Academic Planning

Balance and Depth: Core Courses and Electives

English, mathematics, language, history, science, and the visual and performing arts have specific requirements for graduation. In choosing advanced courses beyond the required graduation level, it is advantageous to pursue a subject to the highest level possible. A student should attempt, therefore, to extend the study of mathematics through the Sixth Form and to establish the best background in language, history, science, and creative arts as talent and interest permit. Students should ascertain any special requirements of colleges and college programs of their choice.

Promotion and Graduation Requirements

For promotion from one form to the next, a student must have sufficient credits, including those the student expects to earn in the years ahead, to meet graduation requirements. The student must also meet the “Quality Requirement” described below.

For graduation with a diploma, a student must earn a minimum of 18 credits in approved college preparatory courses, including English, 4 credits; mathematics: Algebra 1, Geometry, and Algebra 2, 3 credits; U.S. History and one other year of history, 2 credits; two years of Latin or a modern language, 2 credits; two years of science, 2 credits; and visual and performing arts, 1 credit. Each student must also meet the “Quality Requirement” described below.

More typically, a graduate of Westminster has accumulated the following credits: English, 4 credits; mathematics, 4 credits; science, 3 credits; history, 3 credits, including one in U.S. History; Latin or a modern language, 3 or 4 credits; creative arts, 1 credit; and electives, 3 credits.

The “Quality Requirement” for promotion and graduation: In order to earn a diploma as a Sixth Former or promotion as an underformer, a student must pass four major courses each year including English, and earn a general average of 70.0. As a general expectation, all students will carry five courses.

Advanced Placement Courses

All academic departments offer Advanced Placement (AP) courses and examinations. Placement in all Advanced Placement courses requires departmental permission and an average of 90 or above in the course preceding the Advanced Placement level. Students who score successfully on the examination may become eligible for advanced standing in many colleges and universities.

All Fourth Form and Fifth Form students enrolled in Advanced Placement courses are required to take the AP examination in that subject area. Sixth Form students, in consultation with their AP teacher, can opt out of taking the AP examination.
**Study Abroad**
Students may choose to study abroad during their Fifth Form or Sixth Form years. Westminster students accepted by the prestigious School Year Abroad program, experience yearlong study and travel in China, France, Italy, or Spain. Another option for study abroad is available through the equally prestigious English Speaking Union. Available to Westminster graduates in the year following graduation, the program allows a year of study and travel in the United Kingdom. Advice on these programs is offered through the Academic Office, and admission is gained solely through the programs’ respective application processes.

**Courses**
It is impossible to briefly give a completely accurate picture of our academic offerings. Invariably, any printed list of courses is quickly outdated. For additional information about specific courses, please visit our website at www.westminster-school.org or contact the Director of Studies.
English

English courses at Westminster introduce students to great books and ideas through the study of language and literature. At all levels, we teach students to read carefully, to think critically and creatively, and to write effectively. Although the English Department believes in the value of heterogeneously sectioned classes, we do offer Advanced Placement courses for qualified Fourth Formers and Fifth Formers.

At each level, the study of language helps to shape our students’ writing. We devote less time to formal grammar as our students become more proficient in their use of diction, syntax, and imagery in their own compositions, and we give our students practice and instruction in expository, analytical, personal, and creative writing in all of our core courses. The English Department sponsors several major writing contests for students, posts an English-Paper-of-the-Week in the English wing of Armour Academic Center, and selects students to read at Friday Nights at Westminster events during the year.

We focus our study of literature on an essential question for each course of study (What does it mean to grow up? What does it mean to search for an identity? What does it mean to be an American? What does it mean to make choices?), and we select works of literature from a variety of time periods and cultures that provide versions of these basic questions and examples of the ways they affect life. We also teach at least one book of poems by a contemporary poet in every course, and each year the school welcomes that poet for a two-day visit. Linda Pastan, Billy Collins, David Huddle, Stephen Dunn, Marilyn Nelson (2005 & 2017), Ted Kooser, Naomi Shihab Nye (2007 & 2015), Li-Young Lee, Dorianne Laux, Tony Hoagland, Terrance Hayes, Aimee Nezhukumatathil, Mark Doty, Jeffrey Harrison, Richard Blanco, and Rennie McQuilkin have been Westminster Poets in past years. The Westminster Poet for 2019-20 will be formally announced soon.

The Literature of Becoming
This course is the platform for the English curriculum at Westminster. This is the recommended course choice for Third Formers; however, it has been designed and differentiated so as to be a new course of study for a student repeating a freshman year from another institution. Enrollment in this course is by approval of the English Department Chair and the Director of Studies.

The essential question for this year of English study asks, “What does it mean to grow up?” Students read essays, poems, stories, plays, and novels that explore this question, and they explore the question in their own lives through personal writing. The course focuses on the interrelated topics of language and literature by giving students many opportunities to practice reading, thinking, and writing. Over the course of the year, students write many short critical papers, too, and they begin to learn to talk intelligently about language and literature. Texts may include Growing Up: An Anthology of Essays and Stories; Poetry on the Hill: An Anthology of Poems by the Westminster Poets; William Shakespeare’s Romeo and Juliet; J. D. Salinger’s The Catcher in the Rye; Alice Hoffman’s Local Girls; Sherman Alexie’s The Absolutely True Diary of a Part-Time
Indian; and English Workshop, Course 5: Fifth Course. Students also read a variety of pieces by visiting writers and attend their readings at the Friday Nights at Westminster events. Each year, students also study a book of poems by the Westminster Poet for the year.

The Literature of Being
This is the recommended course choice for Fourth Formers; however, it has been designed and differentiated so as to be a new course of study for a student repeating a sophomore year from another institution. Enrollment in this course is by approval of the English Department Chair and the Director of Studies.

The essential question for this year of English study asks, “What does it mean to search for an identity?” The course emphasizes the study of classic and contemporary stories, poems, plays, and essays that feature characters who are searching for their identities. Students write, on average, one paper each week, alternating between analytical or expository writing and personal or creative writing. Texts may include *Points of View: An Anthology of Stories, Essays, and Poems*; Homer’s *The Odyssey*; Sophocles’ *Theban Plays*; William Shakespeare’s *Macbeth*; Richard Blanco’s *The Prince of Los Cocuyos*; *Poetry on the Hill: An Anthology of Poems by the Westminster Poets*; and *English Workshop, Course 6: Complete Course*. Individual section teachers also select several novels or books of nonfiction for their classes. Each year, students also study a book of poems by the Westminster Poet for the year.

AP English: Language and Composition
This course is available to students in the Fourth Form. Enrollment in this course is by approval of the English Department Chair and the Director of Studies.

This course, which also focuses on the essential question of what it means to search for an identity, is designed to prepare students to take the AP English Language and Composition Examination in May. As such, it mirrors a college-level introductory course in Rhetoric and Composition. Students read prose fiction and nonfiction throughout the year to practice the techniques of close reading and to become familiar with the uses and forms of rhetoric. Along the way, students also practice a variety of kinds of expository and critical writing, including the multiple-source synthesis essay. Texts may include *Points of View: An Anthology of Stories, Essays, and Poems*; *Poetry on the Hill: An Anthology of Poems by the Westminster Poets*; *The Norton Reader*; Anthony Doerr’s *Memory Wall*; Richard Blanco’s memoir *The Prince of Los Cocuyos*; William Shakespeare’s *Macbeth*, and assorted short readings. Each year, we also study a book of poems by the Westminster Poet for the year. To be accepted into this course, students need to have the recommendation of their previous English teacher and the approval of the Department Chair and the Director of Studies.

The Literature of Place
This course is available to students in the Fifth Form; however, it has been designed and differentiated so as to be a new course of study for a student repeating a junior year from another institution. Enrollment in this course is by approval of the English Department
Chair and the Director of Studies.

The essential question of this course asks, “What does it mean to be an American?” This course engages students in a yearlong conversation about global and American culture and literature. There is an emphasis on critical reading reinforced by frequent writing assignments. This course covers a diverse group of authors and genres including drama, poetry, fiction, and nonfiction. The course ends with a unit on writing the personal essay to prepare students for writing the college essay (a draft of which they will write during the summer); the *Touchstone Anthology of Contemporary Creative Nonfiction* will often act as the core text for this unit of work. Every class studies a core group of American authors as well as a Shakespeare play; this year’s Shakespeare text is *Othello*. Core authors may include Tim O’Brien, F. Scott Fitzgerald, Zora Neale Hurston, August Wilson, Arthur Miller, and Willa Cather. Each year, we also study a book of poems by the Westminster Poet for the year.

**AP English: Literature and Composition**

This course is available to students in the Fifth Form. Enrollment in this course is by approval of the English Department Chair and the Director of Studies.

This course, which also focuses on the essential question of what it means to be an American, is designed to prepare students to take the AP English Literature and Composition Examination in May. As such, it mirrors a college-level introductory literature course. Students read representative works of American fiction, poetry, drama, and nonfiction throughout the year to practice the techniques of close reading. Along the way, students also practice a variety of kinds of expository and critical writing, with the focus being on writing about literature. The course ends with a unit on writing the personal essay to prepare students for writing the college essay (a draft of which they may work on during the summer). Every class studies a core group of American authors as well as a Shakespeare play; this year’s Shakespeare text is *Othello*. Core authors may include Nathaniel Hawthorne, Willa Cather, Tim O’Brien, F. Scott Fitzgerald, Zora Neale Hurston, August Wilson, Arthur Miller, and Willa Cather. Each year, we also study a book of poems by the Westminster Poet for the year. To be accepted into this program, students need to meet rigorous standards and have the recommendation of their previous English teacher, the Department Chair and the Director of Studies.

**The Literature of Values**

This course is available to Sixth Form students only.

The essential question for the fall term in Sixth Form English is “What does it mean to make choices?” This course is team-taught in a lecture/seminar format designed to prepare students for the courses they will take in college. The texts for study in 2019-2020 include the following: William Shakespeare’s *Hamlet*, Jane Austen’s *Pride and Prejudice*, and a study of the Westminster Poet for 2019-20. Students have opportunities to practice personal, analytical and creative writing. In the winter and spring trimester, students choose their courses from a variety of electives (see the list printed below). These electives are taught as college seminar classes.
**Winter and Spring Electives – Sixth Form**

These courses are available to Sixth Form students only. In the winter and spring terms, students choose from a variety of elective courses. Below is a list of current and new electives; this list provides examples of the kinds of electives for study.

Cli-Fi: Fictions of Climate Change  
African American Literature from the 19th Century  
African American Literature from the 20th Century  
Literature on the Edge  
Writers’ Workshop  
Adapting Short Stories to Film  
Social Psychology  
Humanity in the Twilight Zone  
The World of the Short Story  
Brave New World  
An Introduction to the Plays of Anton Chekhov  
From Both Sides of the Shore  
Nature Writing  
Voices from Down Under  
Social Justice and Ethics in Film  
Underworlds and Wastelands: Eliot and Dante  
Food Writing  
Baseball and Literature  
Lyric Meaning  
Man and Machine  
The Bildungsroman  
American Horror  
The Dystopian Novel  
The American Southwest  
Race in Contemporary American Literature  
Underworlds and Wastelands  
Asymmetry: Reading Two of the Great Novels of the 21st Century  
Shakespeare on Film  
Speculative Fiction and Feminism in 2019  
What Happens When Rainbows are not Enough?  
The Literature of War  
Literature and Film  
“A (Black) Mirror Up to Nature”?  
Science & Dystopia: Speculative Fiction and Other Bodies

**Study in Creative Writing**

The English Department offers a course in Creative Writing for highly motivated students in the Fourth, Fifth and Sixth forms. This program of study is designed to provide a creative writing course and outlet for students who have demonstrated a serious and active interest in writing as art. Students will read a wide range of classic, canonical, and
contemporary works from all genres and from many literary periods, while focusing, in particular depth, on studying the work of the writers who visit Westminster as part of the Friday Nights at Westminster program. At various times throughout the year, the class may also attend poetry, fiction, and nonfiction readings off-campus. Students in this course also take a leading role in putting together *The Martlet* during the spring term. This is a full-credit course, but it cannot be taken in lieu of a core English course. Interested students should formally contact their current English teacher and the Chair of the English Department before signing up for the course. A minimum enrollment for this class is eight students.
History

The History Department guides students to be critical readers, thinkers, and writers in a four-year curriculum that is centered on core courses in world and American history. Through challenging readings, thoughtful discussions, innovative exercises, and thorough research projects, students come to an understanding of both their heritage and the world in which they live.

As Fifth Formers and Sixth Formers, students explore a wide range of electives that encourage them to appreciate the major themes and trends of history, the importance of the individual experience in understanding these trends, and the historical context of fact and opinion, and cause and effect. The History Department teaches students to be respectful of and objective about the past, and to use this knowledge to become productive, responsible, and contributing citizens.

Global History and Society - Third Form
This introductory course for Third Formers covers the major world religions and examines their role as the building blocks of societies in conjunction with the historical, political, economic, and cultural implications of global geography. Essential questions of the course include: How do fundamental beliefs and geographic location affect human interaction? How have these beliefs changed over time? How and to where do these ideas spread? What are the modern-day implications of the interplay among religion, geography, and politics? Students are introduced to key themes including globalization, democratization, population growth, economic development, gender, and environmental issues. The course focuses on developing analytical reading and writing abilities, and also introduces students to the various disciplines within the department. The primary text of the course is Pulsipher and Pulsipher’s *World Regional Geography*.

20th Century World History - Fourth Form
This introductory history course for Fourth Formers addresses the main issues of world political, economic, social, and intellectual history from the end of the 19th century to the present day. 20th Century World History focuses on global interdependence and interactions through such topics as the interaction of colonial and indigenous populations in the Americas, Africa, and Asia; the emergence of intellectual, technological, political, and social revolutions, including nationalism, colonialism, and imperialism; and the great upheavals of the 20th century: the rise of totalitarianism, the world wars, the Russian and Chinese revolutions, the Cold War, decolonization and the emergence of a North-South division in the modern world, and the post-Cold War world. Work in this course is designed to improve critical reading, writing, and research skills, and relies on both primary and secondary sources. Students study current events in world politics and society and complete a major research paper on a topic in world history. The text is William Duiker’s *Contemporary World History*. This text is supplemented by library and online resources.
AP European History - Fourth Form
This course provides an in-depth study of European history from the Renaissance and Reformation to European unification and beyond in the 21st century. The course is equivalent to a college freshman survey course and prepares students to take the Advanced Placement European History examination. The class emphasizes independent study, critical thinking, competent research and writing, and thoughtful discussion of the remarkable achievements and tragedies of modern European History. As an integral part of this learning process, the student will develop the ability to see the facts of history in context, to distinguish courses of movements or trends, and to establish causes, results, and consequences. Through the study of primary documents and secondary sources, the student will weigh evidence and reach conclusions on the basis of facts, not prejudice, and communicate those conclusions effectively. The text is John McKay’s, et. al., A History of Western Society Since 1300, supplemented by Marvin Perry’s, et. al., Sources of the Western Tradition.

Prerequisite: 92 minimum year average in Global History and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

United States History - Fifth Form
This survey course for Fifth Formers covers the core issues of American history from the American Revolution to the present, with particular emphasis placed on the 20th century. Students develop a sound knowledge of American political history and the evolution of American government, and study diplomatic, economic, and social history as well. In the first half of the year, students study key topics in American history: the “Critical Period” of Revolution and founding, Andrew Jackson’s presidency and the emergence of mass politics, expansion west, and the crisis of the Civil War. In the second half of the year, students more closely and chronologically study American history in the 20th century, examining America’s emergence from isolation through two world wars and the Cold War and the tremendous changes in American society and politics associated with the growth of “modern” America. Students learn to distinguish between fact and opinion, evaluate primary source materials, make valid generalizations and support them, and relate America’s past to current problems and issues. Throughout the year, students write numerous analytical papers highlighted by a mature, analytical research paper, a major project during the winter term. Readings for the course are pulled from a variety of sources, including primary and secondary historical documents and essays, and library and online resources.

Prerequisite: Global History and Society or 20th Century World History

AP United States History
Advanced Placement United States History offers an accelerated college-level survey of major political, diplomatic, economic, social, and cultural issues from colonial beginnings to the present. The syllabus explicitly prepares students for the Advanced Placement examination by training students in the interpretation and reconciliation of
critical historical documents and the writing of analytical essays. Students’ historical skills are honed through Socratic class discussions, debates, and practice exams. Classes emphasize more independent preparation and factual retention than in the regular sections of the course. Advanced Placement study is based on Boyer’s and Clark’s challenging college text, *The Enduring Vision*, and primary and secondary sources.

*Prerequisite: AP European or 92 minimum year average in 20th Century World History and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.*

**Moral Philosophy**
The first part of Moral Philosophy at Westminster devotes itself to a survey of the Western philosophical tradition. In past years, books for this section have included Homer, *The Iliad*; Plato, *Six Great Dialogues*; The Bible; Marcus Aurelius, *Meditations*; Pascal, *Pensées*; Nietzsche, *The Gay Science*; Melville, *Moby-Dick* — from Achilles and Socrates to Christianity and Existentialism, an exploration of the continual tension in Western Civilization between Athens and Jerusalem. With this overview complete, the course will proceed to an examination of informal fallacies, General Ethics (i.e., theory), and Applied Ethics (i.e., ethical issues).

*Prerequisite: United States History*

**Outsiders in American History**
What is it like to be an outsider in American society? What happens, historically, to outsider groups in the United States? Using possible case studies such as 17th-century accused witches of Salem, 19th-century Mormons, Japanese-Americans interned during World War II, organized crime and the Mafia, the working poor, as well as outsiders in American boarding schools, this seminar-style course will take a new look at United States history from a perspective that is outside the mainstream. In addition to standard historical texts, students will make use of primary source documents, novels, and movies to explore the outsider experience in American history.

*Prerequisite: United States History*

**AP Economics**
This course offers a rigorous introduction to micro and macroeconomic principles and problems. The course explores the market system, business organizations and decision-making, money and banking, personal investment choices, government fiscal and monetary policy, and international trade. By means of a variety of textbook readings, supplemental materials, newspapers, Internet sources, and guest lectures, students are prepared to take the Advanced Placement Macroeconomics and Microeconomics examinations and to better understand and evaluate business and public policy decisions.

*Prerequisites: United States History*
**AP Comparative Government**

Through work in a college-level text and regular consideration of current media, this course exposes students to the current political systems of different countries and examines them using analytical and comparative themes. The course will examine the systems and politics of six “core” countries: the U.K., Russia, Iran, Mexico, Nigeria, and China. Students will consider each country’s history and political culture, social divisions, formal structures of government, forms of participation, leadership groups, and policy issues and challenges. Topics of discussion will include the relationship of citizens to the state, the purposes and powers of government, opposition and dissident groups, and policy making in a changing world. Students will also consider broader issues such as globalization, democratization, and political change. This course prepares students for the Advanced Placement Comparative Government examination. The texts are Patrick O’Neil’s *Essentials of Comparative Politics* and *Cases in Comparative Politics*.

*Prerequisite: United States History*

**AP Art History**

Art History emphasizes understanding works of art within their historical context by examining issues such as politics, religion, patronage, gender, function, and ethnicity. The AP Art History course also teaches students visual analysis of works of art. The course teaches students to understand works of art through both contextual and visual analysis. Consistent with the Advanced Placement curriculum, 30 percent of the course will focus on Ancient and Medieval European art, another 20 percent on art from beyond the European tradition, and 50 percent on Western Art from the Renaissance to the present.

*Prerequisite: United States History*

**Psychology**

This course offers students an introduction to the study of psychology. Students learn about the behavior and mental processes of human beings in order to better understand themselves and the people around them. The course covers basic psychological concepts and principles, as well as the ethics and methods of psychologists. The course text is David Myers’ *Psychology*.

*Prerequisite: United States History*

**Big History**

This multidisciplinary course seeks to answer sweeping questions about origins and progress, from both scientific and historical perspectives. The course, which receives funding from Bill Gates, has grown into a global conversation involving teachers and students who share curriculum ideas online. Consequently, the powerful ideas and themes in which students engage, from Big Bang to the evolution of life to religion to the rise of civilization, will draw on multiple sources, some provided by the instructor and some which the students will find through their own research. This course will involve lots of
discussion and writing about epistemology, the study of knowledge; students will learn how to be productively skeptical as well as how to support their own assertions using sufficient evidence. Using a historical perspective, students will learn also how knowledge has transformed over time, with new information refuting, supporting, or altering our understanding of the universe. This course, designed for Fifth Formers and Sixth Formers, blends science and history together in a way that will allow them to draw on knowledge from previous courses and tie ideas together as each student considers their own beliefs, understandings, and narrative. The course, with an emphasis on online media, will use iPads and also incorporate electronic research and note-taking skills.

Prerequisite: United States History

Trimester History Electives
Students may sign up for all three electives for a full credit in history as part of the standard five-course load. Alternatively, students may take any one of these courses for additional 1/3 credit beyond the usual 5 credits each year.

Prerequisite: United States History

Fall Elective - The History of Rock ‘n’ Roll
Rock ‘n’ roll asserts a profound influence on the American cultural and social landscape. This course examines the impact of rock ‘n’ roll over the past 50 years. This is not a music course but more an investigation of the impact on, and reflection of rock ‘n’ roll as an element of the American psyche. The course begins with the antecedents of rock: blues, boogie-woogie, country western, swing, and rhythm and blues, and then progresses to the protest music of the ’60s to the more contemporary trends of punk and hip-hop revolt. Emphasis will be placed on how the music reflects or heralds the historical events of each time period. Written papers, seminar discussions, “listening resources” and a major research project comprise some of the assignments in this course, combined with lectures, videos, and presentations.

Winter Elective - The United States in the 1960s
The 1960s was a decade of conflict and confusion, dramatically polarizing different segments of American society. The civil rights movement, the student movement, Vietnam, the women’s movement and Watergate all created a mentality of “us versus them”: blacks vs. whites, students vs. “the establishment,” hawks vs. doves, women vs. men, and Nixon vs. his enemies. This course will examine this unique era by studying a variety of historical perspectives from involved participants within each conflict while also asking critical questions and exploring the historical interpretations of these social and political movements. We will make extensive use of primary source documents and video presentations.

Spring Elective - History of Film
History of Film surveys the invention and historical development of the cinema over the past 150 years. Students will learn how to develop a historical appreciation of films through the cinematic traditions of silent film, documentary, film noir, Hollywood’s
golden era, blockbuster movies, science fiction, comedy, slapstick, experimental films, and others. Investigating how movements in the film industry have historical significance will constitute our primary focus.
Language

The Language Department offers courses in French, Spanish, Latin, and Chinese. Through intensive instruction that develops their listening, reading, speech, and writing, students are immersed in a language that opens up a new world to them as they gain understanding of different cultures, communities, and customs.

For students at the beginning levels, emphasis is placed on comprehension and communication skills. Regular classroom discussion and use of tech tools like our cloud-based language lab reinforce students’ oral and aural skills in a variety of contexts. As the students advance, they are asked to read and write more critically and raise their level of discourse, while maintaining the emphasis on practical written and spoken communication.

Culture, art, history, literature, and film studies play a big role in the development of the Westminster language student. Our teachers draw upon appropriately leveled fiction and nonfiction, current events media, effective tech tools, and Internet research to construct an atmosphere of linguistic and cultural immersion for our students from the very first day of level 1.

Chinese 1
Chinese 1 is designed for students with little or no previous exposure to the language. Instruction will focus on providing quality input through a wide variety of listening and reading exercises. High frequency vocabulary will be used to maximize repetition of useful grammar to mimic the natural language learning process. Students will be regularly exposed to the structures used most often in Chinese, and will thereby build a vocabulary of high-frequency words, conjunctions, and grammar constructions relevant to their own daily lives. While we will write character components, a focus on character input methods for typing and texting will facilitate literacy. Instruction materials and methods will include graded readers, online tools, maps, games, Total Physical Response exercises, story-asking, and timed writes. Content mastery will be evaluated based on constructive participation, class preparation, and regular assessments of progress in the several modes of language acquisition, with an emphasis on receptive language ability and comprehension.

Chinese 2
Chinese 2 will continue the program focus on providing students with quality input through listening and reading. Students will solidify what was learned in Chinese 1 and expand their grammar to include most of the structures used in everyday Chinese. They will similarly reinforce and begin broadening their vocabulary, and develop control of more complex conjunctions. A continued focus on keyboarding skills will allow us to focus on developing literacy. Instruction will make use of graded readers, online tools, maps, games, Total Physical Response exercises, story-asking, and timed writes. Content mastery will be evaluated based on constructive participation, class preparation, and regular assessments of progress in speaking, reading, listening, and composition based on standards set forth by the American Council on the Teaching of Foreign Languages.
Prerequisite: Chinese 1 or permission of the department

Chinese 3
Chinese 3 will continue to focus on listening and reading as the primary means of instruction, but class discussion will become a more fundamental expectation. Materials of instruction will highlight the geography, history, and traditional culture that inform the modern language. More sophisticated vocabulary and nuanced grammar will be introduced and reinforced frequently in class through longer readings, discussions, and game-based exercises. A continued focus on keyboarding skills will allow us to focus on developing literacy while character writing skills are introduced. Instruction methods will include graded readers of a more substantial length, online tools, maps, games, Total Physical Response exercises, sustained silent reading and timed writes. Content mastery will be evaluated based on constructive participation, class preparation, and regular assessments of progress in speaking, reading, listening, and composition based on standards set forth by the American Council on the Teaching of Foreign Languages.

Prerequisite: Chinese 2 or permission of the department.

Advanced Chinese Studies 1 and 2
Advanced Chinese 1 and 2 will continue to focus on listening and reading as the primary means of instruction, but class discussion and written responses will become more nuanced and analytical. Materials of instruction will highlight the geography, history, and traditional culture that inform the modern language. More sophisticated structures will be introduced and reinforced frequently in class through readings, discussions, and game-based exercises. A continued focus on keyboarding skills will allow students to focus on developing literacy, while character writing will become more intensive as we prepare for college-level expectations. Instruction methods will include a reading and discussing short novels, several nonfiction pieces related to culture and traditions, films, current events, and timed writes and essays. Content mastery will be evaluated based on constructive participation, class preparation, and regular assessments of progress in speaking, reading, listening, and composition based on standards set forth by the American Council on the Teaching of Foreign Languages.

Prerequisite: Chinese 3 or permission of the department.

AP Chinese
This course will focus on the Six Themes of the Language AP, and will prepare students for the expectations of college-level Chinese courses. Students should be comfortable drawing on their cumulative years of learning to express their ideas in Chinese speech and writing. The course will assemble readings from a variety of intermediate textbooks most often used at the college intermediate level, as well as classic films and several documentaries; this will provide students with varied means to consider China’s current social, political, and cultural trends with recourse to its traditional roots, as well as in comparison with students’ own cultural and linguistic background. To develop the familiarity with the AP testing methods, students will also regularly complete narrative writing, letter-writing, conversation, and presentation exercises. Handwriting skills will
be emphasized in the spring to prepare for college-level study. Content mastery will be evaluated based on constructive participation, class preparation, and regular assessments of progress in speaking, reading, listening, and composition based on standards set forth by the College Board.

**Prerequisite: Advanced Chinese 2 or permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.**

**Latin 1**
In this introductory course, students will learn the basic structures of the Latin language and will begin to build a working vocabulary to support their reading. The course will emphasize both a formal understanding of the grammar and a familiarity with the language through reading, writing, translation, and dialogue. Study will include the geography, politics, history, literature, mythology, and philosophy of the Romans in particular and of ancient cultures more generally. This course will also introduce students to the study of archeology and etymology. The central texts for the course are the *Cambridge Latin Course Books 1 and 2*.

**Latin 2**
In this course, students continue their study of the Latin language, building upon the basics learned in Latin 1 and expanding into more sophisticated constructions. Students continue to build a vocabulary to support more fluent comprehension of Latin readings, and the texts include an increasing amount of original, unadapted Latin literature. Geographical, historical, and cultural studies continue. The central text for the course is *Cambridge Latin Course Book 3*.

**Prerequisite: Latin 1**

**Latin Literature**
The principal object of this course is to accelerate the students’ ability to read, comprehend, and translate Latin literature with confidence. They will read, discuss, analyze, and translate works of both prose and poetry. Alongside this reading, students will review and further explore the elements of Latin grammar, history, geography, and culture studied in Latin 1 and 2 and will continue to strengthen and build their vocabulary. The works studied in this course will vary from year to year, but will include authors such as Plautus, Cicero, Caesar, Catullus, Vergil, Horace, Livy, Ovid, Seneca, Petronius, Pliny the Younger, and Martial.

**Prerequisite: Latin 2**

**AP Latin**
This course follows the Advanced Placement Latin: Vergil and Caesar syllabus. Students read extensively in Latin from Vergil’s *Aeneid*, and Caesar’s *De Bello Gallico*. Students also carefully study meter and other poetical and rhetorical devices. At the start of the year, the focus is primarily on building a strong reading pace and honing translation
skills, but figures of speech and interpretive writing exercises are introduced early and incorporated increasingly as the year progresses. Students also read about and discuss the literature’s historical and literary context. Students also practice for the format of the exam by completing assessments in multiple-choice questions, translations, spot questions, and comparative essays on known Latin passages, and sight-reading multiple-choice questions on unknown Latin passages.

Prerequisites: Latin 3 and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

**Independent Study in Latin**
Once a student has exhausted all formal class options, he or she may take an Independent Study. The curriculum is based upon the student’s interest, and the teacher and the student meet weekly to discuss the chosen topic of study. The Independent Study gives a student an opportunity to pursue specific topics of interest and to present them on a weekly basis.

**Prerequisite: AP Latin and permission of the department**

**French 1**
This is a beginning course designed for students who have either had no previous French instruction, or for those whose previous study does not qualify them for French 2. The objective of the French 1 program is to establish a strong foundation in all four core language skills (reading, writing, speaking, and listening) through a wide variety of activities, exercises, films, as well as through the textbook *D’accord*. The text is accompanied by an online Supersite that integrates content with technological interactivity. Student frequently use digital language studio software to enhance their oral and aural communication skills. The course explores the Francophone world through internet articles and French language websites. Viewing authentic French movies as well as contemporary French television (TV5) gives the students in French 1 a genuine connection to the Francophone world.

**French 2**
Students in French 2 continue to establish a strong foundation in all four core language skills (reading, writing, speaking, and listening) through a wide variety of activities and exercises. By immersing themselves in the Francophone culture, students reinforce their ability to read, write, speak, and understand the French language. Each French class meets regularly in the state-of-the-art digital language studio where oral and aural communication skills, as well as pronunciation, are reinforced. In the language studio and in the classroom, students learn to incorporate more complex grammatical concepts in order to strengthen their reading, writing, speaking, and listening skills. Students give oral presentations, create videos, and use the internet to learn more about the Francophone world. French is the language of the classroom.

**Prerequisite: French 1**
French 2 Honors
For student who have shown a determination and motivation to master the French language, French 2 Honors continues to establish a strong foundation in all four core language skills (reading, writing, speaking, and listening) through a wide variety of activities and exercises. By immersing themselves in the Francophone culture, students reinforce their ability to read, write, speak, and understand the French language. Each French class regularly uses language studio software to hone oral and aural communication skills as well as pronunciation. Students learn to incorporate more complex grammatical concepts in order to strengthen their core language skills. Students give oral presentations, create videos, read short stories, and use the internet to learn more about the Francophone world. The online Supersite that accompanies their textbook, D’accord, provides integration of content with immediate feedback and includes recording activities as well as viewing authentic short films. French is the language of the classroom.

Prerequisite: French 1 and permission of the department

French 3
Students in the third year of French study have acquired the tools to communicate effectively both in reading and writing, as well as a strong foundation of the Francophone world. Through their text, D’accord, students are exposed to a wide variety of Francophone cultures, literature, articles, and films. Students at this level are expected to communicate in the target language. Linguistic and literary fundamentals are stressed throughout the year in order for the student to refine both written and oral French. Frequent work using language studio software reinforces French oral and aural skills and promotes interpersonal communication skills. Students write frequent essays of varying length, and complete short research projects. Students stay current on news in the Francophone world through various websites such as TV5, rfi and lemonde.fr. French is the language of the classroom.

Prerequisite: French 2

French 3 Honors
This is an accelerated third-level French course designed for highly motivated language students who seek to delve into a comprehensive exploration of the Francophone language and culture. Students at this level have acquired the tools to communicate effectively both in reading and writing, as well as a strong understanding of the Francophone world. Through their text, D’accord, students are exposed to a wide variety of Francophone cultures, literature, articles, and films. Frequent work with language studio software reinforces French oral and aural skills, and facilitates guided internet research of authors, artists, and Francophone culture. Students write frequent essays of varying length, and complete short research projects. Students stay current on news in the Francophone world through various websites such as TV5, rfi and France24 and lemonde.fr. French is the language of the classroom.

Prerequisite: French 2 Honors and permission of department
French 4
This is a discussion-based course, designed to reinforce essential grammatical structures and to perfect oral and aural skills through an analysis of films, poetry, and literature. Technology and multimedia resources are integral to this course, and students will take advantage of language studio software to research the Francophone world around them, and to refine oral communication skills and listening comprehension. Students read a variety of novels, short stories, and contemporary news articles. With the use of interactive technology and film study, students view current events on TV5, and study French films and authentic short films. The AP language and cultural themes are studied to prepare those students who wish to continue to the AP level the following year. French is the language of the classroom.

Prerequisite: French 3 or French 3 Honors

AP French Language
Advanced Placement French Language is a fast-paced, rigorous course, which demands a high degree of proficiency. This is a course for students who have demonstrated excellence in the four crucial areas of language learning: listening, reading, speaking, and writing. The student must be ready to read and analyze literature through the novel *Oscar et la Dame Rose* and *Monsieur Ibrahim et les fleurs du Coran*, write extensively, give numerous presentations, both spontaneous and prepared, on a variety of topics, continue an in-depth study of French syntax and advanced vocabulary, and work weekly with language studio software. The course is organized around the six global themes of the language AP tests: Beauty and Aesthetics, Contemporary Life, Science and Technology, Public and Personal Identities, Global Challenges, and Families and Communities. These themes are reinforced with the help of various supports and the textbook, *Thèmes*. Students read from a variety of texts including Francophone newspapers and periodicals, in addition to using music, films, and videos of native French speakers from around the world. Authentic testing material ensures specific preparation for the Advanced Placement examination. French is the language of the classroom.

Prerequisites: French 3 Honors or French 4 and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

Advanced Modern French
Advanced Modern French is a discussion- and project-based course covering the French social life, workplace, and culture through today’s literature, art, and business. Students will come up with a business plan and will create their own virtual business based on interests, applying what they learned in class. Students will also approach themes related to politics and history through research, French films, and works of literature. They will learn how to lead a debate in the target language. Students will use creative writing to present an online magazine or a weekly newsletter.

Prerequisite: AP French Language and Culture and permission of the department.
Spanish 1
This course is designed for students who have had no or very little exposure to the Spanish language. Students are introduced to fundamental grammar and practical vocabulary. The usage of text, video, and audio material helps develop proficiency in the four basic skills of reading, writing, listening, and speaking. Class is conducted entirely in Spanish. Students are evaluated on a regular basis through written quizzes and tests, as well as oral participation and written work.

Spanish 1 Honors
This is a beginning course designed for students who have previous Spanish instruction but do not qualify for the Spanish 2 course. Students are introduced to fundamental grammar and practical vocabulary. The usage of text, video, and audio material helps develop proficiency in the four basic skills of reading, writing, listening, and speaking. Class is conducted entirely in Spanish. Students are evaluated on a regular basis through written quizzes and tests, as well as oral participation and written work.

**Prerequisite: Permission of the department**

Spanish 2
Spanish 2 will build upon skills learned in Spanish 1, including the present, preterite, imperfect, future, and conditional tenses, along with command forms and perfect tenses of the subjunctive mode. The class will encourage the use of conversational Spanish and the exploration of cultures in Spain and Latin America. Students will participate in culture projects, which will include research, writing, and class presentations.

**Prerequisite: Spanish 1**

Spanish 2 Honors
Spanish 2 Honors will build upon skills learned in Spanish 1 Honors, including the present indicative tense, preterite and imperfect tenses, and useful conversational vocabulary. These concepts will be reviewed using *Descubre* and a short novel, and supplemented by lessons on the future, conditional, and present subjunctive tenses, along with command forms and perfect tenses. The class will encourage use of conversational Spanish and the exploration of cultures in Spain and Latin America through the use of regular class readings and writing assignments.

**Prerequisites: Spanish 1 Honors and permission of the department**

Spanish 3
This course focuses on real communication in a meaningful cultural context that develops and consolidates students’ speaking, listening, reading, and writing skills. Students will review and learn the formation, meaning, and use of grammar structures of the Spanish language including indicative mode (present, preterite, imperfect, conditional, future, and compound tenses); subjunctive mode (all simple and compound tenses, and commands — all forms). Students will also read works from classical Spanish and contemporary Latin American writers.
Prerequisite: Spanish 2

Spanish 3 Honors
This course focuses on real communication in a meaningful cultural context that develops and consolidates students’ speaking, listening, reading, and writing skills. Students will review and learn the formation, meaning and use of grammar structures of the Spanish language including indicative mode (present, preterite, imperfect, conditional, future, and compound tenses); subjunctive mode (all simple and compound tenses, and commands — all forms). Students will also work on readings from classical Spanish and contemporary Latin American writers. This course is considered a pre-AP language course; consequently, a great deal of commitment in all aspects of the language is expected.

Prerequisites: Spanish 2 Honors and permission of the department

Spanish 4: Culture, Conflict and Cinema
This course works to refine the four basic language skills: oral, aural, reading, and writing, with an increased emphasis on the study of Spanish and Latin American culture. Repaso: Grammar - Review Workbook will provide the structural backbone to the course, while Project Based Learning assessments, Hispanic literature, international newspapers, and a variety of online sources will help students engage meaningfully through reading, writing, and speaking. Frequent presentations and seminar-style discussions will provide a forum for debate and student-to-student communication. Additional study of culture and history is done through the study of films in which essential questions and themes will be analyzed during regular Socratic Seminars. Each trimester will focus upon a distinct area of the Hispanic World: Fall term will focus on the Iberian Peninsula (Roman, Visigoth, and Islamic periods, post civil war modern Spain, current independence movement in Catalunya); Winter term will explore Spanish speaking communities in America and the Caribbean; and Spring term will cover South America's quest for independence from Spain.

Prerequisites: Spanish 3

Advanced Spanish Studies
This is a course is designed for students who have an excellent understanding of the Spanish language and who wish to engage in a class that emphasizes discussion of literature, culture, and films. Students’ oral, aural, reading, and writing skills will be the major focus. Students work to perfect these skills by weaving together a variety of multi-modal activities. The course consists of several works by Spanish and Latin American authors chosen by the instructor. The textbook Tejidos will provide students with the basic knowledge of the six themes of the AP Language and Culture course. Authentic communication and culture contexts are explored throughout the year. Students will analyze poems by Garcilaso, Federico García Lorca, Pablo Neruda, Gabriela Mistral, and Octavio Paz.

Prerequisites: Spanish 3 Honors or Spanish 4 and permission of the department
AP Spanish Language & Culture
AP Spanish Language and Culture is designed to help students move from the intermediate Spanish level towards advanced proficiency in interpersonal, presentational, and interpretive communication modes. Students are required to have the Temas textbook and workbook. Unit goals are stated in the form of essential questions relating to the AP themes. These essential questions drive instruction; students are regularly assessed and receive formative feedback to refine communication skills and develop deep understanding relating to the essential questions. Course goals, assessments, and the student portfolio are organized in three areas: Spoken Communication, Written Communication, and Facilitating Skills. These skills are assessed in the AP exam.

Prerequisites: Advanced Spanish Studies and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

AP Spanish Literature
The Advanced Placement Spanish Literature and Culture course seeks to expose students to a third-year college-level introduction to peninsular and Latin American literature while developing students’ ability to comprehend and analyze literary works and develop academic writing skills.

Prerequisites: AP Spanish Language and permission of the department. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

Independent Study in Spanish
Once a student has exhausted all formal class options, he or she may take an Independent Study. The curriculum is based upon the student’s interest, and the teacher and the student meet weekly to discuss the chosen topic of study. The Independent Study gives a student an opportunity to pursue specific topics of interest and to present them on a weekly basis.

Prerequisite: AP Spanish Language, AP Spanish Literature and permission of the department
Mathematics

The Mathematics Department strives to enhance comprehension and skill acquisition, encourage participation, strengthen critical thinking and problem-solving skills, stimulate interest, and build confidence in handling mathematical topics.

The department structures courses and classes so that students attain graphical, numerical, algebraic, and verbal understanding. We cultivate the ability to write mathematical models, make conjectures, and give reasoned arguments in support of assertions.

The school’s minimum requirement ensures that a student will have attained proficiency in Algebra 1, Euclidean Geometry, and Algebra 2 in order to graduate. In reality, it is an expectation that every student will take four years of mathematics, advancing to the highest level possible. We offer AP Calculus AB and BC, AP Statistics, AP Computer Science as well as Calculus and Statistics at a regular level. Students also have the opportunity to complete independent study courses under the direction of a faculty member. These courses tend to be undergraduate-level courses that follow differential and integral calculus.

Students will leave Westminster School well prepared for the study of mathematics in college. We also aim to inspire an appreciation for and comfort with math, so that regardless of whether they make it a part of their college experience, our graduates are prepared to use math throughout their lives.

Algebra 1
This first-year course introduces the fundamental concepts of algebra. Its aims include mastering basic algebraic skills and developing competence with the graphing calculator. Students are introduced to variables, order of operations, algebraic expressions, functions, and equations. Properties of signed numbers and other axioms lay the foundation for solving first-degree equations and systems of equations. Students study linear and quadratic functions, their solutions and graphs, and investigate word problems modeling these functions. The year concludes with a study of polynomials, inequalities, and the properties of exponents.

Geometry
This course consists of the study of shapes in two- and three-dimensional space using the form language of definitions, postulates, and theorems. Students develop inductive and deductive reasoning skills and learn to construct two column proofs. The properties of parallel lines, congruent and similar shapes, ratio and proportion, the Pythagorean Theorem and right triangle trigonometry, special quadrilaterals, circles, geometric probability, and areas and volumes of plane and solid figures are the primary topics in the course. Constructions are performed both with compass and straightedge and using Geometer’s Sketchpad. Alongside this agenda there is also an ongoing review and enhancement of algebra skills. Specifically, we focus on solving linear and quadratic
equations and systems of equations, manipulating and operating on fractions and radical expressions.

**Prerequisite: Algebra 1**

**Geometry Honors**
This course is a fairly traditional study of shapes in two- and three-dimensional space, reasoning from the definitions and postulates that form the foundation of geometric language. Students develop both inductive and deductive reasoning skills, and learn to use formal, informal, and paragraph proofs. The properties of parallel lines, congruent and similar shapes, ratio and proportion, transformations, right triangles and the Pythagorean Theorem, right triangle trigonometry, geometric probability, Platonic solids, areas and volumes of plane and solid figures, and an introduction to trigonometry are the broad topics considered. Algebra and graphing are incorporated into almost every aspect of the course, with algebra skills practiced all year as part of weekly review assignments. The honors course moves at a faster pace and delves more deeply into each of the core concepts of geometry than the regular sections. Students are regularly challenged to solve nonroutine problems and to extend their knowledge by making new discoveries. Honors students also use Geometer’s Sketchpad software to investigate some topics.

**Prerequisites: Algebra 1 and permission of the department**

**Algebra 2**
This course reviews the basic skills of Algebra 1 while building on the notion of a function. Problem-solving and graphing the following types of functions are emphasized: linear, quadratic, polynomial, exponential, logarithmic, radical, and rational. Topics first introduced in Geometry and Algebra 1 are further developed. The graphing calculator is used regularly to enhance and support comprehension, particularly as students analyze data, work with matrices, and when applying algebraic techniques to real-world scenarios.

**Prerequisites: Algebra 1 and Geometry**

**Algebra 2 Honors**
This course builds upon the student’s knowledge of linear and quadratic functions developed in Algebra 1 and then explores polynomial, exponential, logarithmic, radical, and rational functions. The course finishes with a study of graphs produced by the intersection of cones and planes. This course is designed to challenge the more advanced mathematical student by developing skills to analyze different techniques, exploring real-world applications, and by using technology appropriately to examine data and develop solutions. There is an emphasis on being efficient when solving problems. The students will graph many different types of functions, analyze data, work with matrices, and apply their algebra knowledge to new scenarios.

**Prerequisites: Algebra 1, Geometry Honors, and permission of the department**
Pre-Calculus
This course reviews the functions studied in Algebra 2, deepening student comprehension of these functions and their applications. The course thoroughly investigates polynomial and rational functions, trigonometric, logarithmic and exponential functions, as well as power models, with a focus on transformations and graphing. Probability is treated with an emphasis on SAT-type questions. The graphing calculator is used extensively throughout.

Prerequisites: Algebra 2

Pre-Calculus Honors
This course continues the study of functions begun in Algebra 2, building in greater abstraction and generalization. The course thoroughly investigates polynomial, rational, power, logarithmic, exponential, and trigonometric functions. Students also work with limits and difference quotients. Transformations and graphing are emphasized, and the graphing calculator is used extensively. Additional topics include probability, the binomial theorem, series and sequences, and a variety of trig applications. Most students in this course will go on to AP Calculus AB in the following year.

Prerequisites: Algebra 2 and permission of the department

Pre-Calculus/Calculus Honors
This course, designed for the very strongest math students, is intended to prepare students to go straight to AP Calculus BC. In addition to the topics covered in Pre-Calculus Honors, the course also covers parametric equations and conic sections, and does a more thorough treatment of trigonometric applications, including vectors, DeMoivre’s Theorem and polar coordinates. In the spring, there is a thorough treatment of limits, the definition of the derivative and some derivative rules, and derivatives are applied to curve-sketching and optimization.

Prerequisites: Algebra 2 Honors and permission of the department

Statistics
This course is designed for Sixth Formers who have completed Algebra 2 or Pre-Calculus and who wish to pursue mathematics outside of the calculus track. Students make extensive use of graphing calculators in this course as they study combinatorics, probability, normal distributions, and basic inferential statistics. Topics are typically presented in the context of real-world examples, with specific treatment given to applications in finance and investing.

Prerequisite: Algebra 2

Calculus
This course covers topics studied in the first semester of a typical college-level calculus course, from limits to volumes of revolution. Techniques of differentiation and integration, and the application of these concepts are handled in-depth. A review of Pre-
Calculus topics, including trigonometric and exponential functions, is incorporated throughout the year.

*Prerequisites: Pre-Calculus and permission of the department*

**AP Calculus AB**
This is a college-level course that follows the syllabus determined by the College Board. Students study limits, continuity, differentiation, related rates, applications of the derivative to graphing, curve sketching, maximum and minimum problems, motion of a particle, area between curves, volumes of revolution, and first order differential equations in-depth.

*Prerequisites: Pre-Calculus Honors Students seeking enrollment in an Advanced Placement course need departmental approval. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.*

**AP Calculus BC**
This is an introductory undergraduate level differential and integral course that follows the syllabus determined by the College Board. Students study all the AB Calculus topics as well as vector functions, parametric and polar equations, L’Hopital’s Rule, slope fields, velocity and acceleration vectors for motion on a plane curve, methods of integration, length of a path, and infinite sequences and series, including Taylor Polynomials.

*Prerequisites: AP Calculus AB or Pre-Calculus Honors. Students seeking enrollment in an Advanced Placement course need departmental approval. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.*

**AP Computer Science**
This is a college-level course that follows the syllabus determined by the College Board. The course is taught primarily using the Java programming language to illustrate object-oriented development, top-down development, encapsulation, and procedural abstraction. The fundamental concepts of programming are studied in depth, including programming style and expression, modularization, arrays, records, loops, files, implementations, sorting and searching data, and testing and maintenance of software.

*Prerequisites: Pre-Calculus. Students seeking enrollment in an Advanced Placement course need departmental approval. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.*

**AP Statistics**
This is a college-level course that follows the syllabus determined by the College Board. This course examines probability theory, data collection and analysis, distributions,
statistical inference, hypothesis testing, regression, and modeling. A graphing calculator with statistics features is used throughout the course.

Prerequisites: Pre-Calculus. Students seeking enrollment in an Advanced Placement course need departmental approval. The department will discuss each AP candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

Linear Algebra
This is a proof-based course in linear algebra. Students will cover systems of linear equations, matrices, vector spaces, linear transformations, eigenvalues, and eigenvectors.

Prerequisite: AP Calculus BC. Students seeking enrollment in the Linear Algebra course need departmental approval. The department will discuss each candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.

Independent Study in Mathematics
Once a student has exhausted all formal class options, he or she may take an Independent Study. The curriculum is based upon the student’s interest, and the teacher and the student meet weekly to discuss the chosen topic of study. The Independent Study gives a student an opportunity to pursue specific topics of interest and to present them on a weekly basis. In recent years, several students have completed courses in areas such as multivariable calculus, linear algebra, and differential equations through Stanford University’s distance learning program.

Prerequisite: AP Calculus BC. Students seeking enrollment in an independent study course need departmental approval. The department will discuss each independent study candidate on an individual basis, taking into consideration previous academic achievement, work ethic, study skills, and the ability to learn independently.
Science

The Westminster science curriculum begins with physics, the discipline most fundamental to the workings of the universe, and progresses through chemistry and biology to build a diverse body of knowledge. Students employ both experimental and applied learning, and they use many of the instruments and techniques used by scientists. The program is designed not only to prepare those students who will eventually work in scientific fields, but also to provide nonscience-focused students with an appreciation and understanding of scientific knowledge. For the talented science student, “Physics First” allows them to take a greater number of AP classes and has also allowed for reinforcement of mathematics; algebra skills are taught as part of the physics class.

Physics

This course provides students with a basic introduction to physical phenomena and fundamental problem-solving skills. Topics covered include Newtonian mechanics, wave behavior and optics, electricity and magnetism, atomic structure, and heat. Although this course approaches topics primarily from a conceptual perspective, algebra-based problem-solving is also incorporated. The laboratory stresses observation skills, data analysis, and proper lab report format.

Physics Honors

This course provides students with a basic introduction to physical phenomena and develops fundamental problem-solving skills. Topics covered include Newtonian mechanics, wave behavior and optics, electricity and magnetism, atomic structure, and heat. This course moves at a faster pace than the regular physics course and covers topics in greater detail. Although this course approaches topics primarily from a conceptual perspective, algebra-based problem solving, with an introduction to basic trigonometry, is also incorporated. The laboratory stresses observation skills, data analysis, and proper lab report format.

Prerequisites: concurrent enrollment in Geometry Honors and permission of the department

Chemistry

This course introduces students to basic chemical concepts and processes such as atomic structure, chemical bonding, stoichiometry, acid-base chemistry, oxidation-reduction reactions, and electrochemistry. This is a highly quantitative course with emphasis placed on the development of problem-solving skills through the use of dimensional analysis. Consequently, a solid understanding of algebra is required. The laboratory stresses experimental design, observational skills, and data analysis.

Prerequisite: Physics

Chemistry Honors

This course introduces students to basic chemical concepts and processes such as atomic structure, chemical bonding, stoichiometry, acid-base chemistry, oxidation-reduction
reactions, and electrochemistry. This course moves at a faster pace than the regular Chemistry course and covers topics in greater detail. This is a highly quantitative course with emphasis placed on the development of problem-solving skills through the use of dimensional analysis. Consequently, a solid understanding of algebra is required. The laboratory stresses experimental design, observational skills, and data analysis.

**Prerequisites:** Physics Honors and permission of the department

**Biology**

This course provides a detailed study of several key biological topics. Topics covered will include cell biology, genetics, evolution, comparative anatomy, and physiology. The laboratory component of the course stresses experimental design and observational skills. Topics draw upon an understanding of underlying chemical and physical laws.

**Prerequisites:** Physics and Chemistry

**Biology Honors**

This course provides a detailed study of key biological topics, including cell biology, genetics, evolution, biodiversity, comparative anatomy, and physiology. This course moves at a faster pace than the regular Biology course and covers topics in greater detail with an expectation of active student participation during every class. The laboratory component of the course stresses observational skills and data analysis. Topics draw upon an understanding of underlying chemical and physical laws.

**Prerequisites:** Physics Honors, Chemistry Honors and permission of the department

**Astronomy**

Astronomy is a project-based course that covers the history of astronomy, the solar system and its exploration, the structure and composition of the universe, and the search for extraterrestrial life. Evening laboratory periods are required.

**Prerequisite:** Physics; Chemistry is strongly recommended

**Human Anatomy and Physiology**

Human Anatomy and Physiology is a science elective for those students interested in the health sciences. The course often involves the analysis of athletic training case studies and is useful to students interested in understanding exercise physiology, injuries, and injury prevention. Lecture, discussion, labs, and field trips are integral components of this course. The course is open to Fifth Formers and Sixth Formers.

**Prerequisite:** Biology and Chemistry

**Neuroscience**

Neuroscience is one of the fastest growing and most lucrative scientific fields. By focusing the techniques of biology, chemistry, computer science, and economics on the study of the human brain, neuroscience allows us to better understand our thoughts,
behaviors, and what makes us human. This course will examine how changes to our body’s cells and chemistry can give rise to learning, mental disorders, drug effects, addiction, and healthy functioning. Fifth Form and Sixth Form students are at an age where mental illness, drugs and concussion have a major impact on their lives. This course will provide a unique perspective in this critical time of change. Any strong science student, especially interested in medicine, psychology, or human nature, will greatly benefit from this class.

*Prerequisites: Physics, Chemistry, Biology and permission of the department

**AP Environmental Science**
This course is designed to prepare students for the Advanced Placement Environmental Science examination. It examines the biological, chemical, physical, and geological factors that affect the world around us. Special emphasis is given to the impact of the human population on the global ecosystem. The laboratory component centers on biological and chemical sampling of the environment, leading to student independent projects on a specific aspect of the environment. Students will take advantage of the natural resources of the Westminster campus and the surrounding Farmington River Valley in their field research.

*Prerequisites: Students seeking enrollment in an Advanced Placement science course need departmental approval. The department will discuss each AP candidate giving emphasis to previous achievement in science and mathematics courses at Westminster, work ethic, study skills, and ability to learn independently.

**AP Biology**
This college-level course is designed to provide students a broad understanding of biology and, ultimately, prepare them for the Advanced Placement Biology examination. Topics covered include molecular and cellular biology (including recent advances in recombinant DNA technology), genetics, botany, evolution, anatomy and physiology, and ecology. Laboratory work includes guided and independent inquiry, with specific training in presenting scientific results in a paper and presentation. Computer simulations and field trips complement the curriculum and actively engage students. The course puts a heavy emphasis on daily student participation, with students expected to come to write on topics and lead the discussions each day.

*Prerequisites: Students seeking enrollment in an Advanced Placement science course need departmental approval. The department will discuss each AP candidate, giving emphasis to previous achievement in science and mathematics courses at Westminster, work ethic, study skills, and ability to learn independently.

**AP Chemistry**
This second-year course in chemistry is designed to prepare students for the Advanced Placement Chemistry examination. Topics covered include atomic theory, reaction stoichiometry, chemical bonding, acid-base chemistry, oxidation-reduction reactions, electrochemistry, and nuclear and organic chemistry. Emphasis is placed on the
development of problem-solving skills and a thorough understanding of the laboratory exercises recommended by the College Board.

*Prerequisites:* Students seeking enrollment in an Advanced Placement science course need departmental approval. The department will discuss each AP candidate, giving emphasis to previous achievement in science and mathematics courses at Westminster, work ethic, study skills, and ability to learn independently.

**AP Physics**

AP Physics completes the study of the major branches of physics initiated in the introductory physics program. After completing a review of mechanics, students will explore thermodynamics, fluid statics and dynamics, electricity and magnetism, light and optics, quantum physics, and nuclear physics. The course will include a significant laboratory component that will hone students’ analysis of data. The course requires significant use of algebra, geometry, and trigonometry. This course prepares students for the AP Physics 2 exam.

*Prerequisite:* Students seeking enrollment in an Advanced Placement science course need departmental approval. The department will discuss each AP candidate, giving emphasis to previous achievement in science and mathematics courses at Westminster, work ethic, study skills, and ability to learn independently.
Visual and Performing Arts

Westminster students gain the formal tools necessary to interpret and communicate in nonverbal forms of language. The main emphasis of the program lies upon process; students develop good work habits and motivate themselves and their peers to create cohesive bodies of work. Developing visual and performing artists gain an understanding of past traditions and current methods. Encouraged co-curricular connections strengthen the act of making art.

The faculty in the Visual and Performing Arts Department are practicing artists, for whom teaching and the creative process are symbiotic. They believe that the arts experience for students should provide a multiyear perspective. Daily classes are enhanced by occasional trips to local area performances, galleries, and museums. In addition, professional artists come to campus and interact with students in workshops, lectures, and performances.

Introduction to the Visual and Performing Arts
This required Third Form class allows new students to be exposed to a spectrum of offerings in the visual and performing arts. Units of study include visual arts (ex: drawing, painting, sculpture, art history, etc.), music (ex: music theory, music appreciation, music history, etc.), and theater (ex: acting, design, theater history, etc.). This class meets twice weekly throughout the year and is team-taught. There are no homework assignments associated with this class, and it will be graded on a pass/fail basis.

Required of all Third Form students not enrolled in a department course their Third Form year

Introduction to Studio Art
Students enrolled in this introductory studio arts course develop visual thinking skills and abilities through the exploration of various traditional and nontraditional media. Studio work involves correlating idea with process, and form with content, through assignments inspired by cross-curricular studies. Sketchbook assignments challenge students to process both technical and conceptual problems that develop visual solutions. Study of art history supplements the studio work.

Digital Arts
Students in Digital Arts create visual images through the introduction of numerous electronic resources, including the use of graphic software to generate “digital painting,” scanning, digital photography, digital videography and filmmaking, as well as the use of PowerPoint (as an art form). Emphasis is placed on expert composition, idea conceptualization, multimedia design, file management, software knowledge, and creative forms of presentation. Requirements include an assigned digital “sketchbook” as well as weekly digital portfolio projects.
Digital Arts II
This course advances on the foundation of techniques, skills, and abilities acquired in Digital Arts. While the emphasis is placed on short film making, this course expands capabilities inherent in the various Adobe programs. Independent as well as group projects enhance creativity through open-ended prompts and challenges as well as experimentation with form and content which builds as the year progresses. The use of different cameras, printers, and iPads augment versatility in a studio environment.

Prerequisite: Digital Arts

Drawing and Painting
Students study landscape, still life, portraiture, and the figure using graphite, charcoal, acrylic, and watercolor as media. Emphasis is placed upon composition, color, form, and content. Art history is incorporated into lessons as needed, and relevant trips off campus supplement the course. Students have the opportunity to review their own and their classmates’ work in formal critique settings, often with visiting critics from other areas of the school community.

Prerequisite: Introduction to Studio Art

AP Studio Art
This studio course is aimed at fulfilling the requirements for the Advanced Placement Drawing Portfolio. Students explore a variety of drawing media and techniques, including oil, watercolor, pastel, acrylic, and mixed media. Finally, they design and execute “concentration projects” in which each student pursues a chosen theme or technique in greater depth.

Prerequisite: Introduction to Studio Art and permission of the department

Independent Study in Studio Art
Students with experience in the studio and whose schedules do not permit them to take a full-year course may sign up, a trimester at a time, to work in the medium of their choice on a tutorial basis, subject to approval and availability of the teacher.

Prerequisite: Permission of the department

Photography
This course provides students with a variety of technical and creative photographic skills. A yearlong course, students take an in-depth look at many of the historical, technical and aesthetic areas in both traditional and digital photography. Through hands-on assignments, demonstrations, projects and critiques, the students will learn how to properly expose and process both film and digital files and how to print from their film negatives in the darkroom and from digital files in Photoshop. The assignments are structured with a view toward instilling a sense of design and craft with an appreciation of the decision-making process that leads to a well-composed and high-quality image. Students are issued, on loan, a digital SLR camera and, later in the year, a 35mm film
camera. There is a lab fee of $275 for this course. The text is *Photography: The Essential Way* by Barbara London, Jim Stone, and John Upton. Note: Enrollment for this course is limited and placement preference is given to Fifth Form and Sixth Form students.

**Advanced Photography**
This course is offered to motivated students who wish to continue the study of photography. Students explore still life photography, advanced digital manipulation and strengthen their experience with studio portraiture and various lighting technique. Students will execute an independent exploration of the photo essay completing an original photo essay for exhibition. Students grow their portfolios, create a significant body of work and write an artist mission statement. Independence and commitment to the development and execution of a personal body of work are essential. There is a lab fee of $195 for the year. Texts: *Reading in Photography: The Essential Way* by Barbara London, Jim Stone, and John Upton; *The Book of Alternative Photographic Processes* by Christopher James; and *Designing a Photograph* by Bill Smith.

*Prerequisite: Photography and/or permission of the instructor.*

**AP Studio Art: 2-D Design in Photography**
This studio course is aimed at fulfilling the requirements for the Advanced Placement 2D Design Portfolio. Students explore various traditional and digital methods in photography as they work towards the creation and growth of a comprehensive body of work. This course enables students to develop a cohesive body of work investigating a significant visual idea in 2D design. Students design and execute “concentration projects” in which the student investigates a chosen theme or technique in greater depth. There is a lab fee of $195 for the yearlong course. Texts: *Exploring Visual Design: The Elements and Principles* by Joseph A. Gatto and *Photowisdom: Master Photographers on Their Art* by Lewis Blackwell

*Prerequisite: Photography and permission from the department*

**Introduction to Architecture**
This course consists of three phases. The first, given in the fall trimester, concentrates on learning to draw with a triangle and T-square, using common scales, and introducing the basic systems for making orthographic and isometric projections. The second phase, developed during the winter trimester, is concerned with various design exercises, in some cases devised by the teacher, and in others by the students from a descriptive program. The third phase, in the spring trimester, involves the design of a simple house, where a client’s program, presented in considerable detail, must be accommodated. The course is intended not merely as a prerequisite for Architecture 1, but as an opportunity to provide exercises in drawing and conceptualizing for all students who wish to continue in architecture and for those who wish only to acquire a foundation in graphics and design.
Architecture 1: Residential Drawing and Design
In the first two trimesters, students study two design problems: conventional wood-frame construction and post-and-beam construction. Some projects are designed for actual sites on the campus, and may be related to life and activities at school, such as a vacation cottage or residence for a young faculty family. Occasionally, other teachers act as “clients.” The third trimester emphasizes basic problems involving site, structure, mechanical systems, building codes, and zoning. Students are required to make presentation and technical drawings and to make oral presentations of their finished work.

Prerequisites: Introduction to Architecture

Architecture 2
For the first two trimesters, the students consider larger design problems with the focus on relatively simple, one-function buildings, where the major concerns are site and structure. The third trimester emphasizes the elements of construction detail and mechanical systems. Students are required to make technical drawings and to make oral presentations of their finished work.

Prerequisite: Architecture 1

Architecture 3
For the first two trimesters, the students consider larger design problems with the focus on complex, multi-function buildings, where the major concerns are architectural theory and layering of various 3D programs. The third trimester emphasizes the elements of construction detail and materiality. Students are required to make technical drawings and to make oral presentations of their finished work.

Prerequisite: Architecture 2

Theater Program
The theater program (Dramat) at Westminster offers students the opportunity to experience all aspects of theatrical performance and production in the theoretical setting of the classroom, the scene shop, and the practical arena of our department productions.

Classroom Environment
All classes in the theater program are intentionally designed to get students up and on their feet and have them fully experience the art form. Introduction to Theater is the gateway class to all other courses in the theater program. It exposes students to a variety of ideas and disciplines within the art form. It is open to all students in all forms. Independent Study in Theater is an intensive elective that prepares advanced students to dive deep into a specific area of interest. The topics are many and varied, offering students the opportunity to gain depth as well as breadth.
Theater Productions
Each year, the theater program produces two mainstage productions in the state-of-the-art Werner Centennial Theater: one dramatic piece spanning the varied genres of theater and a musical production. During the spring term, Dramat members direct one-act plays in tandem with musical pieces by the Student Music Organization and dances choreographed by students in the Dance Ensemble as part of the Spring Performing Arts Collective Ensemble (SPACE). All of these productions offer many opportunities for student involvement and leadership as performers, stage managers, lighting technicians, and set-builders.

Theater Courses

Introduction to Theater
The purpose of this class is to increase understanding, appreciation, and analysis of theater as an event and art form. Students begin by exploring the basics of the stage and defining the space. They experience how to audition for particular types of theater and touch upon elements of design and directing. Devising theater is a major component of the class. Students have the opportunity to express themselves from a self-reflective standpoint through journaling, and through a series of theater exercises. As the course moves into the acting element, students begin to understand how to use their voice effectively and begin to understand how their body works in unison with the voice through multiple forms of expression. While thoroughly exploring games and improv, students will begin to discover what it is to play, and begin to translate that into their approach to structured roles. The goal is to embrace a process, or “technique,” that is uniquely their own, fully embodied and deeply invested. The class also experiences an interactive theater history exploring the origins of theater to dramas of the 21st century.

Independent Study in Theater
For the passionate student only, this class is an in-depth exploration focused on directing. Key concepts to be explored entail script analysis, play production (from a performance and technical standpoint), and acting. The student will gain hands-on experience in dramaturgy through the study and exploration of selected plays, and through observation of live professional theater performances. They will develop skills from the acting perspective by participating in various directing exercises of scenes from published plays. Students are encouraged to meet with the Director of Theater prior to registering if they have interest in this independent study.

Prerequisite: Permission of the instructor

Music and Dance Program

Music History and Theory
This course helps students gain an understanding of the basic elements of music through various listening and writing activities. Two timelines are incorporated into the history portion of the class: a study of the history of classical music and a study of American popular music, including the genres of blues, jazz, and rock ‘n’ roll. In the examination of
the history of American popular music, particular attention is paid to the African-American experience of the 19th and 20th centuries. A portion of this class will be devoted to the study of music theory and basic music reading skills.

(This course or its equivalent is a prerequisite for the Advanced Placement Music Theory course.)

AP Music Theory
This course is equivalent to a college-level music theory course and is designed for advanced music students who have an interest in expanding their knowledge of music and music theory. Much of the course is devoted to ear training, analysis, melodic and harmonic dictation, and sight singing. Students will have an opportunity to explore their creativity by composing their own music using the knowledge they have gained in the first part of the year.

Prerequisite: Introduction to Music Theory or permission of the department based on results of a placement test

Concert Band
This instrumental ensemble is dedicated to exploring traditional concert band/wind ensemble literature, jazz repertoire, and arrangements of pop music. Open to all interested students, it meets two times per week during the performing arts block. One creative arts credit is granted to those enrolled who meet all performance commitments for two consecutive years.

Jazz Ensemble
This is an instrumental ensemble that explores Big Band and jazz literature. It is open to members of the Concert Band by audition, or by invitation of the director. Membership in the Concert Band is a requirement for participation in this ensemble. The group meets once per week during the performing arts block. One creative arts credit is granted to those enrolled who meet all performance commitments for two consecutive years.

String Ensemble
The String Ensemble is open to all intermediate and advanced bass, cello, viola, and violin players. This group studies the traditional classical chamber music repertoire, as well as more contemporary transcriptions. It meets once a week during the performing arts block.

Dance Ensemble
This is open to all interested students who want to work intensively on challenging choreography and on student-generated dances. The ensemble is responsible for the performance of dance pieces included in the various concerts throughout the year. It meets four times per week during the performing arts block. One creative arts credit is granted to those enrolled who meet all performance commitments for two consecutive years.
**Chorale**
The Westminster Chorale functions as an experience for any student who enjoys singing. Unlike Chamber Choir, the only prerequisite for joining the group is a love of music and a desire to learn a variety of repertoire. Basic vocal skills are taught such as breathing, diction, and phrasing. The Chorale meets twice a week and takes part in an average of four concerts per academic year. Students who sing in the Chorale for two years fulfill their Westminster arts requirement.

**Chamber Choir**
This group is limited to a maximum of 24 singers who must audition with the director. Membership in the Chorale is a requirement for participation in this ensemble. This group focuses on the performance of a challenging repertoire, both accompanied and *a cappella*, from 16th-century madrigals to close harmony pop arrangements. In addition to the major school concerts, performances include trustee and alumni functions, chapel services, and off-campus musical events.

**Private Lessons**
Students may choose to take private lessons for voice or instrument. Lessons meet once per week during a free period. Lesson fees are in addition to tuition and lessons are not for credit. Students can study any voice part or instrument including string instruments, keyboard instruments, brass, and woodwinds. Students who are interested in taking private lessons should contact the Director of Music.