

Upper School Course Guide

2025-2026

Table of Contents

English

<u>History</u>

Mathematics

Performing Arts

Physical Education/Health

Religion

Science

Visual Arts

World Languages

English

Graduation requirement: 8 semester credits

Course Sequence:

Grade 9: ENG101: English 9 - Close Reading & Analytical Writing

Grade 10: ENG201: English 10 - Composition & Rhetoric Grade 11: ENG301: English 11 - Inquiry & Synthesis OR

ENG621: AP Language and Composition **OR**

ENG631: AP Literature and Composition

Grade 12: One yearlong **OR** two semester-long electives*

Junior† and Senior Elective Courses:

Semester Yearlong

ENG401: English 12 - Self & Revision ENG501: Honors English 12 - Self & Revision

ENG411: Creative Writing ENG511: Honors Creative Writing

> ENG621: AP Language and Composition[∆] ENG631: AP Literature and Composition[△]

ENG791: Advanced English Scholarship and Research[∆]

Yearlong Courses:

Registration requires student-teacher conversation about appropriate placement.

Course Descriptions:

ENG101: English 9 - Close Reading & Analytical Writing

This discussion-based course, required for all ninth graders, builds capacity for literary study with a focus on the core skills of close reading and analytical writing. Students explore short stories (various authors), 12 Angry Men (Rose), Trifles (Glaspell), The Marrow Thieves (Dimaline), Recitatif (Morrison), The Odyssey (Homer; trans. Emily Wilson), Just Mercy (Stevenson), and a wide selection of poetry to develop their ability to read between the lines, recognizing and understanding figurative language. Throughout this study of literature students explore what it means to look at the world from someone else's point of view and engage with compassion. They improve their facility with the formal essay, developing skills in evidence-selection, literary analysis, and the writing process. Students also write frequent journal entries, practice public speaking in a variety of formal presentations to the class, and increase vocabulary through words drawn from class texts. (Yearlong)

^{*} Seniors must be enrolled in at least one English course each semester.

[†] Juniors students may take English electives in addition to their required course.

[△] ENG791 requires an application in semester 1 of junior year.

ENG201: English 10 - Composition & Rhetoric

This course, required for all tenth graders, is designed to enhance students' reading, writing, critical thinking, and discussion skills through the rhetorical analysis of literature, focusing on the American Spirit and themes like the American Dream, American Exceptionalism, and "life, liberty, and the pursuit of happiness." The class investigates how the rhetoric of "Americanness" permeates contemporary texts, as well as how similar rhetoric appears in texts far before the USA's founding. At the core of this course, students examine how rhetoric, identity, and storytelling intersect, questioning what this tells us about our past and present, as well as implications for the future. This course grows skills in both rhetorical and literary analysis, further preparing students for English 11, AP Literature and Composition, and AP Language and Composition. (Yearlong)

ENG301: English 11 - Inquiry & Synthesis

This course, required for juniors not taking AP Literature and Composition, develops students' reading, writing, critical analysis, and discussion skills through the revision process and the study of major works of literature from several eras and varied voices. The course includes works such as The Great Gatsby (Fitzgerald), In the Distance (Diaz), The Fire Next Time (Baldwin), There There (Orange), and a selection of choice books that include Station Eleven (St. John Mandel), Exit West (Hamid), and Never Let Me Go (Ishiguro). Additionally, students read many personal essays by various authors. They study poetry to build on skills laid in the 9th grade poetry essay and enhanced in poetry pairings throughout 10th grade. Students write inquiry journal entries, analytical essays, personal essays, and poems of their own imagining. They also collaborate in small groups to make new media texts about the literature. We review and build with active revision the essential elements of essay structure and work to increase the logic and depth of students' inquiry and argumentation, the sophistication and nuance of their analyses, and the variety, concision, and grammatical precision of their sentences. (Yearlong)

ENG401: English 12 - Self & Revision

This senior-level course examines how one's sense of self is shaped by the larger world, exploring and synthesizing the ways authors and artists express personal identity through storytelling. Using a selection of short stories, nonfiction essays, media texts and memoirs—including Admissions (Scott), How to Write an Autobiographical Novel (Chee), There's Always This Year: On Basketball on Ascension (Abdurraguib), Fun Home (Bechdel), and Know My Name (Miller)—students explore the complexities and opportunities of first-person narration. The course emphasizes inquiry-driven approaches to both analytical and creative writing, encouraging students to explore how form influences personal narratives and how different media can express point of view and subtleties of voice. By the end of the course, students have gained a deeper understanding of the relationship between narrative structure and personal expression, honing and expanding their skills in analyzing and crafting first-person stories across various forms. (Semester)

ENG411: Creative Writing

This course, open to juniors and seniors, guides students to explore creatively through writing. Students learn that creative writing—the making of art objects through language — involves learning to pay close attention to the world and to human experience. In addition to writing, students also read and discuss a large variety of literary genres and forms. Using literary works as models and sources of inspiration, students create their own art objects that reflect and convey their own meaningful experiences and insights. The majority of class time is spent in a variety of writing activities, such as warm-up writing prompts, in-class writing practice, writer's workshops, and endeavors designed to help students find their inspiration and focus for writing. Throughout the semester students work toward completing a polished collection of their best writing produced during the course. Seniors are given priority. (Semester)

ENG501: Honors English 12 - Self & Revision

This course, open to seniors and enhancing the concepts of English 12, engages in a more immersive study of personal narrative, deepening students' understanding of how identity is shaped and conveyed across diverse storytelling media. With additional time and expectation for depth of exploration and investment in revision, students will experiment with structure, style, and voice through multiple drafts, peer workshops, and collaborative storytelling. The course also integrates interdisciplinary perspectives, incorporating documentary film and drama to examine how different forms influence self-representation. By the end of the year, students present inquiry-driven lessons to their peers and showcase a sophisticated, cohesive body of work that reflects their evolving analysis and craft of selfhood within narrative. (Yearlong)

ENG511: Honors Creative Writing

This course, open to seniors and enhancing the concepts of the semester-long Creative Writing course, is for students interested in deepening their creative writing practice through inspiration, generation, revision, and publication. In this class, students establish and then build on study of creative nonfiction, fiction, poetry, and screenwriting by selecting a genre of focus, reading deeply in that genre, and developing a body of work reflective of the student's skills in that genre. Students will also take their work through rigorous (and joyful!) revision in order to prepare it for publication in literary journals, newspapers, and anthologies. Classwork will be supplemented by field trips to inspiring local destinations, including literary presses, independent bookstores, and other organizations related to the publishing industry. Throughout the year, students will come to understand how to craft not only powerful writing, but how to bring that writing to the world. (Yearlong)

ENG621: AP English Language and Composition

This course, open to qualifying juniors and seniors, is a writing-intensive class that engages students in becoming skilled readers of nonfiction prose from a variety of time periods, disciplines, and rhetorical contexts. Students apply the techniques they study to their own prose, writing journals, and essays in a variety of modes, including narrative, expository, analytical, and argumentative. Students explore how the interactions between a writer's purpose, audience, subject, occasion, and other rhetorical conventions influence the effectiveness of a text. In addition to a composition textbook, students read a variety of articles and essays. Authors read may include Toni Morrison, Margaret Atwood, Louise Erdrich, Audre Lourde, Abigail Adams, and Sojourner Truth. In preparation for the AP examination, students also take a number of practice tests and write many in-class essays. Seniors are given priority. Prerequisites: pre-registration form completion and teacher recommendation. (Yearlong)

ENG631: AP English Literature and Composition

This course, open to qualifying juniors and seniors, is designed for students with a strong interest in the study of literature. Successful students have exceptional reading, writing, speaking, and literary analysis skills, a willingness to read a large number of challenging books and to write frequent, longer essays in response to those texts. The this course focuses on in-depth discussion of major authors and important literary works in the genres of poetry, drama, fiction, and nonfiction from a range of time periods, including many of the following: *Invisible* Man (Ellison), How Much of These Hills Is Gold (Zhang), Hamlet (Shakespeare), The Promise (Galgut), Ceremony (Silko), A Doll's House (Ibsen), The Importance of Being Earnest (Wilde), essays of literary criticism. and a unit of poets and their work. In addition to preparing students to take the AP examination in the spring, this seminar-style class cultivates student exploration of more challenging materials in an intensive scholarly community with other highly motivated students. Seniors are given priority. Students in this course are required to read an additional summer reading book to be announced before the end of the year *Prerequisites*: pre-registration form completion and teacher approval. (Yearlong)

ENG791: Advanced English Scholarship and Research

2025-2026 focus - Literature and Creation

This course is open to qualifying seniors. How does one work of art influence another? What does literature have to say about making, makers, art, and artists? Does the created thing itself have agency? This class begins by exploring the ekphrastic (both those of established writers and our own creative attempts), then moves to theoretical lenses on literature about making, makers, art, and artists, resulting in small-group presentations and defenses of research and conclusions. In the second semester, students choose individual texts for inquiry and research, culminating in a paper and a conference presentation. Though often separate in endeavor, all students anchor their year's work in an investigation of how art can speak to art, how creation and the created can take on a life of their own. (Yearlong)

History

Graduation requirement: 6 semester credits

Course Sequence:

Grade 9: HIS101: Modern World History

Grade 10: HIS201: United States History OR HIS601: AP United States History

Grade 11: Electives Grade 12: Electives

Junior and Senior Elective Courses:

HIS421: History of Terrorism

HIS431: Labor Studies

HIS441: Sports in America: A Social History

HIS451: Modern Chinese History

HIS461: The Ancient World

HIS471: World War II & the Holocaust

HIS481: Economics I HIS482: Economics II

HIS591: Honors Research: African American Studies

HIS592: Honors Research: Current History HIS593: Honors Research: Heritage Studies HIS594: Honors Research: Race In Place

HIS602: AP Art History

HIS603: AP US Government & Politics

HIS604: AP Comparative Government & Politics

HIS791: Advanced History Research

Course Descriptions:

HIS101: Modern World History

This course, required for all grade 9 students, is designed to challenge students to search for the root causes of the issues we face in the world today. We will examine the early modern world, the global power structures of imperialism, how societies have both promoted and fought against inequity, 20th century world conflict, revolutionary independence movements during the eras of colonization and decolonization, and lastly we will explore contemporary global issues. This course will focus on expanding student skills in the areas of collaboration, critical reading, research and citation, and analytical writing. During both semesters students will engage in role play decision-making scenarios and complete research projects. (Yearlong)

HIS201: United States History

This course, required for all grade 10 students not taking AP United States History, covers important political, economic, social and intellectual developments of the United States from colonial times to the present. Among the topics to be studied are the Federalist Era, the Jacksonian Era, the Civil War and Reconstruction, Industrialization, World War I, the New Deal, World War II, the Cold War and Vietnam. Analysis of primary sources is emphasized, as well as an approach that encourages students to view discrete events from many perspectives. (Yearlong)

HIS421: History of Terrorism

This semester course will take a historical, theoretical and critical view of terrorism and terrorists, focusing on domestic terrorism in the United States. We will begin with an academic dive into the subject, looking into the differences between freedom fighters and terrorists, exploring different theories and causes of terrorism and the role of the media in attacks. We will then shift to a case study approach in the United States. We will explore the similarities and differences between left and right wing terror, both historically and today. We will examine the 1995 Oklahoma City Bombing, analyzing the motives and goals of the attack. The course will culminate with a study of the September 11 attacks. (Semester)

HIS431: Labor Studies

At least one third of your life is spent at work, so it is important to think critically about your life as a worker. Labor Studies combines history, economics, sociology, political science, and documentary filmmaking to explain the systemic factors behind why people love or hate their jobs. This course focuses on how the everyday experiences of workers throughout Minnesota, the United States, and the world have changed over the twentieth and twenty-first century. Course materials include twenty documentaries that showcase the voices of students, parents, farmworkers, factory workers, domestic workers, office workers, truckers, teachers, meatpackers, police officers, managers, athletes, waiters, rideshare drivers, and social media influencers, among others. Students will research the history of an occupation, analyze a present-day labor issue, and create a mini-documentary about a friend or family member's work life. (Semester)

HIS441: Sports in America: A Social History

The rivalries, multimillion-dollar television contracts, and the explosion of fantasy leagues reveal that sports and athletic competition have become a defining cultural experience in the United States. Peeling away the hype and hoopla, students will discover that sports reveal much about American identity, history, politics and culture. This course will examine and interpret the role and importance of sports such as baseball, boxing, football, and basketball at the professional and amateur levels in American history and their reflection of American social values as well as how they have been vehicles for social advancement. Students will read stories about athletes and competitions and how issues of class, race, gender, industrialization, nationalism, foreign policy, religion, economics and patriotism affected those. The course will require students to investigate through different perspectives, to consider the context of time and place, and to question common narratives. (Semester)

HIS451: Modern Chinese History

China has undergone a remarkable transformation over the last 200 years. This semester course will examine how China went from a "century of humiliation" to transforming itself into a world power. We will begin our study with the arrival of the Europeans in the late 1700s and follow the progression of Chinese history, including the Opium Wars, the fall of the Qing Dynasty, the rise of the Nationalist Movement, World War II, and the rule of Mao Zedong and the Chinese Communist Party. We will analyze the clash of the common people and the ruling classes, and gain understanding of the events and policies that helped shape the last two centuries of Chinese history. (Semester)

HIS461: The Ancient World

This course delves into the foundations and development of civilizations from their inception around 3000 BCE to the dawn of the Middle Ages around 1000 CE. While we will examine ancient civilizations, it's important to recognize their enduring impact on our contemporary world. These civilizations laid the groundwork for many aspects of our modern society, including governance and law, organized religion and philosophy, written language and mathematics, economic systems and trade, art, music, and literature, and scientific inquiry and technological innovation. However, this historical journey also reveals the darker side of human civilization, including corruption and exploitation, warfare and conflict, and social injustice and oppression. By understanding the complexities of these ancient societies, we can gain valuable insights into the challenges and opportunities facing our own world. While specific historical events and figures will be discussed, the emphasis will be on the underlying patterns and trends that shaped the course of human history. (Semester)

HIS471: World War II & the Holocaust

This course focuses on the conditions and progress of the Nazi persecution and murder of European Jews and other minorities from the 1930s to 1945 within the larger picture of the events of World War II. Military aspects of the war, including the Nazi blitzkrieg, Battle of Britain and London Blitz, Operation Barbarossa (invasion of the Soviet Union), Japanese expansion and the war in the Pacific, and the Normandy invasion will be a part of the course. The military history of the war will provide larger context for the main focus of the course, which is the Holocaust. Other important contextual topics include historical European antisemitism, Germany after World War I, the economic and cultural crises of the 1920s, fascism in Europe, and the rise of Hitler and the Nazi party in the 1930s. Other topics include the options Jewish Germans faced in escaping the country, the beginnings of concentration and death camps, ghettos, Jewish resistance (hiding, escape, and armed resistance), and the Holocaust and memory. Finally, the aftermath of the Holocaust, including the war criminal trials and the fate of displaced persons will help conclude the course. Students will examine both primary and secondary sources, including texts, photos, artwork, and videos, to investigate the time period. (Semester)

HIS481: Economics I

This course explores microeconomic and macroeconomic concepts. After an introduction to economic thinking and theory, students explore microeconomic analysis of the laws of supply and demand, marketing techniques, and the organization of business firms. Macroeconomic topics include fiscal and monetary policy, inflation, and the role of the Federal Reserve. Discussion and evaluation of the economic and political implications of these concepts are major components of this course. (Semester)

HIS482: Economics II

This course continues to analyze the major economic concepts presented in Economics I while emphasizing current economic issues. Students examine the growing economic interdependence between nations and grapple with debates of free trade versus protectionism. Students will discuss emerging economies and America's role in the world economy. Students create business plans that examine what it takes to open a business including financing, marketing, real estate, employee benefits, insurance and a cost analysis of the various facets of their business proposal. Prerequisite: Economics I. (Semester)

HIS591: Honors Research: African American Studies

This advanced-level course will focus on the histories of African-American and Black communities, beginning with African kingdoms and concluding with the contemporary Civil Rights Movement. Students will cultivate a nuanced understanding of Black scholarship and Black Thought in the context of the African diaspora and the United States by utilizing primary sources, academic analysis, works of art, media, and literature. Interdisciplinary by design, this course will extend student learning beyond the traditional scope of a History course, inviting students to critically analyze the history of Black folks and decentering whiteness in this narrative. (Semester)

HIS592: Honors Research: Current History

This is a headline driven advanced-level course that will examine the global dynamic of the 21st Century. The class will introduce students to the issues and conflicts facing our world today. It will examine global events through three separate lenses: Students will learn the historical context that is the foundation for each of the conflicts studied; they will examine contemporary foreign, domestic, and doctrinal policies in order to understand multiple perspectives for each conflict; and students will create and complete multiple research projects that delve deeply into political and social divisions, regional power struggles, and related events that impact national and global stability. (Semester)

HIS593: Honors Research: Heritage Studies

This advanced-level course consists of individual student inquiries into family history and collective conversations about our interconnected heritage. First, the class considers multiple definitions of kinship—including Indigenous, queer, transnational, and adoptive perspectives—and each student establishes personalized research objectives. Second, the class examines past examples of research into family history and heritage in Minnesota, and each student chooses a mentor text on which to model their own project. Third, the class explores a variety of research methods—such as family interviews, census records, and newspaper archives—and each student creates a customized research plan. Fourth, the class learns how to find scholarly articles, book chapters, and multimedia sources so that each student can compile a bibliography that directly speaks to the historical context of their own ancestors. Lastly, each student presents their original research to an audience of their choosing as both a research paper and another storytelling format of their own choosing. Overall, this highly rigorous and personalized course aims to develop students' research skills as well as self-knowledge. (Semester)

HIS594: Honors Research: Race In Place

This advanced-level course will investigate population growth and demographic changes in the Twin Cities since the early 20th century. We will explore where different racial, ethnic, and religious populations settled within the Twin Cities urban areas and how economic, political, cultural, and social factors affected these decisions. This work will be set in the historical context of the time periods in which these groups arrived, expanded, and/ or moved and the events and issues that shaped the Twin Cities' racial, ethnic, and religious development. Topics to be investigated include the Twin Cities' population trends, geography, demographics, and population shifts over the years. Special attention will be paid to areas such as Rondo, Little Earth, North Minneapolis, Cedar Riverside, and Frogtown. (Semester)

HIS601: AP United States History

This course, open only to qualifying grade 10 students, addresses the major developments that shaped our nation. This course diverges from the US History survey course in the quantity and rigor of readings, the heavier stress on historical analysis and the expectation that AP students develop more complex and sophisticated reading, analytical, and interpretive skills. Students will also cultivate a critical appreciation for American History and analyze the evolving nature of historians' understandings of the past. Prerequisites: A- (90) or above in Modern World History or upon appeal with departmental approval. (Yearlong)

HIS602: AP Art History

This course is designed to give students the tools they need to be conversant about pieces of art they encounter throughout life while mastering how to approach a work of art, the vocabulary and analytical methods with which to discuss it and the knowledge of how the piece fits into the general sweep of art historical periods and styles. Students work toward achieving an understanding of the interconnectedness of art with other aspects of world cultures. By studying artists from around the world and from unfamiliar cultures, this course aims to develop a broad perspective about and appreciation for both European-based and non-Western art. (Yearlong)

HIS603: AP US Government & Politics

This course examines the relationships between the three branches of the US government and explores how different political ideologies and opinions shape American politics. The course also provides an introduction to key political concepts, ideas, institutions, policies, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. Underpinning the required content of the course are several big ideas (Constitutionalism, Liberty and Order, Civic Participation, Competing Policymaking Interests, Methods of Political Analysis) that allow students to create meaningful connections among concepts throughout the course. Students will also engage in skill development that requires them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. Lastly, students will complete a political science research or applied civics project as part of the required coursework for the AP exam. Students will be required to take the AP exam in the spring. (Semester)

HIS604: AP Comparative Government & Politics

This course will push students to examine the diversity of political life outside the United States by using a comparative approach to examine the political structures, policies, and political, economic, and social challenges of six countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students will compare the effectiveness of approaches to global issues by examining how different governments solve similar problems. Students will also read and interpret data, make comparisons and applications, and develop evidence-based arguments. Students will be required to take the AP exam in the spring. (Semester)

HIS791: Advanced History Research

Advanced History Research is open to qualifying seniors. In this course students will conduct independent and in-depth research into a historical topic of their choice. The research will consist of consultation with both primary and secondary sources, in addition to working with people and organizations outside of Breck. Students will undertake the research, writing, and presentation process that historians practice, including advancing an original interpretation of a particular historical event or concept and explaining how their project fits into the existing scholarship. Students will work with the instructor to develop research questions, review the literature already written about a topic, and research a variety of sources to create their own argument supported by relevant evidence. Over the course of the class, students will present their learning via multiple platforms, including articles, websites, videos, and presentations. There may also be an opportunity to prepare one's scholarship for publication or presentation at a historical conference. The range of potential topics is limited only insofar as students have access to archives, libraries, sources, and research experts (historians, professors, archivists) outside of Breck. Students are expected to begin the process early and arrive at the beginning of the course with a solid idea of a historical topic that they will investigate throughout the school year. *Prerequisites*: Application, departmental approval, and a minimum grade of A- (90) in junior year History coursework. Class of 2027 students must take an Honors Research course in their junior year in order to be eligible to apply for Advanced History Research. (Yearlong)

Mathematics

Graduation requirement: 6 semester credits including: Algebra I, Geometry, and Algebra II

Core Course Sequence: Semester Courses:

MAT101: Algebra 1B MAT331: Computer Science I* MAT332: Computer Science II* MAT102: Geometry MAT321: Probability and Statistics* MAT201: Algebra 2

MAT301: Functions, Statistics and Trigonometry

MAT401: Precalculus MAT541: Calculus

Honors Courses:

MAT201H: Honors Algebra 2 MAT401H: Honors Precalculus

AP Courses:

MAT621: AP Statistics*

MAT631: AP Computer Science A*

MAT641: AP Calculus AB MAT642: AP Calculus BC

Higher Level Courses:

MAT731: Advanced Topics in Computer Science

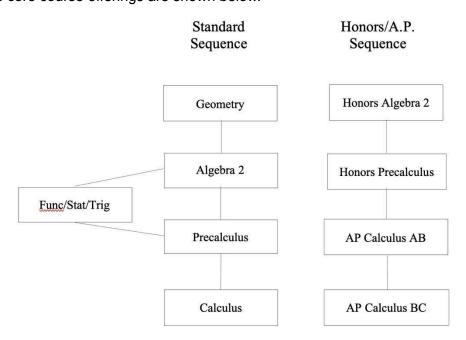
MAT751: Advanced Topics I - Linear Alg, Diff Eqns, Multivariable Calc

MAT752: Advanced Topics II - Independent Study

MAT791: Advanced Math Research

Common Pathways:

Many combinations of math courses are possible in the Upper School. Two common pathways through the core course offerings are shown below.



^{*} Students frequently take these courses in conjunction with another math course.

Honors/Advanced Placement Courses

Breck's Standard Sequence offers a robust set of college-preparatory mathematics courses. culminating in Calculus for most students. Honors and Advanced Placement (AP) courses are appropriate for students who have the interest in, and capacity for more challenging material and a faster pace.

Because one purpose of these courses is to prepare students for the AP examinations in Calculus and Statistics, each course emphasizes facility with algebraic manipulation to a greater degree than in Standard courses.

Students in Honors and AP courses share these traits:

- As noted, they grasp challenging new concepts and procedures at a rapid pace
- They make independent connections among mathematical ideas and apply previous knowledge to new situations
- They persevere in the face of difficult problems or concepts and draw independently on a variety of strategies in seeking solutions
- Because of their interest in the study of mathematics, they commit more time and effort to their coursework than is typical

Criteria for enrollment in Honors and AP courses include: success in previous courses, strong standardized test scores, and a history of demonstrated interest in mathematics. Teacher recommendations and placement tests also are used to evaluate candidates for Honors/AP work. Continuation in the sequence requires the approval of the current teacher and an average grade of at least a B in the previous course. The Department Chair makes final placement decisions.

Sequence Changes and Acceleration

Multiple opportunities exist for students to transition to Honors/AP courses or to advance more rapidly through the curriculum. Questions regarding the options below may be directed to the student's math teacher or to the Mathematics Department Chair.

- Concurrent Math Courses: There are two points at which students may take sequenced classes concurrently:
 - Algebra 1B and Geometry
 - o Geometry and Algebra 2

These options require a significant commitment from the student and should only be undertaken after consulting the student's teacher or the Math Department Chair. This option prevents students from taking Fine Arts courses in the grade 9, but it is available to students who are able to handle the demands of two math courses.

- **Summer Work:** Students may take *Geometry* through the Breck Summer Program, or independently through another approved provider. This requires a formal proposal and department approval in advance.
- Additional Work and Placement Test: Students may attempt to enter the Honors/AP Sequence at any of the following points by completing additional material under the direction of their teacher and/or during May Program, and passing a placement test:
 - Geometry to Honors Algebra 2
 - Algebra 2 to Honors Precalculus
 - Precalculus to AP Calculus AB

Details of these options are provided to students in their math classes.

Course Descriptions:

MAT101: Algebra 1B

This course covers the second half of a first-year algebra course. A brief review of prior material is followed by study of systems of equations and inequalities, polynomials and factoring, exponents, quadratic equations and functions, radicals, and rational equations and functions. Connections with Geometry are explored. *Prerequisite*: Algebra 1A or departmental approval. (Yearlong)

MAT102: Geometry

This course addresses geometric relationships and applications in a context of reasoning and proof. Topics include parallel and perpendicular lines, congruence and similarity of triangles, right triangle trigonometry, solid geometry, coordinate geometry, and properties of circles. Connections to algebra are regularly explored and reinforced. Prerequisite: Algebra 1 or 1B. (Yearlong)

MAT201: Algebra 2

This course develops students' proficiency with algebraic expressions and functions, including linear, quadratic, polynomial, rational, radical, exponential, and logarithmic forms. Problem-solving skills and conceptual understanding are balanced and integrated, with a focus on effective strategies for learning math. Students engage in collaborative, hands-on activities using vertical surfaces and a Thinking Classrooms approach. Prerequisite: Algebra 1 or 1B. (Yearlong)

MAT201H: Honors Algebra 2

This course moves students from the less formal mathematics of the Middle School to the rigors of the Upper School Honors/Advanced Placement sequence. The pace is rapid and students are expected to develop independence and flexibility as problem solvers and learners of mathematics. The course emphasizes facility with algebraic forms, especially linear and quadratic equations and systems, powers and roots and functions based on these concepts. Logarithmic, polynomial and other special functions are also studied. Links with geometry, including transformations are included. Graphing technology is used to explore the relationship between algebraic relations and graphs. Prerequisites: Algebra, Geometry and departmental approval. (Yearlong)

MAT301: Functions, Statistics and Trigonometry (FST)

This course integrates statistical, algebraic and trigonometric concepts using graphing calculators and Desmos as tools for function and data analysis. The connections between equations and graphs of exponential, trigonometric, logarithmic, and other functions are explored with an eye toward future math courses. Descriptive and inferential statistics and their applications are included as well as projects to explore data. Prerequisite: Algebra 2. (Yearlong)

MAT321: Probability and Statistics

This semester course serves as an introduction to descriptive and inferential statistics and principles of probability. The descriptive statistics strand includes graphing, summary statistics, and linear and nonlinear modeling. Probability concepts include counting principles, conditional probability and independence, and probability distributions including the binomial and normal. Hypothesis testing and confidence intervals are introduced. Students who have taken or plan to take Honors Precalculus or Functions, Statistics & Trigonometry should not take this course due to overlap of content. Prerequisite: Algebra 2 or Honors Algebra 2. (Semester)

MAT331: Computer Science I

This course introduces students to the major concepts of computer science: variables and types, functions, sequence, branching, repetition, and algorithm development and implementation. Students will build fundamental programming and computational problem-solving skills. No prior programming experience is required. (Semester)

MAT332: Computer Science II

This course is a direct follow-up course in Computer Science for students who have successfully completed Computer Science I. Students will learn about major concepts in object-oriented programming, implementation of classes, Strings, Collections, File I/O, and more. Students will build their own program/application at the end of the semester. Prerequisite: Computer Science I or departmental approval. (Semester)

MAT401: Precalculus

This course prepares students for the study of calculus. Topics include transformations of functions, and properties of polynomial, rational, exponential, logarithmic, and trigonometric functions. Students investigate real world applications through mathematical modeling. As time allows, students will explore vectors, polar coordinates, and conic sections. Prerequisites: Functions, Statistics and Trigonometry, or Algebra 2 and departmental approval. (Yearlong)

MAT401H: Honors Precalculus

The trigonometry strand of this course addresses triangle relationships, graphing and modeling, identities, vectors, parametric equations, polar coordinates, and complex numbers in polar form. Other topics include sequences and series, counting, mathematical induction, the Binomial Theorem, matrices and their applications, conic sections, and partial fraction decomposition. Prior topics on factoring, logarithms, and polynomial and rational functions are reviewed and extended. Topics in statistics and probability are included as time permits. Prerequisites: Honors Algebra 2 or Algebra 2 and departmental approval. (Yearlong)

MAT541: Calculus

This course addresses topics from first-year calculus, including limits, derivatives and integrals, and applications of these ideas. Conceptual understanding is emphasized; procedural fluency is developed over a subset of AP Calculus methods and function types. Review and development of pre-calculus topics is embedded. This course does not prepare students for the AP Calculus exams, nor for AP Calculus BC. Prerequisites: Honors Precalculus or Precalculus and departmental approval. (Yearlong)

MAT621: AP Statistics

This course addresses major statistical concepts and tools for collecting, analyzing and drawing conclusions from data. Four conceptual themes organize the material: Exploratory data analysis and description, sampling and experimentation, probability and simulation, and statistical inference. Topics include statistical graphing, summary statistics, regression and correlation, randomness and probability, experimental design, sampling distributions and the Central Limit Theorem, confidence intervals and hypothesis testing. Students complete at least one major project. Prerequisites: Functions, Statistics and Trigonometry; or Probability and Statistics; or Honors Precalculus; or departmental approval. Students are urged to consult with their math teacher for advice before registering for this course. (Yearlong)

MAT631: AP Computer Science A

AP Computer Science A is equivalent to a first-semester, college level course in computer science. This yearlong course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. Prerequisites: departmental approval and either Algebra 2 or Honors Algebra 2 (Yearlong)

MAT641: AP Calculus AB

This course covers topics in the Advanced Placement (AP) Calculus AB syllabus, including limits, differentiation and integration, elementary differential equations and applications of these topics. Central concepts are developed and proved formally. This course prepares students for the AP Calculus AB exam. Prerequisites: Honors Precalculus or Precalculus and departmental approval. Students are cautioned that strong proficiency with prerequisite content is assumed. (Yearlong)

MAT642: AP Calculus BC

This course expands on the content of AP Calculus AB. Additional topics include advanced integration techniques, improper integrals, infinite series (including Taylor and power series), polar, parametric, and vector equations, and differential equations. Technology is integrated where appropriate. Review of major AB Calculus AB topics is embedded throughout the year. This course prepares students for the AP Calculus BC exam. Prerequisites: AP Calculus AB and departmental approval. (Yearlong)

MAT731: Advanced Topics in Computer Science

This course allows students to investigate computing on a deep level through a project-based approach. The course explores procedural programming at a lower level with C, Database design and queries with SQL, and front-end web frameworks with Bootstrap, Jinja, and Python. The course culminates with a group project demonstrating previously learned skills as well as independently developed skills. Prerequisite: Advanced Placement Computer Science A*. (Yearlong)

MAT751: Advanced Topics I - Linear Alg, Diff Eqns, Multivariable Calc

This course allows students with a strong background in one-variable calculus to explore advanced topics in multivariable calculus, differential equations, and linear algebra. Advanced topics in statistics and geometry may be included. Prerequisites: AP Calculus BC. AP Statistics recommended. (Yearlong)

MAT752: Advanced Topics II - Independent Study

Students in this course engage in a combination of in-class and independent work in advanced mathematics. This may include joining students in Advanced Topics I for individual units or lessons, presenting lessons to Advanced Topics I students, and conducting independent explorations. Prerequisites: Advanced Topics in Mathematics I and departmental approval. (Yearlong)

MAT791: Advanced Math Research

This course, one of Breck's Advanced Research programs, offers engaged math students an opportunity to apply both statistical methods and mathematical modeling through research. There are two main paths students can take with their research, depending on their interests. The first, is working with a nonprofit or community organization to further the client's mission in the community. The second, is working with any organization or business to assist in analyzing existing data or a project of interest. Prerequisite: Departmental approval based on application, recommendations, and interview. Minimum Course Prerequisites: completion of either Precalculus or Honors Precalculus and completion of FST; or Probability and Statistics; or AP Statistics (AP Statistics is strongly recommended). (Yearlong)

Performing Arts

Graduation requirement: 2 semester credits of Performing Arts and/or Visual Arts

Course List:

Band⁴ Choir⁴

PER301: Symphonic Winds & Jazz Ensemble* PER211: Upper School Voices*

PER511: Advanced Concert Chorale*

PER233: Music and Film[†] (Spring 2027, 2029)

Dance⁴

PER221: Dance Music: Craft and Cognition PER521: Advanced Dance Repertory* PER231: Music Theory I

PER232: Music Psychology[†] (Spring 2026, 2028)

Orchestra⁴

PER241: String Ensemble*

PER541: Advanced Chamber Players*

PER631: AP Music Theory*

Theater

PER251: Theatrical Production I PER252: Theatrical Production II PER253: Actor's Workshop⁴

PER551: Advanced Studio Theater[△]

Course Descriptions by discipline:

BAND

PER301: Symphonic Winds and Jazz Ensemble

This course is designed to meet the needs of aspiring instrumental music students in grades 9-12 by imparting knowledge and experience through ensemble performance. The weekly schedule includes rehearsal and performance of a diverse range of materials and styles featuring standard and contemporary concert band and chamber music literature. First semester will focus primarily on standard wind band literature. Second semester focuses on jazz music as the band prepares for our spring concert, "Jazzfest." This course presents the "real world" of the practicing professional musician in a controlled atmosphere. Prerequisite: Open to all Upper School instrumental music students who have had three years of Middle School band, and instructor approval. This is a year long course so the expectation is for students to commit for both semesters. (Yearlong, repeatable)

^{*} These courses are yearlong.

[†] These courses do not fulfill Performance Arts graduation requirements.

^A Students enrolling in performance courses should meet with the instructor to determine placement.

CHOIR

PER211: Upper School Voices

This course is open to any upper school student and provides a foundation in proper vocal technique, musicianship, and 2, 3, and 4-part choral score reading, sight-reading and ear-training skills. Students will also learn fundamental vocal techniques including: proper breath control and support, healthy vocal tone and placement, increase individual vocal range, develop the ability to navigate and blend vocal registers, and further improve vocal endurance and production. Performance opportunities include singing at both winter and spring choral concerts, performing with the Advanced Concert Chorale at Breck home athletic games, in Chapel and at Baccalaureate Service/Commencement and other on and off-campus events. Prerequisite: A voice placement assessment and instructor approval. The voice placement assessment is not an audition, but an opportunity to hear one's vocal range and tessitura for choral section placement (SATB). (Yearlong, repeatable)

PER511: Advanced Concert Chorale

This is the premiere choral ensemble at Breck School and provides talented, upper school students with the opportunity to learn and perform advanced SSAATTBB choral repertoire at the highest level. Students will further develop their sight-reading, ear-training, and score-reading skills as well as focus on advanced vocal technique; breath support, vocal tone and placement, vocal range, blending vocal registers, and increasing vocal endurance and production. Diverse choral repertoire from all genres and time periods will be studied and performed. Performance opportunities include both winter and spring choral concerts, singing in Chapel, at Breck home athletic games, participating in MSHSL-sponsored Solo and Large Group Contests, Baccalaureate, Commencement, as well as other on and off campus events. Prerequisites: Audition and Instructor approval. Note: Open to all students in the Upper School who have the vocal ability and musical experience to perform advanced choral repertoire. Prior participation does not ensure placement. (Yearlong, repeatable)

DANCE

PER221: Dance

Dance provides students, with or without dance experience, development in movement principles, technique, vocabulary, and choreography. Dance will focus on developing a technical foundation in ballet and modern dance and encourage students to develop motor and performance skills needed to succeed as well-rounded dancers and dance-makers. The class will consist of warm-up exercises to stretch and strengthen the body, increase technical skills, and prepare students to move fully. The class will combine movements (including movement patterns across the floor) that are designed to improve technical skills, enhance musicality, and encourage the development of individual expression. Students will take part in an end of the semester dance concert. (Semester, repeatable)

PER521: Advanced Dance Repertory

Advanced Dance Repertory is a fast-paced dance class requiring that students have a strong background in modern and ballet technique. Classes will combine technical aspects of ballet with the freedom and fluidity of modern dance. Dancers will explore new ways of moving in combinations, floor work and partnering. Students will work to build a wide array of movement styles and genres. This class will examine how dance has been an important part of oral and performance traditions of passing stories down from one generation to the next. This class will celebrate our personal achievements, encourage collaboration and highlight the power of the ensemble/team. Dancers will take part in both the fall and winter dance concerts. Each year of Advanced Dance Repertory can be counted for either Performing Arts or Physical Education semester credits. *Prerequisites*: Audition and teacher approval. (Yearlong, repeatable)

MUSIC: Craft and Cognition PER231: Music Theory I

This course teaches you how to understand, analyze, create and produce music. It is geared towards students who are interested in exploring the inner workings of music as we analyze why songs become popular, how they are constructed, and why we like them. Students are introduced to the building blocks of music — rhythm, melody, harmony and form — by exploring music from all genres from Classical to Hip Hop to EDM to Jazz. No prior musical training is necessary and students get a chance to play ukulele, electric guitar, and keyboards. Students create and compose music (both live and electronic) in a variety of styles. (Semester 1)

PER232: Music Psychology

In Music Psychology we examine music through the lenses of psychology, neuroscience, physics and biology. We investigate guestions such as: What is music and why does it exist? Why do you like the music that you like? Why do songs get stuck in your head? Is music an evolutionary adaptive trait that has helped our species to survive? Why does music make us feel emotion? Can music heal? Through an interdisciplinary and often hands-on approach, we try to make sense of the most mysterious human obsession: music. (Semester 2; Offered spring semester of 2026 and 2028) This course does not fulfill the Performing Arts graduation requirement.

PER233: Music and Film

This course uncovers how film soundtracks communicate plot, character, setting, theme and mood. Using films from the silent era to today, we will study how film music functions as a medium of communication between the people producing the movie and the people watching it. Students learn the basic elements of music, such as notation and harmony, in order to critically analyze and appreciate why certain film music makes you feel excited, happy or terrified. By studying the films and soundtracks of the past one hundred years, students also develop analytical skills for social justice. No prerequisites or experience required. (Semester 2; Offered spring semester of 2027 and 2029) This course does not fulfill the Performing Arts graduation requirement.

PER631: AP Music Theory

In AP Music Theory, students learn the musical and harmonic practices of 17th and 18th centuries Europe. Students develop the skills of melodic and harmonic dictation, part writing, harmonization, sight singing, contextual listening and more. These skills will benefit anybody who is involved with music, regardless of time period whether as a performer, creator, or listener. This course builds on knowledge gained from Music Theory I or previous experience with music. The goal is to integrate aspects of melody, harmony, texture, rhythm, form, musical analysis, history and style as students mature in their understanding of theory. Prerequisite: Music Theory I or teacher approval. (Yearlong)

ORCHESTRA

PER241: String Ensemble

This course is designed to meet the needs of the string student who enjoys playing their instrument without the rigors and demands of the Chamber Players. Literature consists mostly of arranged works for string ensemble, ranging from the Baroque era to modern day. There are several opportunities for performance throughout the school year including Winterfest and Stringfest. Prerequisites: At least four years of instrument instruction and teacher approval. (Yearlong, repeatable)

PER541: Advanced Chamber Players

This class is considered one of Breck's distinctive courses and enables students to study and perform literature from all historical periods at a high artistic level. There are sectional coachings with the Minnesota Orchestra once or twice a year and guest conductors are invited to come in and work with the orchestra. There are numerous opportunities for performance throughout the school year, including Winterfest, Stringfest and Chapel. Prerequisites: Audition and teacher approval. Note: Open to all students who play a string instrument and have the ability to perform advanced, unedited string orchestra repertoire. Prior participation does not ensure placement. (Yearlong, repeatable)

THEATER

PER251: Theatrical Production I

This course introduces the Upper School student to technical theater in the context of an actual production. Students will learn proper safety techniques before setting about defining and learning carpentry, painting, electrical, and software techniques used in the Theater. Students create the necessary scenic, lighting and sound elements for the Theater program's current productions and assist with lighting effects necessary for the dance concert(s). (Semester, repeatable)

PER252: Theatrical Production II

This course introduces the Upper School student to technical theater in the context of an actual production. Students will learn proper safety techniques before setting about defining and learning carpentry, painting, electrical, and software techniques used in the Theater. Students create the necessary scenic, lighting and sound elements for the Theater program's current productions and assist with lighting effects necessary for the dance concert(s). Prerequisite: Theatrical Production I (Semester, repeatable)

PER251: Actor's Workshop

In this semester-long, repeatable course, students explore various acting methods to deliver authentic performances for stage and screen. Through improv, scripted exercises, ensemble scene work, and monologue performance, you will develop abilities for acting on camera, in theater, and even digital content creation. Emphasis is placed on helping you build versatility and confidence in your craft. By the end of the semester, you will showcase your growth in a final performance, demonstrating all you have learned! (Semester, repeatable)

PER551: Advanced Studio Theater

Advanced Breck Studio theater is a performance-based class in which the students will produce a limited, fully-fledged production. Students will go in-depth into the performance and production process, engage in character study, and explore new techniques and skills. This work will culminate in the showcase of the production at the end of the semester. (Semester, repeatable)

Physical Education/Health

Graduation requirements: 12 units of Physical Education (PE units)

- Health (3 PE units) and Performance Physiology (3 PE units) required in Grade 9
- 6 additional PE units which can be earned through Athletics or Coursework (see below)

ATHLETICS

- Participation in Upper School sports or approved^A Breck club sports (1 PE Unit per season[†])
 - [†] To receive credit, athletes must: 1) be in good standing; 2) complete the entire season/cycle; and 3) be present for at least 85% of all practices and athletic contests (no excused absences).
 - Activities such as equestrian, home or local gym workout plans, fencing, etc., are not approved. Outside programs and/or year-round club athletics that prevent participation in Breck athletics are not approved.

PHYSICAL EDUCATION ELECTIVES

- One semester course (6 PE units)
- One quarter course (3 PE units)
- Complete one semester of a dance course* (6 PE Units)
 - * A semester of dance used to meet PE graduation requirements may not be used to meet Performing Arts graduation requirements. Separate semesters must be used to meet each requirement.

Course List:

PHY101: Health

PHY102: Performance Physiology

PHY201: FAST! - Fitness, Adventure, and Sport Techniques

PHY211: Morning Yoga

PHY212: Yoga

Course Descriptions:

PHY101: Health

This course is a requirement for all grade 9 students. It focuses on topics and concerns that are of importance to adolescents. Areas that are covered are emotions, family structure, friendship, trust, decision-making, sexuality, chemicals and nutrition. Students are encouraged to think about themselves, their values, how they make decisions and how they interact and communicate with others. (Quarter)

PHY102: Performance Physiology

This course is a requirement for all grade 9 students. It focuses on the components of health and performance fitness and the physiology of exercise. Students study exercise, nutrition, metabolism and the three principal systems related to physical activity: cardiovascular, respiratory and musculo-skeletal. Students practice, monitor, develop, lead and evaluate activity and exercise. Students will be trained in CPR and may seek certification (Quarter)

PHY201: FAST! - Fitness, Adventure, and Sport Techniques

This course enables students to explore lifelong movement through fitness, adventure education, and sport techniques. Fitness elements of the program include cardiovascular and strength training, flexibility and meditation. Students will continue to develop leadership skills and lifelong fitness pursuits through adventure activities including the ropes course, field trips in the community and recreational activities. Examples include: Bouldering, biking, disc golf, paddle board, fly fishing, pickleball, golf, and yoga. (Quarter or Semester)

PHY211: Morning Yoga

This course, offered fall semester only, meets 7:30-8:15 am, 4 days per week. Morning Yoga is designed to help students build core strength, improve body alignment and balance, increase flexibility, and boost self-confidence. Students will explore various breathing techniques and meditation practices while cultivating the positive mindset associated with yoga. In addition to physical postures, students will study the philosophy and history of yoga, as well as the seven main energy systems within the body. Through movement, breathwork, and mindfulness, students will experience the many benefits of yoga, including improved flexibility, stress relief, and deeper relaxation for both body and mind—ultimately enhancing overall well-being. Open to sophomores, juniors, and seniors. (Quarter or Semester)

PHY212: Yoga

This course, offered spring semester only, Yoga is designed to help students build core strength, improve body alignment and balance, increase flexibility, and boost self-confidence. Students will explore various breathing techniques and meditation practices while cultivating the positive mindset associated with yoga. In addition to physical postures, students will study the philosophy and history of yoga, as well as the seven main energy systems within the body. Through movement, breathwork, and mindfulness, students will experience the many benefits of yoga, including improved flexibility, stress relief, and deeper relaxation for both body and mind—ultimately enhancing overall well-being. Open to sophomores, juniors, and seniors. (Quarter or Semester)

Religion

Graduation requirement: World Religions, Philosophy of Religion, and one elective course to be completed in Grade 11 or 12

Course Sequence:

Grade 9: REL101: World Religions

Grade 10: REL201: Philosophy of Religion

Grade 11/12: One Elective Course

Junior* and Senior Elective Courses:

REL401: Moral Philosophy

REL411: Bioethics

REL421: Religious Imagery in Film REL431: Theologies of Liberation

Course Descriptions:

REL101: World Religions

World Religions I aims to introduce students to the simple, core concepts for many of the world's most practiced religions. Students will move through a timeline of religious beliefs and cultures, from ancient Hinduism to Modern Humanism, while gaining an understanding of the complexities that exist within human nature. The goal of this course is for students to engage with the question "What is religion?", and to develop an awareness of how their personal beliefs affect the world around them. (Completed during May Program)

REL201: Philosophy of Religion

Religion attempts to answer the "big questions" of human existence. Why are humans religious? Is faith an irrational act? Does God exist? If God exists, how do we explain evil and suffering? Are ethics and morality solely dependent on religion? What happens after we die? Through the academic study of contemporary and classic religious texts across religious traditions, students have the opportunity to rigorously examine their views and assumptions while also being put into dialogue with their peers and great thinkers of the past and present. (Semester)

REL401: Moral Philosophy

The pursuit of an ethical life has been a central concern of philosophers and theologians throughout history. Relying on primary texts from classical and contemporary thinkers, this course takes an interdisciplinary approach through the study of philosophy, theology, law, and politics to engage and understand our responsibilities to ourselves, to other people, and the greater world. Students will leave this course with a deeper sense of self-understanding, critical thinking skills, and a better idea on how one cultivates a good and just life. (Semester)

^{*} Students typically prepare for their senior speeches in their grade 12 Religion elective. Students who complete their Religion elective in grade 11 will provide a rough outline of a speech idea to fulfill the class requirement, and will work with Rev. Bliss and Mr. Johnson to finalize their senior speeches in grade 12.

REL411: Bioethics

This course, offered fall semester only, immerses students in discussions on controversial issues in science and medicine, including abortion, fertility treatment, stem cell research, euthanasia, genetic testing, the right to privacy, and health care. Students investigate the morality of each issue, looking at the opinions of bioethicists as well as refining their own opinions. Students will examine multiple perspectives and gain the historical, scientific, and legal perspectives necessary to informed decisions and informed discussions for the big questions of bioethics, while carefully thinking about their own morals and opinions—as well as the opinions of their classmates-on various ethical topics. (Semester)

REL421: Religious Imagery in Film

This course examines how the intricate practices of religion are illustrated in the art form of film. Students will also study basic film composition and structure, and create their own short films. This course fulfills the one-semester senior year religion requirement. (Semester)

REL431: Theologies of Liberation

This course will examine two questions: "Where is God?" and, "What does God have to do with liberation?" To explore these questions, students will read some foundational liberation theology and discuss how liberation shows up – sometimes despite organized religion – in activism, visual art, fiction, cinema, and the work of eco-justice. Students will leave with a better understanding of liberation, solidarity, intersectionality, and how God aligns Godself with those who are poor, people of color, disabled, women, or queer. The summative project will include students reflecting on their own theological perspective and liberation, or how they see God working in the world, and what this means for their own lives. (Semester)

Science

Graduation requirements: 6 semester credits - typically Physics, Chemistry, and Biology

Standard Course Sequence:

Grade 9: SCI101: Physics Grade 10: SCI211: Chemistry Grade 11: SCI321: Biology

Grade 12: Semester/Yearlong electives OR AP Courses

Students who would like to pursue an alternate path in the science department must speak with the science department chair.

Yearlong Courses

SCI101: **Physics**

SCI101H: Honors Physics

SCI211: Chemistry SCI321: Biology

SCI601: Advanced Physics

SCI602: AP Physics C SCI611: AP Chemistry SCI621: AP Biology

SCI791: Advanced Science Research I SCI792: Advanced Science Research II

Semester Courses

SCI401: Engineering SCI402: Robotics

SCI421: Anatomy and Physiology SCI521: Advanced Molecular Biology

SCI591: Honors Science Research (fall only)

Course Descriptions:

SCI101: Physics

This course is an introduction to physics with a college-preparatory focus, designed to enable students to apply concepts of physics to everyday activities. The emphasis is on understanding concepts supported by algebra-based computations. The course serves as an introduction and provides a framework for quantitative work. Laboratory experiments, demonstrations, and learning cycles are emphasized whenever possible. Prerequisites: Completion of Algebra I or Algebra 1A. Concurrent enrollment in Algebra 1B or higher (Yearlong)

SCI101H: Honors Physics

This course is an introduction to physics with a college-preparatory focus, designed to enable students to apply concepts of physics to everyday activities. The emphasis is on understanding concepts supported by algebra and geometry-based computations. The course serves as an introduction and provides a framework for quantitative work. Laboratory experiments, demonstrations, and learning cycles are emphasized whenever possible. The course will move at a faster pace and cover more material than Physics. Prerequisites: Concurrently enrolled in Honors Algebra II or higher, and an A- or above in Science 8. (Yearlong)

SCI211: Chemistry

This course is an introduction to chemistry with a college-preparatory focus. The course covers structure of matter, quantum mechanics, types and properties of chemical substances, basic organic chemistry, chemical reactions, and acid-base chemistry. Emphasis is placed on laboratory work, practical applications, and societal issues. Students undertake an extensive research project at the end of the year. (Yearlong)

SCI321: Biology

This course is an introduction to biology with a college-preparatory focus. The course is designed for students to gain an appreciation for their role as interactive occupants of the biosphere. Important themes of ecology and molecular biology are addressed to provide basic biological frameworks so that students become better informed decision-makers in a global society. The subject matter is approached primarily through inquiry-based, hands-on laboratory and field experiences that emphasize a cooperative team-learning approach. Inquiry is supported by lectures, readings, and literature research. Prerequisite: Completion of Chemistry (Yearlong)

SCI401: Engineering

This course covers concepts common to all engineers, and students perform case studies as individuals and teams. Students learn introductory 2-D and 3-D modeling using Vectorworks. They are also introduced to basic circuitry, principles of mechanics and to materials science. Students then apply these concepts to their own engineering designs, which might include making a slingshot to project a 55-gallon drum, designing a passive solar home, engineering a high mileage vehicle, or creating a mobile suitcase for the physically challenged. In case studies, students consult with professional engineers and experts in the field of engineering as well as test the models they make using a variety of instruments, including computers. Field trips to universities and businesses and guest speakers are included in the course. Prerequisite: Completion of Physics (Semester)

SCI402: Robotics

This course is focused on mechanical and programming design of robots. Students experience an in-depth study of robotic systems using Lego NXT. Students learn about structure, motion, power, sensors, control, logic, and programming systems while using an engineering problem-solving model. Students begin by studying functions for robots and learning basic robotic programming. Students then design their own programs and build robots to complete given tasks. Students develop teamwork, problem solving, ideation, and project management and communications skills. The final robot project developed in this course is displayed publicly at the end of the course in a 'BotFest. Prerequisite: Completion of Physics (Semester)

SCI421: Anatomy and Physiology

This course is designed to provide an opportunity to investigate the human body, its structure, function and how the human body reacts to external stimuli throughout everyday life. Through the dissection of a cat and other vertebrate organs, students will learn the structure and function of the parts of the human body, along with its systems. Students will engage in investigations to understand and explain the behavior of the human body in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications. This course is a junior and senior elective course; the rigor is less than an AP course. *Prerequisites*: Biology and Chemistry (Semester)

SCI521: Advanced Molecular Biology

This course is an advanced, college level laboratory-based course designed for students who are interested in molecular biology applications in biotechnology. The course reviews the structure and function of DNA and proteins, expanding on what students learned in biology. Students will be introduced to tools and techniques for applications involving DNA and proteins, such as gel electrophoresis, PCR, and immunodetection, and they will use them throughout the course in a variety of experiments. Specific lab activities include a module on DNA fingerprinting and how it is used in human identification, a module on GMO detection in food with an emphasis on societal implications of GMOs, a module on DNA barcoding and the use of bioinformatics in species identification, and a module that incorporates an ELISA test which uses antibody/antigen interaction to detect disease. Recently discovered tools, such as CRISPR, and new research on the influence of the environment on genes (epigenetics) will be addressed as areas of future study and potential advancements in biotechnology. Prerequisites: B+ in Chemistry and in Biology, or completion of AP Chemistry and AP Biology (Semester)

SCI591: Honors Science Research

This research-based course, offered fall semester only, is designed for motivated students interested in conducting independent scientific research. Students will design a semester-long science research project culminating in competition at the Twin Cities Regional Science and Engineering Fair with potential advancement to state and international competitions. Students will develop skills in experimental design, data collection, statistical analysis, scientific writing, literature review, and data visualization, allowing exploration in various fields such as biology, chemistry, physics, environmental science, and behavioral science. Students will receive individualized guidance and mentorship throughout the research process. Assessment will be based on research proposals, experimental design, data analysis, written reports, presentations, and science fair participation. This course is intended for sophomores, juniors, and seniors who desire to pursue scientific research in a guided and focused classroom setting but are not enrolled in the Advanced Science Research program. Prerequisites: A- or better in most recent science class or successful completion of AP Chemistry or AP Biology (Semester)

SCI601: Advanced Physics

This course is for students who have an interest and aptitude in physics and mathematics. The course is designed to provide a strong foundation in algebra-based physics. The course covers 1 and 2- dimensional kinematics & dynamics; work & energy; momentum & collisions; rotational motion & torque; electrostatics and circuits; and mechanical waves and sound. Laboratory experiments and demonstrations are used whenever possible to illustrate concepts. Prerequisites: For incoming grade 9 students: concurrent enrollment in Honors Algebra II or higher and recommendation from the 8th grade science teacher. For students entering grades 10-12: completion of Algebra II or higher (Yearlong)

SCI602: AP Physics C

This calculus-based course includes a comprehensive coverage of mechanics and electricity and magnetism, each corresponding to approximately a semester of college-level work. In mechanics, students study kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. In electricity & magnetism, students study electrostatics; conductors, capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism. The course also includes a hands-on laboratory component comparable to an introductory college-level physics laboratory in which students write comprehensive laboratory reports. Prerequisites: Completion of AP Calculus AB with a grade of A-, a 3 on the AP Calculus AB exam, and departmental approval. (Yearlong)

SCI611: AP Chemistry

This course is for students who have an interest and aptitude in chemistry. The course covers stoichiometry, thermochemistry, atomic structure, periodic properties of the elements, chemical bonding, the behavior of gases, liquids and solids, kinetics, acid-base equilibrium, solution equilibrium, thermodynamics, and electrochemistry. Problem solving and laboratory work are stressed as a means of understanding chemical concepts. *Prerequisites*: Completion of Chemistry with a grade of A- or A, departmental approval and completion of or concurrent enrollment in Honors Trigonometry/Precalculus/Statistics or Pre-Calculus. Students who earn an A- or higher in Honors Physics are also eligible for AP Chemistry. Students who complete Advanced Physics are eligible for AP Chemistry. (Yearlong)

SCI621: AP Biology

This course centers around four themes: Evolution, Energy, Genetics & Information Transfer, and Biology Systems. Each topic will include in-depth laboratory experimentation or project work and requires strong reading and study skills to successfully manage the course's rigor. This course is intended to prepare students for the national Advanced Placement test in the spring and is recommended for students interested in the life sciences with ambitions for entering a post-secondary STEM program. Prerequisites: Completion of Chemistry with an average grade of A- or A, departmental approval, and satisfactory completion of any summer reading and work assigned OR completion of Biology with an average grade of A- or A. (Yearlong)

SCI791: Advanced Science Research I

This course is designed for students who are gifted/seriously interested in science. The course gives students an opportunity to participate in graduate-level research experiences at university laboratories. Students complete the research component of the course during the summer. During the first semester, students write a publication-quality research paper that they submit to national competitions and present their work to a Lower or Middle School science class. During the second semester, students submit their papers to the Minnesota Academy Junior Science Symposium, Minnesota Scholar of Distinction competition, complete a poster, give a presentation to an Upper School science class, present a formal seminar presentation, and participate in the regional and state science and engineering fairs. Selection for the course is through written application and a formal interview. Prerequisite: Recommendation of the Science Department (Yearlong with summer expectation)

SCI792: Advanced Science Research II

This course is a second-year continuation of Advanced Science Research and is limited to highly motivated science students. The course gives students an opportunity to participate in graduate-level research experiences at university laboratories over a second summer. In addition to pursuing their own research, Advanced Science Research II students take on a leadership role in the course, serving as the co-teacher of the Advanced Science Research course. During the first semester, students submit publication-quality papers to national competitions and present their work to a Lower or Middle School science class. During the second semester, students submit their papers to the Minnesota Academy Junior Science Symposium, Minnesota Scholar of Distinction competitions in science and in leadership, complete a poster, give a presentation to an Upper School science class, present a formal seminar presentation, and participate in the regional and state science and engineering fairs. Prerequisite: Advanced Science Research I (Yearlong with summer expectation)

Visual Arts

Graduation requirement: 2 semester credits of Performing Arts and/or Visual Arts

Course List:

VIS101: Creative Design

Ceramics VIS111: Ceramics I VIS112: Ceramics II VIS211: Ceramics III VIS212: Ceramics IV VIS411: Ceramics Studio I VIS511: Ceramics Studio II

VIS611: AP 3-D Art and Design (Ceramics)

<u>Photography</u>

VIS131: Photography I VIS132: Photography II VIS231: Photography III VIS232: Photography IV VIS431: Photo Studio I VIS531: Photo Studio II

VIS631: AP 2-D Art and Design (Photography)

Drawing & Painting

VIS121: Draw/Paint I VIS122: Draw/Paint II VIS221: Draw/Paint III VIS222: Draw/Paint IV

VIS421: Draw/Paint Studio I VIS521: Draw/Paint Studio II

VIS621: AP Drawing

Course Descriptions by discipline:

VIS101: Creative Design

This course prepares students to create and learn the theory of design principles, and to apply these concepts as they draw, paint, sculpt, photograph, and work with digital media, in preparation for more advanced art courses in Upper School. Students then choose Drawing and Painting, Ceramics, Photography, or Videography. Students have sketchbooks for assignments as they further their design skills. This course is a prerequisite for taking other Visual Art courses. Completion of Creative Design 8 in Middle School fulfills this requirement. (Semester)

CERAMICS

VIS111: Ceramics I

The course is designed to introduce students to working with clay and give them some insight into the world of contemporary ceramics. Students incorporate and expand on the elements of Creative Design, studying ceramic forms and vessels from a cross-cultural and historical perspective. Basic techniques of ceramic construction and forming are taught including a unit on the potter's wheel. Additive and subtractive techniques will be taught, as well as pinching, coil and slab building. We will discuss and create functional and sculptural work, and discuss how to achieve abstraction. This course is a prerequisite for further Ceramics courses. Prerequisite: Creative Design (Semester)

VIS112: Ceramics II

This course is designed to enhance skills learned in Ceramics I. Form and function will be emphasized. A combination of coil and slab building are taught as well as a pottery wheel unit. Prerequisite: Ceramics I or departmental approval (Semester)

VIS211: Ceramics III

This course is designed to enhance the student's previous knowledge of ceramics. Integrity of material, function and form are stressed. Advanced techniques are taught and utilized. Students become acquainted with the works of some distinguished ceramicists including Mackenzie, Voulkos, and Duckworth. Form, texture and balance are emphasized. More in-depth techniques on the potter's wheel are taught and alternative firing methods are introduced. Prerequisite: Ceramics II or departmental approval (Semester)

VIS212: Ceramics IV

Building on what students have learned in previous ceramics courses, this course will further develop a student's ability to plan and create works that not only showcase expressive qualities, but also show a higher level of craftsmanship and attention to detail. Creative approach to the clay and incorporation of mixed media are taught. Students also participate in an alternative firing. Prerequisite: Ceramics I or departmental approval (Semester)

VIS411: Ceramics Studio I

This course is designed for students with technical backgrounds to conceptualize assignments that involve creative problem solving. The Raku firing process is introduced. Students become acquainted with the renaissance going on in ceramic art today. Students continue to develop a portfolio for presentation to post-secondary institutions. Prerequisite: Ceramics III or IV and departmental approval (Yearlong)

VIS511: Ceramics Studio II

This course is designed for students with a strong technical background in ceramics who are ready to develop in-depth projects. Concept and process are emphasized in the development of personal imagery. Students broaden and refine their visual literacy as they become more familiar with both art history and contemporary art. Students continue to develop a portfolio for presentation to post-secondary institutions. Prerequisites: Ceramics Studio I and departmental approval (Yearlong)

VIS611: AP 3-D Art and Design (Ceramics)

This course is designed for students who are seriously interested in the practical experience of art. AP Art is not based on a written examination; instead, students submit portfolios for evaluation at the end of the school year. The instructional goals of the AP Studio Art | 3D Design: The Portfolio (Ceramics) program includes creative as well as systematic investigation of formal and conceptual issues, emphasizing making art as an ongoing process that involves the student in informed and critical decision-making, developing technical skills, and familiarizing students with the functions of the visual elements. Prerequisites: Previous studio experience and departmental approval (Yearlong)

DRAWING & PAINTING

VIS121: Draw/Paint I

This course introduces students to a fundamental approach in drawing and painting that enables them to further their ability to see and to develop their own creative process. Students learn to create successful compositions while developing the skills of contour, gesture and value. Students work with a variety of drawing and painting materials and keep a weekly sketchbook to hone drawing skills and stimulate creativity. Prerequisite: Creative Design (Semester)

VIS122: Draw/Paint II

This course enables students to bring personal expression more fully into play, as they continue to hone the basic skills that were introduced in Drawing/Painting I. Work from observation is emphasized, as well as inventive usage of materials. Students keep a weekly sketchbook to practice drawing skills and stimulate creativity. Prerequisite: Draw/Paint I or departmental approval (Semester)

VIS221: Draw/Paint III

This course enables students who have demonstrated a working knowledge of contour, gesture and value, to continue to hone their technical skills as they develop more complex personal imagery in their work. Projects in both drawing and painting are expanded, integrating advanced techniques and concepts. Students keep a weekly sketchbook to hone drawing skills and stimulate creativity. Prerequisite: Draw/Paint I or II or departmental approval (Semester)

VIS222: Draw/Paint IV

This course further develops a student's ability to conceive and create works that have integrity of material. concept and process. Students begin to organize work to develop a portfolio for presentation to post-secondary institutions. Students keep a weekly sketchbook to hone drawing skills and stimulate creativity. Prerequisite: Draw/Paint I or II or departmental approval (Semester)

VIS421: Draw/Paint Studio I

This course is designed for students with a strong technical background in drawing and painting who are ready to develop in-depth projects. Concept and process are emphasized in the development of personal imagery. Students broaden and refine their visual literacy as they become more familiar with both art history and contemporary art. Students keep a weekly sketchbook to hone drawing skills and stimulate creativity. Students continue to develop a portfolio for presentation to post-secondary institutions. Prerequisites: Draw/Paint III or IV and departmental approval (Yearlong)

VIS521: Draw/Paint Studio II

This course prepares students to create an in-depth body of work revolving around a chosen theme suitable for presentation to post-secondary institutions. This advanced course is similar to AP Studio Art | Drawing: The Portfolio, but does not require the AP Portfolio. Prerequisite: Draw/Paint Studio I and departmental approval (Yearlong)

VIS621: AP Drawing

This course is designed for students who are seriously interested in the practical experience of art. Final evaluation of this course is not based on a written examination; instead, students submit portfolios for evaluation at the end of the school year. The instructional goals of AP Studio Art | Drawing: the Portfolio, includes encouraging creative as well as systematic investigation of formal and conceptual issues, emphasizing making art as an ongoing process that involves the student in informed and critical decision-making, developing technical skills and familiarizing students with the functions of the visual elements. Prerequisites: Draw/Paint Studio I and departmental approval (Yearlong)

PHOTOGRAPHY

VIS131: Photography I

This course helps students to explore the art of digital photography and the essential ways in which photography is embedded into our society. Students begin by learning technical skills for operating a camera, including shutter speed, aperture, ISO, use of different lenses, camera angles, lights, and composition. They complete a series of projects to demonstrate mastery of essential concepts in photography. Students then learn a powerful artistic skill using Adobe Photoshop to manipulate photographic media in a thoughtful, purposeful way. Their individual work is evaluated by peer critique and displayed for the community. Students also learn about different photographic styles and complete a presentation on the work of a given photographer that includes slides and oral analysis of the work. Prerequisite: Creative Design (Semester)

VIS132: Photography II

Building on skills learned in Digital Photography I, students will continue to explore photography as an expressive art form. Emphasis will be placed on the composition, value, clarity, and presentation of each photograph. Students will create a personal theme-based portfolio and explore various experimental photographic techniques. Prerequisite: Photography I or departmental approval (Semester)

VIS231: Photography III

This course enables students who have demonstrated a working knowledge of a DSLR camera to continue to build on technical skills as they develop more complex personal imagery in their work. Projects are expanded, integrating advanced techniques and concepts. Students keep a weekly sketchbook / journal to document ideas and photo-shoot details and locations. Prerequisite: Photo II or departmental approval (Semester)

VIS232: Photography IV

This course further develops a student's ability to conceive and create works that have integrity of technical skill, concept and expression. Students begin to organize work to develop a portfolio for presentation to post-secondary institutions. Students keep a weekly sketchbook / journal to further their thought process and deepen their understanding of the photographic process. Prerequisite: Photo III or departmental approval (Semester)

VIS431: Photo Studio I

This course is designed for students with a technical background in digital photography that involves more in-depth exploration of creative problem solving. Students will discover inspiration from all around us, whether capturing the small, human details of everyday life or exploring larger, abstract ideas about culture and identity. This creative territory will also refine technical skills. The goal will be to make images that have a real impact on your personal community. Advanced concepts are taught. Students become acquainted with historical photography concepts, artists and techniques. Students continue to develop a portfolio for presentation to post-secondary institutions. Prerequisites: Photo III or IV and departmental approval (Yearlong)

VIS531: Photo Studio II

This course prepares students to create an in-depth body of work revolving around a chosen theme suitable for presentation to post-secondary institutions. This advanced course is similar to AP Studio Art Digital Photography Portfolio but does not require the AP Portfolio. Prerequisites: Photo Studio I and departmental approval (Yearlong)

VIS631: AP 2-D Art and Design (Photography)

This course provides direction for highly motivated photography students. Students will investigate various forms of expression and techniques using the principles and elements of design. Students will develop mastery in concept, composition, and execution using 2-D Design works. Students will be introduced to new photographers, digital artists, and more sophisticated techniques as points of departure to create work that reflects their spirit and vision. By exploring photographic and digital media with the camera and the computer, students will be able to develop a body of work that reflects a range of problem solving and ideation, and develops versatility with techniques to demonstrate their abilities. Prerequisites: Photo Studio I and departmental approval (Yearlong)

World Languages

Graduation requirement: 6 semester credits of consecutive levels within the same language Breck offers language courses in Chinese, French, and Spanish. Course sequences and descriptions are separated by language below.

Repeating courses: Some students are required to repeat a level when they fail to gain the required proficiency for promotion to the next level. Grades for repeated language courses appear on transcripts and count toward GPA.

Changing placement: Work outside of class for a placement change (e.g., summer programs or tutors) must receive pre-approval from the World Languages department chair. Additionally, the student must pass the proficiency examination for the level that is to be skipped.

Additional languages: Students may take a second world language. Such a schedule should be carefully planned as it constrains other choices. Seniors are not allowed to register for the first year of a language.

Non-Immersion Track Courses:

Students beginning a new language generally start in Level I, but may place in a higher level if they have prior experience. This is dependent on departmental approval.

Immersion Track Courses:

Students who join Breck's immersion track courses come in with a high level of language proficiency, typically students coming from an immersion program or who are heritage speakers. Enrollment in the immersion track courses is dependent upon departmental approval.

CHINESE

Chinese Course Sequence:

Non-Immersion Track		
CHI101: Chinese I		
CHI201: Chinese II		
CHI301: Chinese III		
CHI401: Chinese IV		
CHI501: Chinese V		
CHI601: Chinese VI		

Immersion Track		
CHI711: Advanced Chinese for Immersion and Heritage Learners I		
CHI712: Advanced Chinese for Immersion and Heritage Learners II		
CHI713: Advanced Chinese Seminar I		
CHI714: Advanced Chinese Seminar II		

Chinese Course Descriptions:

CHI101: Chinese I

A course for students with little or no previous experience learning Mandarin Chinese, Chinese I starts from the very basics of the language and works forward. Each of the four modalities of language (reading, writing, speaking, and listening) are broken down and exercised so that students begin their Mandarin Chinese journey with strong fundamentals. Students first learn the phonetic sounds of the language (Pinyin) as well as the tones required to become an effective speaker of the language. Characters are then introduced in segments- radicals, strokes, and stroke order. Students increase their proficiency in the language by practicing their skills through writing assignments, presentations, listening exercises, and communicative activities. At the end of the year students will feel comfortable reading, writing, listening, and speaking about the topics that we covered. (Yearlong)

CHI201: Chinese II

This course is the Upper School entry-level class for students who have completed the Grade 8 Chinese course at Breck Middle School, and students who have completed Chinese I in the Upper School. In Chinese II, students are introduced to Chinese by using the text Chinese Primer from Princeton University. This course builds on the goals of the first-year course with more integration of oral and written skills. Class is principally conducted in the Chinese language and students are expected to use Chinese in their daily class routine and when conversing. The goal of the course is to expand student's knowledge of vocabulary, pattern structures and characters, as well as to improve their comfort level in the language. A survey of Chinese history is also presented and additional aspects of Chinese culture are introduced through readings, films, or speakers. (Yearlong)

CHI301: Chinese III

Conducted primarily in the target language, Chinese III builds on the material and skills learned in previous years. Students hone their reading, writing, speaking, and listening skills through collaborative and interpretive work, and increased opportunities for interpersonal communicative activities. There is also a continued emphasis on learning how to best utilize the sentence structures and vocabulary from our textbook, as well as additional material that focuses on different cultural aspects of China. (Yearlong)

CHI401: Chinese IV

Chinese IV is a class for students who have successfully completed Chinese III. Conducted primarily in Chinese, students will continue to improve on their reading, writing, listening, and speaking skills through journal assignments, audio recordings, and class presentations. Students also continue to add new sentence structures and vocabulary to their toolbox. In addition to the language learned from our textbook, students will continue to explore different cultural aspects of China and will use the language learned to discuss and demonstrate their knowledge of those topics. (Yearlong)

CHI501: Chinese V

This course is conducted exclusively in Chinese. Students learn all the commonly used Chinese sentence structures to be able to perform extemporaneous dialogues on various topics and also discuss current events to strengthen their speaking skills. Students are expected to write essays and read authentic short stories and poems to hone their reading and writing skills. Students are expected to converse exclusively in Chinese. (Yearlong)

CHI601: Chinese VI

This course is an advanced course conducted entirely in Chinese. The focus of the course is to increase students' listening, speaking, reading and writing language skills as well as to deepen their understanding of Chinese culture through a variety of sources: current events, articles, contemporary films, Chinese songs and classical poems. Students will have debates on the modern Chinese education system or other current events topics to develop their oral proficiency. Students will also do presentations or write essays on Chinese language and culture to demonstrate their understanding of Chinese geography, major dialects and cultural specificities. (Yearlong)

CHI711: Advanced Chinese for Immersion and Heritage Learners I

This course is taught entirely in the target language and is designed to build on the strengths students already possess as fluent Chinese speakers. It is created specifically for students with an immersion background and for heritage speakers. The program is a content-based instruction course built around themes relevant to the lives and abilities of heritage speakers and immersion students. The course incorporates authentic materials produced by native writers and speakers to broaden students' cultural perspectives, increase their global awareness, and set the foundation for a positive image of their identity. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

CHI712: Advanced Chinese for Immersion and Heritage Learners II

This course is the second year of the advanced Chinese course for immersion and heritage speakers. Students will continue to develop their language skills and cultural knowledge as they collaborate on projects with students at their fluency level, focusing on the improvement of literacy and communicative skills, as well as the development of critical thinking and problem-solving skills. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

CHI713: Advanced Chinese Seminar I

This course is the third year of the Advanced Chinese for Immersion and Heritage Speakers program. It is designed to strengthen students' advanced language skills and to deepen their cultural understanding of the Chinese world through diverse thematic contexts. It is also designed to continue developing students' analytical and critical thinking skills through the study of authentic literary works from the diversity of the Chinese-speaking societies. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

CHI714: Advanced Chinese Seminar II

This course is the fourth year of the Advanced Chinese for Immersion and Heritage Speakers program. It is designed to prepare students to thrive in a globalized and interconnected world. Students will continue to hone their language skills as well as to deepen and broaden their cultural knowledge through individual and group projects on diverse thematic contexts. Students will also use the target language as a vehicle to explore and examine the diverse Chinese-speaking societies around the world. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

FRENCH

French Course Sequence:

Non-Immersion Track		Immersion Track		
FRE101: French I		IIIIIIlersion Hack		
FRE201: French II		FRE511: Advanced French for Immersion and Heritage Learners I		
FRE301: French III				
FRE401: French IV]	FRE512: Advanced French for		
FRE501: French V		Immersion and Heritage Learners II		
FRE601: French VI - AP French Language and Culture				
FRE701: French VII - Advanced French Literature and Culture				

French Course Descriptions:

FRE101: French I

This course introduces students to the basics of the French language by learning sound patterns, verb conjugations, vocabulary, and grammatical differences between French and English. This course also helps students build an awareness of French-speaking cultures. The class is conducted principally in French, and students are expected to understand and use spoken and written French appropriate to this level. Students are introduced to authentic Francophone texts and will train to read French authentic material to build their literacy skills in a foreign language. The basic communicative skills of reading, writing, listening, and speaking French are developed through activities including short writings, discussing texts or movies, practicing language through online games or role-playing. (Yearlong)

FRE201: French II

This course incorporates and strengthens the basic skills taught in French I, and builds on the use of practical vocabulary and more complex grammatical concepts such as object pronouns, past tenses as well as the introduction to future and conditional tenses. Students are expected to speak, write and read the language appropriately for their level, and the class is conducted principally in French. Students expand on their understanding of the French-speaking world through discussions about culture, reading of authentic texts, and role-playing of authentic tasks such as asking directions, asking for help in a store, or ordering items online. Students are expected to conduct research on authentic French-speaking websites and present projects to the class in French. (Yearlong)

FRE301: French III

This course builds on mastery of increasingly complex grammatical concepts such as past conditional and the introduction to the subjunctive mood. This course also builds on relevant and practical vocabulary so as to develop more ease and spontaneity in speaking and writing. This course develops reading skills through written versions of authentic French works and improves creative writing skills through guided exercises. The culture of people in French-speaking countries is an integral part of the material of each unit, as well as improving students' awareness of the global world through current events and research in the target language. (Yearlong)

FRE401: French IV

This course is a continuation of the literacy skills built in French III, and an expansion of the speaking, writing and reading skills developed in previous years of French. Students review general verb tenses and grammar concepts, and expand their knowledge of the intricacies of the language with advanced structures such as past infinitive, si clauses, gerund, and past subjunctive. Through the development of their literacy skills, students are expected to write essays and read advanced-level Francophone texts. Students are also expected to be conversational in their speaking skills to be able to have a debate or an extemporaneous discussion on varied topics. Expanded vocabulary and strategies of linguistics are acquired through a study of social issues, Francophone literature, and essential questions. (Yearlong)

FRE501: French V

This course reinforces and refines previously acquired skills. There is an extensive review of the language structures while expanding vocabulary and idioms on varied topics related to students' life, current events, literature, or essential questions. Students engage in dialogues and debates, give exposes, write essays, research self-guided topics about the French-speaking world, and read authentic literary works including poetry. short stories, film scripts and a full-length novel. Students are expected to conduct research and collaborate on projects in the target language. This course is conducted exclusively in French, and students are expected to speak the target language exclusively in class. (Yearlong)

FRE511: Advanced French for Immersion and Heritage Learners I

This course is taught entirely in the target language and is designed to build on the strengths students already possess as fluent French speakers. It is created specifically for students with an immersion background and for heritage speakers. The program is a content-based instruction course built around themes relevant to the lives and abilities of heritage speakers and immersion students. The course incorporates authentic materials produced by native writers and speakers to broaden students' cultural perspectives, increase their global awareness, and set the foundation for a positive image of their identity. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

FRE512: Advanced French for Immersion and Heritage Learners II

This course is the second year of the advanced French course for immersion and heritage speakers. Students will continue to develop their language skills and cultural knowledge as they collaborate on projects with students at their fluency level, focusing on the improvement of literacy and communicative skills, as well as the development of critical thinking and problem-solving skills. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

FRE601: French VI - AP French Language and Culture

AP French Language and Culture is comparable in content and in difficulty to a course in French Composition and Conversation at the third-year college level. Students who enroll in AP French Language and Culture should already have a good command of French grammar and vocabulary. Students enrolled in this course should therefore be prepared for the rigors of college work. This course involves the reading, study and discussion of authentic French documents, such as articles from magazines and newspapers, texts from songs, as well as Francophone literature. Authentic movies and podcasts are also studied to reinforce listening skills and vocabulary building. The course is conducted exclusively in French, and develops advanced literacy skills through the three modes of communication: interpersonal, interpretive, and presentational. It also includes an intensive grammar review. Students who complete this course are required to take the AP exam for possible college credit. This course has been approved by and follows the AP guidelines stated by the College Board. (Yearlong)

FRE701: French VII - Advanced French Literature and Culture

This yearlong course will examine some of the major literary and cultural movements of the Francophone Modern World through the eyes of leaders in literature and cinema. The body of work studied will challenge students to analyze texts and images that presented, at the time of their creation, a transition into a new literary or cultural era. In this course, students will be able to discover some of the events and voices that have marked the modern Francophone history from Césaire to Beauvoir and Kassovitz, and will be able to establish parallels between the material studied, their own lives and our current world. Through project-based learning, research projects or debates, students will have opportunities to develop their language proficiency in French across the three modes of communication: interpersonal, interpretive and presentational, with special attention to critical reading and analytical writing. (Yearlong)

SPANISH

Spanish Course Sequence:

Non-Immersion Track		Immersion Track		
SPA101: Spanish I		illillersion track		
SPA201: Spanish II	SPA512: Advanced Spanish for	SPA512: Advanced Spanish for		
SPA301: Spanish III		Immersion and Heritage Learners I		
SPA401: Spanish IV		SPA512: Advanced Spanish for		
SPA501: Spanish V		Immersion and Heritage Learners II		
SPA601: Spanish VI - AP Spanish Language and Culture				
SPA701: Spanish VII - Advanced Spanish Literature and Culture				

SPA101: Spanish I

This course is an introductory-level course aimed at developing students' proficiency in basic concepts of speaking, writing, reading and understanding of the Spanish language. A cultural awareness of Spanish-speaking countries is introduced through thematic units, emphasizing the appreciation for learning a foreign language and culture by comparing one's own perspective to that of Spanish-Speaking countries. Topics introduced include greetings, hobbies, describing people, telling time, daily schedules, numbers, describing classes, meals and food, family, and shopping. Areas of primary emphasis are simple sentence structure such as Spanish articles, subject pronouns, possessive adjectives, comparatives, as well as verb constructions in the present tense. (Yearlong)

SPA201: Spanish II

This course continues to build on the skills developed in Spanish 1 and to emphasize speaking, writing, reading and listening with more extensive development of interpersonal skills. This course is conducted primarily in Spanish, and students are expected to use Spanish when conversing. Language skills are developed through topics including the life and art of Frida Kahlo, Hispanic athletes, holidays, and music. Specific areas of study include a review of the present tense, an introduction to past tenses, commands and the 115 common Spanish verbs. (Yearlong)

SPA301: Spanish III

This course is conducted primarily in Spanish, and students are expected to converse and write in Spanish. More advanced readings are introduced and discussed, including a well-known Latin American short story. The fundamental elements of grammar are completed, and students are expected to write short essays and discuss current events. Students discuss and compare their own community to that of the Spanish-speaking countries to develop a better understanding of the global world. The geography and culture of Spanish-speaking countries continues to be emphasized with topics such as physical and mental health, family relationships, volunteer activities, environmental concerns, and general social awareness. Language skills are expanded through areas of study including major verb tenses such as the future tense, imperfect and preterite tenses, and present subjunctive, as well as the review of object pronouns. (Yearlong)

SPA401: Spanish IV

This course is conducted exclusively in Spanish, and students are expected to converse exclusively in Spanish. This course is aimed at refining students' written and oral proficiency skills, and includes a review of major grammatical concepts. Students in this course read and write on topics such as personal interactions of teenagers, biodiversity and millenarium health traditions, the history of Cuban revolution, and the value of people's beliefs and ideologies. Students continue to build on their understanding of Spanish-speaking culture with short readings, films or songs. (Yearlong)

SPA501: Spanish V

In Spanish V, students build their proficiency by participating in extended conversations about advanced topics with an emphasis on history and social justice. Students will be challenged by lengthier non-fiction texts and audio recordings. Authentic literature is introduced through short stories by renowned authors in the Spanish-speaking world. Students will solidify their use of simple and complex verb tenses in addition to fine tuning other grammatical structures. Other themes discussed in this course are responsible tourism, environment and use of water, and the importance of the visual arts and handicrafts in Spanish-speaking cultures. (Yearlong)

SPA511: Advanced Spanish for Immersion and Heritage Learners I

This course is taught entirely in the target language and is designed to build on the strengths students already possess as fluent Spanish speakers. It is created specifically for students with an immersion background and for heritage speakers. The program is a content-based instruction course built around themes relevant to the lives and abilities of heritage speakers and immersion students. The course incorporates authentic materials produced by native writers and speakers to broaden students' cultural perspectives, increase their global awareness, and set the foundation for a positive image of their identity. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

SPA512: Advanced Spanish for Immersion and Heritage Learners II

This course is the second year of the Spanish immersion and heritage speakers advanced course. Students will continue to develop their language skills and cultural knowledge as they collaborate on projects with students at their fluency level, focusing on the improvement of literacy and communicative skills, as well as the development of critical thinking and problem-solving skills. Students will be accepted into the program upon review of their oral proficiency and fluency, provided that they are heritage speakers or that they have an immersion background. (Yearlong)

SPA601: Spanish VI - AP Spanish Language and Culture

This Advanced Placement course stresses speaking and reading skills, composition, the development of vocabulary and grammar accuracy. The yearlong course is the equivalent of a third-year college course in advanced Spanish composition and conversation. The course emphasizes the use of active communication and develops the ability to comprehend formal and informal spoken Spanish; the ability to express ideas with accuracy and fluency is a necessity at this level. Students focus on the acquisition of vocabulary and the understanding of language structures through the study of thematic units to be able to effectively read, write, and speak the language. The course is conducted exclusively in Spanish, and develops advanced literacy skills through the three modes of communication: interpersonal, interpretive, and presentational. Students who complete this course are required to take the AP exam for possible college credit. This course has been approved by and follows the AP guidelines stated by the College Board. (Yearlong)

SPA701: Spanish VII - Advanced Spanish Literature and Culture

This yearlong course will examine some of the 20th century literature produced by the Hispanic diaspora in the United States, compared with Latin-American literature. The goal of the course is to have students generate comparisons between the literature that is produced by both groups of Hispanic writers. These comparisons will be based on the many different interpretations the authors present on identity, race, diversity, ethnicity, immigration and the construction of nations and communities. This exploratory course will yield a deeper understanding of Latin American literature and will survey how the concept of nation and communities has been constructed over time through the study of a body of texts that will cover social and political problems as well as gender issues. The course will provide opportunities for students to develop their proficiency in Spanish across the three interpersonal, interpretive and presentational modes of communication, with special attention to critical reading and analytical writing. (Yearlong)