Rooted in Berkshire School's mission of learning for life, the program emphasizes sustained language use, interpretive analysis, interpersonal exchange, and presentational expression as essential tools for global citizenship. Students encounter language as a living system shaped by culture, history, and contemporary contexts, and are encouraged to reflect while building the skills necessary to communicate across differences with clarity, empathy, and purpose.

Instruction is conducted in the target language and follows a vertically aligned curriculum designed to ensure coherence, rigor, and consistent expectations across levels. The Department offers Chinese, French, Latin, and Spanish, with courses structured to develop proficiency progressively through authentic texts, media, and culturally rich resources. Assessment practices emphasize performance-based tasks that mirror real-world communication and prepare students for advanced academic work and preparation for college-level study and lifelong learning.

Three consecutive years of the same language (through level III) are required for graduation.

Chinese I
Chinese I is an introductory Mandarin Chinese course designed for students with no Chinese background. This course provides basic training in listening, speaking, reading and writing Mandarin Chinese. The goal of this course is to lay a solid foundation for further Chinese language study and to strive for well-rounded development of communicative skills in listening, speaking, reading and writing as well as developing an understanding of Chinese culture.

Chinese II
Students continue to develop their communication skills in listening, speaking, reading and writing via student-centered activities. Chinese word-processing is introduced. Students further explore Chinese culture through various multimedia projects (posters, Chinese language films, etc.) and continue to build the foundation for more advanced study.

Chinese III
Chinese III aims to continue to develop the students' communicative skills in listening, speaking, reading and writing in Mandarin Chinese through task-based activities. Students start to read Chinese without Pinyin except for new words. Common idioms and ancient stories behind them are introduced and students continue to gain a better understanding of Chinese culture.

Chinese IV
Chinese IV promotes mastery of the language beyond the three-year language requirement and prepares students for further language studies in college. All the reading is in Chinese characters with more sophisticated grammar and syntax. The goal is to further enhance students' linguistic skills as well as their appreciation for Mandarin Chinese language and culture. Modern prose is introduced. Since the course is conducted entirely in Chinese, students are required to speak only the target language for the duration of the class.

Chinese V
The Chinese V course focuses on further developing students' full range of language skills and interweaves appropriate cultural content. The wide variety of cultural topics includes school, family, food, sports, holidays and customs, travel, famous people, history, literature, and arts. Students explore both contemporary and historical Chinese culture via the Mandarin Chinese language in order to prepare them for college-level studies in Chinese. Since the course is conducted entirely in Chinese, students are required to speak only the target language for the duration of the class.

Advanced Placement Chinese Language and Culture
A culmination of the Mandarin program, the AP Chinese course prepares students for the Advanced Placement Chinese Language and Culture exam. AP Chinese Language and Culture is equivalent to an intermediate-level college course in Chinese. Students cultivate their understanding of Chinese language and culture by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.
Prerequisite: permission of the department

French I
French I is designed to introduce students to the French language and Francophone cultures as well as help students to develop the ability to speak, read, write, and listen to French. Course themes are presented and discussed through a variety of media, including online learning platforms. Teaching methods include reading and discussing cultural documents in class as well as practicing vocabulary and new grammatical structures in context, all of which enables students to begin to understand French and express themselves in the language. The course is conducted entirely in French.

French II | Advanced French II
French II builds upon French I, emphasizing the four core language skills and improving the language proficiency of students. Course themes are presented and discussed through a variety of media, including online learning platforms. Teaching methods include reading and discussing cultural documents in class as well as practicing vocabulary and new grammatical structures in context, all of which enables students to further understand and express themselves in French. The course is conducted entirely in French.

French III | Advanced French III
French III students continue to increase students' proficiency in listening, speaking, reading and writing. Project-based, the course encourages students to further express themselves using all of the tenses and a rich vocabulary. Teaching methods include reading and discussing cultural documents in class as well as practicing vocabulary and new grammatical structures in context, all of which enables students to further understand and express themselves in French. The course is conducted entirely in French.

French IV | Advanced French IV | French V
French IV and V students continue to develop the skills and knowledge necessary to speak French clearly and to read and write it critically, taking into consideration the interpersonal, interpretive, and presentational modes of communication. The course centers around student-driven projects addressing French and Francophone themes such as cooking, fashion, sports, and art. Students watch films and newscasts, analyze authentic texts, and articulate themselves clearly and expressively during debates and presentations. Themes alternate from year to year so as to allow students the opportunity to pursue a fifth year of study.

Advanced Placement French Language and Culture
The AP French course is designed to elevate the students' communicative and analytical skills, improve their cultural awareness, and prepare them for the interpersonal, interpretive and presentational modes of communication demanded by the AP exam. Students are immersed in the French language during class, and they engage in many activities designed to improve their oral fluency. French, as an expression of the Francophone cultures in this interconnected world, creates a bond with those diverse communities for students along the way. The speaking, reading and written elements of the AP course center around global challenges, science and technology, contemporary life, personal and public identities, families and communities, and finally, beauty and aesthetics. Since the course is conducted entirely in French, students are required to speak only the target language for the duration of the class.
Prerequisite: permission of the department

Latin I
Latin I is designed for students who have had no previous instruction in Latin. Students receive a thorough grounding in basic grammatical forms, including the five noun declensions and agreement of nouns and adjectives; pronouns; and the six verb tenses in the active and passive voice as well as elementary vocabulary. Students also learn about Roman civilization and the importance of the Latin language in Western culture.

Latin II
Students in Latin II complete their study of basic Latin grammar and syntax, as well as expanding their vocabulary. Students begin to read extended prose passages to prepare them for reading classical Latin prose in their third year.

Latin III
Students in Latin III undertake a comprehensive review of basic Latin grammar and vocabulary in the fall trimester. Students also read and translate modified passages in the first part of the year in preparation for translating true prose during the second half of the year. These works include, but are not limited to, Caesar, Eutropius, and Cicero.

Latin IV, V
Students electing Latin IV, V are committed to developing a mastery of the language beyond the three-year language requirement. Latin IV, V is primarily a translation course that focuses on Latin poetry and Roman comedy. The course alternates from year to year in material covered, allowing students the opportunity to pursue a fifth year of study if they choose.

Advanced Placement Latin
This course offers an immersive exploration of the Roman world through the eyes of its most famous epic poet and its most observant letter-writer. Students engage in an in-depth study of Vergil's *Aeneid* and Pliny the Younger's *Letters*, contrasting the grand, mythological foundations of Rome with the intimate, lived realities of the Imperial era. The curriculum extends beyond the core

syllabus to include "sight-reading" of diverse Latin authors and four curated course projects, allowing students to apply their linguistic mastery to a wide range of historical contexts. By analyzing these texts, students sharpen their critical and literary skills, exploring themes of duty, disaster, social status, and the human experience. This course prepares students for the AP exam and provides a foundation for future classical or humanities studies.
Prerequisite: permission of the department

Spanish I
This introductory course is designed for students who have had no previous instruction in Spanish or for those in need of additional study before meeting the demands of Spanish II. The course emphasizes the acquisition of basic oral and literacy skills by teaching the use of Spanish in daily situations such as meeting people, telling time, expressing likes and dislikes, and going shopping. Students are expected to participate actively in class and to be adventurous in the usage of simple expressions and verbs. The course is taught entirely in Spanish.

Spanish II | Advanced Spanish II
Spanish II continues to develop oral and listening proficiency, literacy skills and cultural knowledge through a variety of activities. The course focuses on the continued acquisition of grammar structures and vocabulary and covers the following topics: imperfect, imperfect/preterite contrast, subjunctive, perfect tenses, future, and conditional. Thematic vocabulary is integrated into each lesson. The use of audio and visual materials in class encourages conversation in the target language. Spanish culture, art history and literature are incorporated extensively through supplementary readings and multimedia activities. The course is taught entirely in Spanish.

Spanish III | Advanced Spanish III
Spanish III students continue to develop strong listening, oral, reading and writing skills by intensive immersion in a language classroom conducted completely in Spanish. After a comprehensive review during the first few weeks, emphasis is placed on a systematic review of Spanish grammar and the acquisition of the subjunctive. Emphasis is also placed on studying Hispanic culture and society through short films, reading and discussion, and online learning platforms. The course is taught entirely in Spanish.

Spanish IV | Advanced Spanish IV
Spanish IV students continue to develop the skills and knowledge necessary to speak Spanish clearly and to read and write it critically, taking into consideration the interpersonal, interpretive, and presentational modes of communication. The course centers around level readers, engaging students in stories using Spanish in authentic and cultural contexts. Students analyze video, newscasts, songs and supplementary texts, and learn to better articulate themselves clearly and expressively in the target language.

Spanish V
This course is a panoramic journey through Latin American literature and film. The first part of the course begins with a general overview from the Pre-Columbian period, going through the colonial, independence periods, and modernismo, which was a paramount movement in Latin American literature that questioned conventional notions of literary discourse. The second part of the course moves forward towards the 20th century with an overview from postmodernismo, new narrative, el boom and finishing with literature of modern revolution, culture and politics in Latin America. As students immerse themselves in the literature, special attention is given to the socio-historical context of Latin America. Therefore, both political and cultural issues are of interest and the focus of analysis and class discussions.

Advanced Placement Spanish Language and Culture
The Advanced Placement Spanish Language and Culture course is designed to elevate the students' communicative and analytical skills, improve their cultural awareness, and prepare them for the interpersonal, interpretive and presentational modes of communication demanded by the AP exam. Students are immersed in the Spanish language during class, and they engage in many activities designed to improve their oral fluency. The acquisition of cross-cultural awareness is an important objective since there is great diversity in the Spanish speaking world as seen in the organization of the course, which is divided into six thematic units. Each unit is developed using authentic written sources, news segments and class activities, including radio segments broadcast throughout campus. Discussion is an important requirement in class, and spontaneous participation is encouraged. Grammar is reviewed briefly in context. Since the course is conducted entirely in Spanish, students are required to speak only Spanish for the duration of the class.
Prerequisite: permission of the department

Mathematics

The mathematics curriculum is designed to provide a rigorous foundation in the basics of mathematics and the tools to foster logical thought and analysis. We want students to appreciate the nature, beauty, and scope of mathematics and to understand its potential in dealing with the world's increasing technological complexities. Critical thinking, collaboration and mathematical modeling are emphasized at all levels. In all mathematics courses, faculty help students develop successful study skills and effective test-preparation techniques.

For students whose backgrounds and aptitudes are strong, there are advanced sections of courses in our core curriculum. These include Advanced Placement Calculus BC, Multivariable Calculus, Linear Algebra, Advanced Topics in Higher Mathematics, and Advanced Math/Science Research. Each of these courses allow students who are passionate about mathematics to pursue excellence in the subject at the highest level.

Three years of mathematics (including Algebra I, Geometry, and Algebra II) are required for graduation; four years are strongly encouraged.

Note: Students taking Algebra II or higher are required to have a TI-Nspire graphing calculator, either CX or CAS. As the CAS version of the TI-Nspire is not allowed on the ACT, the Department recommends that students purchase the CX version. The TI-Nspire is not required for Algebra I or Geometry.

Algebra I | Advanced Algebra I
This course provides a thorough introduction to the language of algebra, including its symbols and the axioms and laws which govern its structure. Emphasis is given to the understanding and manipulation of algebraic expressions, from performing standard operations to factoring polynomials and simplifying radical expressions. Primary goals include competence in solving linear equations and inequalities, systems of linear equations, and quadratic equations. The advanced course includes all the topics in Algebra I, while moving at a faster pace and incorporating more complex problem-solving to better prepare students for subsequent advanced-level mathematics courses.
Prerequisite: permission of the department for Advanced Algebra I

Geometry
Devoted to plane Euclidian geometry, this course also extends into solid geometry. The subject is treated as a structured system and emphasizes deductive reasoning and mathematical proofs, whereby intuition and proofs are blended. Topics such as congruence, perpendicularity, geometric inequalities, parallelism, quadrilaterals, geometric proportions and similarity, circles, and three-dimensional solids are studied.
Prerequisite: Algebra I

Advanced Geometry
This is an exploration and problem-centered course where students discover all geometric concepts studied in geometry through the completion of carefully curated problem sets. Collaborative problem-solving, mathematical curiosity, resourcefulness, and algebraic fluency are developed throughout the course.
Prerequisite: Algebra I and permission of the department

Algebra II
This course begins with a review of Algebra I and extends to include number systems, polynomials, rational expressions, and imaginary and complex numbers. Students explore function fundamentals, including domain and range, transformations, compositions, and inverse functions. The curriculum covers radical, exponential functions, and logarithms. Students utilize the technological tools for graphing, solving equations, and determining function features.
Prerequisite: Geometry or permission of the department

Advanced Algebra II and Trigonometry
This course covers all topics of Algebra II in greater depth, while also including topics such as the binomial theorem, graphs of logarithmic functions, rational functions, trigonometric functions, and analytic trigonometry.
Prerequisite: Geometry and permission of the department

Precalculus
This course reviews the concepts from Algebra II that are central to calculus and explores several discrete math topics. Focus is placed on polynomial, rational, trigonometric, logarithmic, and exponential functions. Discrete topics include polar coordinates, sequences and series, and conic sections. Students utilize the technological tools for graphing, solving equations, and determining function features.
Prerequisite: Algebra II and permission of the department

Advanced Precalculus
This course builds upon the curriculum of Advanced Algebra II and Trigonometry to prepare students for future studies in Calculus and Advanced Placement mathematics courses. In addition to a more in-depth study of the topics in Precalculus, students also learn the Rational Zeros Theorem, complex roots of polynomials, advanced trigonometric identities, and limits. Students also further develop their problem-solving skills.
Prerequisite: Algebra II and permission of the department

Advanced Precalculus Accelerated
The course is intended for students who have demonstrated an exceptional commitment and aptitude in mathematics. Topics are explored more rapidly, challenging students to apply concepts and skills at the highest level. In addition to the study of all topics in Advanced Precalculus, the first four units of the College Board's AP Calculus BC curriculum are covered in the spring trimester.
Prerequisite: Advanced Algebra II and Trigonometry and permission of the department

Discrete Mathematics*
Offered in alternate years in relation to Financial Mathematics, this course offers an introduction to four branches of discrete mathematics: combinatorics, sequences, symbolic logic, and graph theory. Students practice applied mathematics through group projects on election theory, fair division, population growth, supply chain optimization, recursion, game theory, and the Monte Carlo method. Students explore the intersection of discrete mathematics and computer science. Throughout the course, students utilize several software packages along with the TI-Nspire calculator to assist in finding solutions. **Offering is subject to availability.*
Prerequisite: Algebra II

Financial Mathematics*
Offered in alternate years in relation to Discrete Mathematics, this project-oriented course provides a foundation in financial applications of mathematics. Students explore practical mathematical applications relevant to financial management. Topics covered include expense management, utilizing banking services, credit and loans, automobile ownership, taxes, and the stock market. **Offering is subject to availability.*
Prerequisite: Algebra II

Calculus
This course provides an introduction to calculus without significant reliance on manual algebraic manipulation, instead placing a larger emphasis on leveraging technology for computations. The curriculum is hands-on and project-based, allowing students to explore the real-world utility of calculus through practical applications.
Prerequisite: Precalculus and permission of the department

Advanced Calculus
This course is an introduction to the fundamental concepts of calculus with a strong focus on algebraic techniques. Topics include the study of limits, continuity, and the derivative and its applications, followed by integration and its applications. Students explore logarithmic, exponential, and trigonometric functions and various techniques of differentiation and integration.
Prerequisite: Precalculus and permission of the department

Statistics
Topics for study in this course include the organization of data into patterns and the interpretation of them using regression and correlation. Emphasis is on designing experiments and utilizing probability and randomness to establish inference. Students explore confidence testing in both distributions and proportions and employ modern technology to achieve these ends.
Prerequisite: Algebra II and permission of the department (recommended in Form VI)

Advanced Placement Statistics
This course is built around four main topics: exploring data, planning a study, probability as a foundation for the procedures of statistics, and inferential reasoning. These four broad conceptual themes are studied in depth to prepare students for the Advanced Placement exam in May. Students use computer software and the TI-Nspire graphing calculator to examine distributions, plan studies, make conjectures, study random behaviors, and analyze and draw conclusions from data. This course is more theoretical, more demanding, and requires a higher level of conceptual understanding than the Statistics course.
Prerequisite: Advanced Precalculus and permission of the department (recommended in Form VI)

Advanced Placement Calculus AB
This fast-paced college-level course is intended for students with well-developed problem-solving skills as well as strong algebraic fluency and aptitude. Topics covered include limits, derivatives, applications of differentiation, integration, the definite integral, the Fundamental Theorem of Calculus, methods of antidifferentiation, differential equations, and applications of integration. Students are required to leverage their mathematical skills and knowledge to solve complex multi-step problems as well as develop clear, logical, and concise written mathematical arguments. The course prepares students for the Advanced Placement exam in May.
Prerequisite: Advanced Precalculus and permission of the department

Advanced Placement Calculus BC
This fast-paced college-level course is intended for students with well-developed problem-solving skills as well as strong algebraic fluency and aptitude. Topics

covered include applications of differentiation, integration, the definite integral, the Fundamental Theorem of Calculus, methods of antidifferentiation, differential equations, logistical growth, applications of integration, convergence and divergence of infinite series, calculus of parametric equations and polar curves, and vector-based calculus. Students are required to leverage their mathematical skills and knowledge to solve complex multi-step problems as well as develop clear, logical, and concise written mathematical arguments. The course prepares students for the Advanced Placement exam in May.
Prerequisite: Advanced Placement Calculus AB (or Advanced Precalculus Accelerated) and permission of the department

Linear Algebra
Offered in alternate years in relation to Multivariable Calculus, this course in advanced mathematics includes the core components of linear algebra. Topics covered include matrices, rank, determinants, linear equations, vector spaces, linear independence, eigenvectors, and linear transformations. The course includes applications to linear programming, differential equations, and computer graphics, and students explore the overlap between computer science and mathematics. Students also explore the connections between eigenvectors in linear algebra and how to use them to solve differential equations.
Prerequisite: Advanced Placement Calculus BC and permission of the department

Multivariable Calculus
Offered in alternate years in relation to Linear Algebra, this course in advanced mathematics includes core components of multivariable calculus. Students begin with vector algebra and geometry, cylindrical and spherical coordinates, three-dimensional surfaces, vector functions, velocity and acceleration, speed, tangent and normal vectors, arc length and curvature. The second half of the year covers functions of several variables, partial differentiation, grad, div, curl, tangent plane, normal line, level curves/surfaces, extrema and Lagrange's method, multiple integrals, change of variables, Jacobian applications, vector analysis, and more complex differential equations. While the course emphasizes concrete computations over proof, it demands that students move beyond thinking of mathematics as a set of rules and algorithms to memorize and instead encourages students to approach problems with greater independence and maturity.
Prerequisite: Advanced Placement Calculus BC and permission of the department

Advanced Topics in Higher Mathematics*
The course emphasizes mathematical reasoning and problem-solving through elegant proofs and applications to cryptography, computer science, and real-world problems. Topics are approached with both theoretical depth and practical applications, preparing students for collegiate mathematics and computer science programs. Students learn to think like mathematicians, constructing and communicating mathematical arguments with precision and creativity. The curriculum focuses on advanced theoretical topics such as combinatorics, logic, graph theory, number theory, and game theory. This course demands a high degree of mathematical maturity as students explore complex theories and tackle challenging problems. **Offering is subject to availability.*
Prerequisite: Advanced Placement Calculus BC and permission of the department

Advanced Placement Computer Science Principles
This course introduces students to the foundational concepts of computer science where they explore how complex digital information such as numbers, text, images, and sound are represented and stored and how the logic behind these representations preserves essential qualities of the data. Fundamental programming concepts and collaborative software development processes are studied, enabling students to develop a variety of apps utilizing variables, conditionals, functions, and lists. This course emphasizes leveraging creative problem-solving to create real-world applications that connect the material being studied to students' everyday lives. Students design and analyze algorithms used for everyday computer tasks, explore logic behind data formatting, as well as research and debate current events at the intersection of internet, data, public policy, law, ethics, and societal impact. This course prepares students for the Advanced Placement exam in Computer Science Principles, which involves the completion of a digital artifact that will be submitted to the College Board in addition to the student sitting for the written Advanced Placement exam.
Prerequisite: Geometry, Algebra II, and permission of the department

Advanced Placement Computer Science A
Equivalent to a one-semester, college-level course in computer science, this course introduces students to the discipline through high-level programming in Java. Fundamental topics include the design of solutions to problems, the use of data structures (including 1D arrays and 2D arrays) to organize large sets of data, and the development and implementation of algorithms to process information. While prior coding experience is helpful, students may enroll in this course with no prior computer science knowledge. This course prepares students for the Advanced Placement Computer Science A exam.
Prerequisite: Advanced Algebra II and Trigonometry (or AP Computer Science Principles) and permission of the department

Science

Scientific knowledge has grown so rapidly that no single person can master all the facts of even one discipline. Yet the ability to think scientifically has never been more important, whether weighing questions about technology, the environment, health, or countless other dimensions of modern life. The mission of the Science Department is to develop students as scientific thinkers: people who reason logically, solve problems creatively, research rigorously, and communicate clearly. More than learning established facts, students learn to find the patterns and principles that connect them.

Central to this mission is our emphasis on scientific practices. In every course and at every level, students are asked to be scientists, not simply to learn about science. They ask questions and develop models. They make predictions, then design and carry out experiments to test them. They construct arguments grounded in evidence, propose solutions to real problems, and give and receive feedback on their work. Throughout, they learn to present their findings in professional scientific formats, both to their teachers and to their peers, using a wide range of instruments and analytical tools in and beyond the laboratory.

Two core laboratory sciences (biology, chemistry, physics) are required for graduation. Once students have completed their foundational requirements, they can deepen their study in biology, chemistry, or physics; or explore other branches of science in detail, including environmental sciences, air and space sciences, and engineering and physical sciences.

Biology
This core laboratory science examines the living world from multiple perspectives. Core topics include the scientific method, ecosystems, cell structure and function, genetics, and evolution. Students develop skills in laboratory techniques, data collection, and scientific communication through traditional and inquiry investigations, including a field research project conducted on a study plot in the forest on the slopes of Mt. Everett.

Advanced Biology: Research Methods
This research-based course is designed for students with strong science backgrounds and research experience. It covers a comprehensive study of cell and molecular biology, microbiology, and modern biological research techniques. Students gain proficiency in DNA and protein analysis, fluorescence microscopy, and mammalian bioinformatics while refining their skills in data analysis, problem-solving, and collaboration. These hands-on experiences enhance understanding of biological systems while building essential skills in data analysis, problem-solving, and collaboration.
Prerequisite: Algebra I and Geometry (may be taken concurrently) or permission of the department

Chemistry | Advanced Chemistry
This core laboratory science introduces the principles governing matter and its interactions. Topics include states of matter, chemical formulas and equations, atomic structure, periodic trends, chemical bonding, chemical reactions, solutions, and acids and bases. Through traditional and inquiry investigations, students explore stoichiometry, measurement, gas laws, acid-base equilibria, and qualitative analysis, emphasizing precision and accuracy. Laboratory work emphasizes the design of investigations, data analysis, and the communication of scientific findings. The advanced section offers a faster pace and greater depth in the same topics.
Prerequisite: Algebra I for Chemistry; Advanced Geometry (may be taken concurrently) for Advanced Chemistry

Physics | Advanced Physics
This core laboratory science explores the fundamental laws of the physical universe. Areas of study include kinematics, Newton's laws of motion, rotational motion and torque, energy, light, sound, and electromagnetism. Students strengthen their ability to apply mathematics to physical systems and expand skills in laboratory techniques, data collection, and scientific communication through traditional and inquiry investigations as well as engineering challenges. The advanced section offers a faster pace and greater depth in the same topics.
Prerequisite: Algebra II (may be taken concurrently) for Physics; Advanced Precalculus (may be taken concurrently) for Advanced Physics

Environmental Science
This elective course examines environmental systems and sustainability through an interdisciplinary lens. Students study environmental science, ecology, and the connections among environmental, social, and economic

systems. Coursework emphasizes inquiry-based research, data analysis, and communication of scientific findings. Learning extends beyond the classroom through fieldwork, community engagement, and place-based projects.
Prerequisite: two core laboratory courses or permission of the department

Introduction to Engineering
This elective introduces students to engineering principles through programming, circuitry, electronics, rapid prototyping, and design thinking. Students develop skills in the iterative engineering and design process by exploring microcontroller programming and fabrication using tools such as 3D printers. The course culminates in a collaborative project in which students create a functional solution to a real-world problem.
Prerequisite: Biology and Chemistry (may be taken concurrently)

Advanced Principles of Engineering
This elective course provides a broad foundation in engineering concepts, including mechanisms, strength of materials, structures, automation, and kinematics. Students apply mathematics, science, and technology to solve rigorous design challenges while developing documentation skills, creativity, and teamwork. Real-world design problems are addressed through collaborative projects.
Prerequisite: Algebra II, two core laboratory courses (one must be Physics), and permission of the department

Astronomy
This elective explores celestial phenomena and the vast expanse of the universe. Students study planetary motion, star formation, galaxies, black holes, and more. Students also explore the methods of observational astronomy while developing skills in telescope operation and astronomical imaging. Students become familiar with the telescope and imaging systems using the school's Dixon Observatory and portable robotic telescopes.
Prerequisite: two core laboratory courses or permission of the department

Advanced Astrophysics
This elective course is designed for students seeking to go beyond the wow-factor of the traditional astronomy course and to experience a more rigorous introduction to the field. Students engage in a mathematically-driven exploration of the universe and apply high-level physics to the cosmos. Moving beyond conceptual descriptions, this course utilizes quantitative analysis to investigate stellar evolution, orbital mechanics, and galactic structure. Students bridge the gap between theory and practice by conducting collaborative research projects using raw data from NASA archives and global observatories to solve real-world astronomical puzzles.
Prerequisite: Advanced Physics (may be taken concurrently) and permission of the department

Aviation Science
This yearlong elective course prepares students for the FAA Knowledge Exam for Private Pilot. Topics include navigation, radio communication, aviation weather, instrumentation, and aircraft systems. Students build applied aeronautics knowledge and practice safety protocols. The course features flight instruction at Great Barrington Airport.
Prerequisite: two core laboratory courses; open to Form VI and, pending availability, Form V

Human Anatomy and Physiology
This elective focuses on the structure and function of the human body by exploring how their own body systems work and interact to maintain homeostasis. Core topics include cellular biology and integumentary, skeletal, muscular, nervous, circulatory, and digestive systems. Students practice traditional and inquiry investigations, use anatomical models, and employ multimedia resources to support learning.
Prerequisite: two core laboratory courses

Psychology
This elective introduces students to the science of behavior and mental processes. Core topics include neuroscience, development, perception, learning, memory, personality, social psychology, and abnormal psychology. Students analyze research, interpret case studies, and explore real-world applications such as advertising and eyewitness testimony. The course includes an examination of classic and contemporary experiments. *Open to Form VI and, pending availability, Form V.*

Advanced Placement Biology
This AP course is designed for second-year biology students interested in advanced study in biological science. Topics include biochemistry, cell biology, genetics, evolution, and ecology. Students engage in advanced laboratory investigations, refine data analysis skills, and prepare for the Advanced Placement exam in Biology.
Prerequisite: two core laboratory courses and permission of the department

Advanced Placement Chemistry
This AP course for second-year chemistry students mirrors the rigor of a first-year college chemistry program. Topics include stoichiometry, acid-base equilibria, spectroscopy, redox equilibria, and quantitative analysis. Students conduct laboratory work that emphasizes accuracy, precision, and reproducibility

in measurement, and practice answering AP-formatted questions in preparation for the Advanced Placement exam in Chemistry.
Prerequisite: two core laboratory courses, Advanced Algebra II and Trigonometry, and permission of the department

Advanced Placement Environmental Science
This AP course provides a comprehensive study of environmental systems and is intended for students who are new to, or have limited experience with, environmental science. Areas of focus include ecosystems, atmospheric and biospheric systems, population dynamics, pollution, climate change, and resource management. Students conduct laboratory and field investigations to support their learning, and practice answering AP-formatted questions in preparation for the Advanced Placement exam in Environmental Science. *Not recommended for students who have already taken Environmental Science.*
Prerequisite (Form VI): two core laboratory courses and permission of the department
Prerequisite (Form V, pending availability): Biology, Chemistry, Physics, and permission of the department

Advanced Placement Physics C: Mechanics
This AP course for second-year physics students provides an in-depth, calculus-based study of classical mechanics. The course covers kinematics, dynamics, energy, momentum, rotational motion, gravitation, and oscillations. Students build expertise in advanced problem-solving and laboratory experimentation in preparation for the Advanced Placement exam in Physics C: Mechanics.
Prerequisite: two core laboratory courses, AP Calculus (may be taken concurrently), and permission of the department

Advanced Environmental Science Research
This research course is intended for students who have completed AP Environmental Science and want to pursue independent research. Students study advanced ecological concepts, develop and carry out original projects, and refine their field and laboratory techniques, all through local exploration of Berkshire School's 400-acre campus. Students generate their own research paper and present their findings to their peers and the Berkshire School community.
Prerequisite: AP Environmental Science (or Environmental Science with approved application) and permission of the department

Advanced Math/Science Research
This independent research course allows students to design and execute an original research project of their conception in any of the STEM disciplines, including Computer Science. Students work in collaboration with a faculty mentor or professional scientist to produce a research paper in scientific journal format and present their findings to members of the department and others in the Berkshire School community.
Prerequisite: two core laboratory courses (Advanced or AP preferred), Precalculus, approved application, and permission of the department

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Berkshire School admits students of any race, color, religious affiliation, national and ethnic origin and qualified handicapped students to all rights, privileges, programs and activities generally accorded or made available to students. We do not discriminate in violation of any law or statute in the administration of our educational policies, admissions policies, scholarship and loan program, and athletic or other school-administered programs.

BERKSHIRE SCHOOL