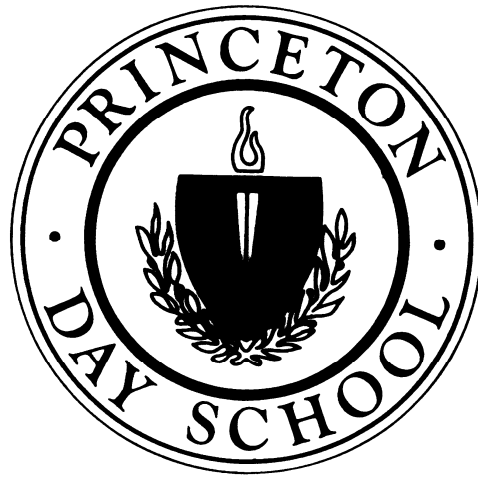


**UPPER SCHOOL**  
**COURSE SELECTION GUIDE**



**2015 - 2016**



# UPPER SCHOOL

## COURSE SELECTION GUIDE

### Course Descriptions Choosing Your Courses

**PLEASE NOTE:**

Major courses meet four or five days a week;  
most minors meet two or three days a week.  
All majors and art minors are graded on an A-F scale.  
Courses are year-long unless otherwise noted.

Offerings may vary slightly from year to year: a course's  
inclusion in this booklet does not guarantee that it  
will be available to students during any given year;  
all classes are dependent upon sufficient enrollment.



**2015 - 2016**

## MISSION STATEMENT

Princeton Day School nurtures the mind, the body, and the character of each student. In academics, athletics, the arts, and service, we celebrate the pursuit of individual excellence and the spirit of collaboration that binds us together as a community. We seek diversity of cultures, views, and talents to promote the intellectual growth and moral development of our students.

Our rigorous and broad PK-12 program is designed for motivated and academically talented students. We emphasize both creative and critical thought and their clear expression. Supported by an exceptional faculty and a cooperative partnership of school and home, our students discover the joy of learning. They explore their interests, cultivate enduring relationships with teachers and peers, take risks, and thrive.

Integrity, respect, and compassion are essential to the school's mission. Our students leave Princeton Day School well equipped for college and beyond; prepared to act knowledgeably, to lead thoughtfully, to share generously, and to contribute meaningfully.

## PHILOSOPHY OF THE PROGRAM

As a college preparatory school, PDS sets a high standard of academic excellence, which includes independence of thought. It offers rigorous training in core skills of verbal and quantitative reasoning and self-expression. We seek students of character and promising intellect who are capable of responding to this challenge. Our broad and innovative curriculum is complemented by our attention to the individual student and by our commitment to recognizing and supporting differences in learning styles.

### ACADEMIC GUIDELINES AND PROCEDURES

#### DIPLOMA REQUIREMENTS

To earn a diploma, a student must successfully complete the equivalent of 18 full-year academic courses during the upper school years. Each year-long major is worth one credit; each year-long minor is worth one half of a credit. These credits must include:

- 4 credits of English
- 3 credits of mathematics
- 2 credits of history, including American History in 10<sup>th</sup> grade
- 2 credits of laboratory science
- 2 credits of one modern or classical language
- 1 credit of religion
- 1 credit (1 year-long major or 2 year-long minors) in fine or performing arts
- 3 credits of electives (3 years of year-long major courses, or 2 majors and 2 minors)

Also, required for all students are:

- 1 credit (2 years) of physical education, including 1 trimester of Health (usually taken in 10<sup>th</sup> grade)
- 50 hours of community service, which should be completed by September of the senior year
- successful completion of a senior independent project

#### STUDENT COURSE LOAD

These requirements define a minimum upper school program and are designed to allow flexibility for students with special interests. **Students generally take five majors and one or two minors; a student must be enrolled in at least four majors. Six majors is an exception and requires the permission of the advisor, college guidance, and the head of upper school.**

#### DIPLOMA/CREDIT EXCEPTIONS

With prior approval of the Committee of Department Chairs, the head of upper school, the student's advisor, parents and the department when applicable, a student may:

1. Receive a waiver of a diploma requirement if the department involved rules that the student has achieved a level of proficiency commensurate with the credit requirements.
2. Complete the diploma requirements and graduate at the end of three years in the upper school. Such a student should submit plans to the Committee of Department Chairs by December of the sophomore year. A student who leaves PDS at the end of the junior year without having completed graduation requirements may later petition for a diploma on completion of the equivalent of those requirements.
3. Receive recognition (but not credit) for academic work at other schools, colleges or summer schools. No outside work may be substituted for a graduation requirement.
4. Receive credit for independent work and, in rare cases, substitute such an accredited independent program for some portion of the course requirements defined above.
5. Residency requirement. A student, who is accepted for tenth or eleventh grade, must stay for two years to receive a PDS diploma. A student accepted for the twelfth grade, who has completed all PDS requirements, may be eligible to receive a PDS diploma.

#### COURSE WITHDRAWAL

The school reserves the right to withdraw any course for which there is insufficient enrollment.

#### PASS/FAIL OPTIONS

Any eleventh or twelfth grade student who is taking a fifth course that is not a requirement for graduation has the option of taking this course on a pass/fail basis. In addition, any student may opt to take an art minor pass/fail once the graduation requirement is fulfilled. The decision to exercise this option must be made before the end of the fourth week of classes.

#### ADVANCED PLACEMENT COURSE GUIDELINES

Many of the departments offer Advanced Placement (AP) courses, which have curriculum guidelines set by the College Board, entailing a level of commitment and rigor appropriate to a college level course and culminating in a three-hour national exam. Each department has determined the criteria by which a student may qualify to enroll in a given AP course. The school makes sure that this challenge is a correct match by consulting the teacher, department chairs, and advisors, who verify that the student meets the criteria for entering the course. Not all students are eligible or appropriate for AP classes, and the school reserves the right to make that decision. In order to honor the integrity of the AP program, a student who enrolls in an AP course must sit for the AP exam. Following the AP exam, a senior will be excused from the class to focus on his/her senior project, while underclassmen must continue in the course until the end of the year. Students are required to attend all of their classes on the day of their AP exams, but they are allowed to be unprepared for those classes without penalty. A student who has a morning exam and leaves early or who has an afternoon exam and arrives late will be treated as having an unexcused absence.

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## ENGLISH

Upper School English is a **four-year**, integrated program based on the principle that reading and writing are complementary disciplines. All English courses emphasize core skills of critical thinking and creative self-expression. Students read literary works from a variety of periods, cultures, and genres, and they hone their interpretive skills through class discussion, analytical essays, dramatic performance, and other forms of response to the reading. Readings also provide models and ideas for personal essays, short fiction, poetry, drama, and other forms of creative writing. Through writing exercises in class, free-writing in a Writer's Notebook, frequent revision, peer-editing, and one-on-one conferences with their teachers and with trained student-mentors in the PDS Writing Center, students gain practice with the writing process and strengthen their applied knowledge of grammar, usage, and style.

The goals of the four-year program in English are to help students become alert and compassionate listeners to the voices of others in the classroom and on the page; to help them become creative, independent thinkers; and to help them develop the boldness, clarity, and precision of their words, spoken and written. Through research-based projects across the four-year curriculum, we also aim to strengthen their ability to conduct research, evaluate and document sources, and synthesize their findings in creative and informative prose. In addition, we seek to cultivate in all our students the practice of reading as a source of pleasure, inspiration, and knowledge, and to that end, independent reading and summer reading are integral components of all English courses. Ninth and tenth grade students take year-long English courses shaped around the core curricula described below; juniors and seniors choose their courses from a rich and varied list of English electives. All of our English electives are AP-level classes in the sense that students who consistently do honors-level work in our upper level English classes are well prepared to achieve successful scores on the English Literature & Composition AP.

### **SPEECH AND DEBATE (minor)**

Open to all upper-schoolers, grades 9-12, this year-long minor course gives students an exciting and challenging opportunity to strengthen their public speaking skills. Students prepare and deliver speeches that inform, entertain, and persuade, and they study the rules and techniques of formal debate, learning how to plan and present affirmative and negative arguments.

### **JOURNALISM AND LEADERSHIP (minor)**

The course will introduce students to the basic elements of journalistic writing, ranging from how to write effective news or opinions articles, how to conduct meaningful interviews, the challenges of editing and preserving the intent of a writer, as well as exercises designed to sharpen basic rules of language. Students will also explore important questions of ethics and professional standards as well as the importance of having a clear mission, a deliberate tone, and articulated goals for student publications. We will also examine different types of media such as print, digital, and radio, and whether standards of ethics or practice differ among different types of media. Throughout every topic or exercise, students will explore what it means to define and exercise leadership through involvement in the journalistic craft based on the premise that leadership is not synonymous to position of power.

### **ENGLISH IX**

Students entering the ninth grade are just beginning to step back and question themselves and their surroundings, exploring their autonomy in various ways. This course is designed to help them discover and nurture their powers of self-reflection in thought, feeling, and expression. The course explores the power of words and of storytelling to help us give shape and meaning to our experience, our sense of self, and our sense of community. In the classroom and in their writing, students are challenged to expand their own powers of self-expression, while in their reading they explore a world of mystery, song, and story that has been calling us back to ourselves ever since the first song went out from the fire into the surrounding night. Several themes weave through the texts and activities of the ninth grade curriculum: coming of age stories, the hero's journey as recounted in various eras and cultures, and the tensions between self and community. Readings include such works as Sophocles' *Oedipus Rex* and *Antigone*, Shakespeare's *Othello*, Salinger's *Catcher in the Rye*,

Fugard's *Master Harold and the Boys*, and Alvarez's *In the Time of the Butterflies*, as well as poetry of various periods and styles.

### **ENGLISH X**

In the tenth grade, students explore a variety of literary genres, including the novel, the play, the short story, the poem, and the essay. Texts are discussed both as literary forms and as art, psychology, and philosophy. Readings include such works as Golding's *The Lord of the Flies*, Hurston's *Their Eyes Were Watching God*, Miller's *Death of a Salesman*, Orwell's *1984*, Brooks's *Caleb's Crossing*, Shakespeare's *Hamlet*, Homer's *Odyssey*, and poetry of various eras and styles. Students write regularly in a variety of forms, including personal and critical essays, literary imitations and dialogue pieces, poetry and short story creations inspired by course readings and personal experience, and a research project.

### **Grades Eleven and Twelve - Electives**

Juniors and seniors work with their English teachers and advisors to design a two-year program of English electives that will meet their individual needs and interests. The offering of English electives varies from year to year but always includes courses exploring particular themes; courses focusing on particular literary genres; and courses surveying particular periods in English, American, or world literature. All electives, whatever the focus, emphasize core skills of reading, analysis, discussion and oral presentation, critical writing, creative writing, and revision. Both juniors and seniors sign up for the two-trimester electives offered during the first and second trimesters of the school year. During the third trimester, juniors take a writing-intensive elective, and seniors take a five-week seminar, *A Life That Works*, before undertaking their senior projects.

**Please Note:** What follows is a general listing of frequently offered English electives. A separate listing of English electives actually being offered for the coming year is published each spring, at which time students sign up for the coming year's electives through their current English classes. For detailed information on current English classes, see the [US English website](#).

### **Two-Trimester Electives for Both Juniors and Seniors**

#### **AMERICAN LITERATURE**

From the first voyages of discovery, the American story entails a search for words adequate to describe the wonders of this New World. No single narrative tells the whole story. It would be more accurate to speak of American literatures: the different threads of coherence that parallel, overlap, and sometimes conflict one with another. There is, for example, a narrative of exceptionalism, in which this new Eden is a "city on a hill" and beacon of freedom to others. There is a narrative of wildness and extravagance, in which we draw our strength from the inexhaustible abundance that lies out there on the ever new frontier. There are narratives of assimilation and self-reliance and darker narratives of subjugation, escape, and betrayal. We will trace the threads of these competing narratives from the early writings of explorers and pilgrims and see how they continue to animate the political, social, and economic discourse of our own lives and institutions. Along the way we will read such germinal texts as Emerson's *Nature*, Whitman's *Leaves of Grass*, Hawthorne's *The Scarlet Letter*, Dickinson's poems, and Fitzgerald's *The Great Gatsby*. Students will write critical and creative responses to the texts that we encounter and give research-based presentations on authors or themes of their own choosing.

#### **COMING OF AGE**

In this course, we will ask ourselves what it means to "come of age." What crucial issues do we confront as we grow up? Does the process of coming of age differ according to one's gender, ethnicity, class, or physical surroundings? When, if ever, do we finally "come of age?" We will consider these and other questions as we study a variety of coming of age narratives, which may include *Into the Wild* (Krakauer), *Lord of the Flies* (Golding), *Jane Eyre* (Bronte), *The Glass Menagerie* (Williams), *The House on Mango Street* (Cisneros), *Oranges are Not the Only Fruit* (Winterson), *Angela's Ashes* (McCourt), and/or *Drown* (Diaz), as well as selected poetry and prose by writers such as Philip

Roth, Maxine Hong Kingston, Joyce Carol Oates, Mark Doty, Annie Dillard, and Sherman Alexie. In addition to exploring the core questions through discussion and analytical writing, we will give voice to our own coming of age experiences by writing original poetry, short stories, and personal narratives. We will also work with visiting artists from McCarter Theatre's Youth Ink playwriting residency to produce our own ten-minute plays.

### CREATIVE WRITING

This course is for students with strong writing skills, a particular interest in creative writing, and the desire to explore writing in a range of forms — including personal essays, critical essays, poetry, short stories, and drama. Significant class time will be devoted to a shared exploration of the writer's craft through individual conferencing, critiquing in small groups, free-writing, and presenting works in progress. Models will be drawn from such longer works as Kincaid's *At The Bottom Of The River*, Johnson's *Jesus' Son*, Kerouac's *On the Road*, Hemingway's *Old Man And The Sea*, Fitzgerald's *The Great Gatsby*, O'Brien's *The Things They Carried*, and Zinsser's *On Writing Well*. Reading will include shorter reflections on the life of a writer from the journals and essays of Sylvia Plath, Mark Twain, Annie Dillard, Kurt Vonnegut, Anna Quindlen, Jonathan Swift, and Maureen Dowd. For the final project each trimester, students will assemble a portfolio containing their best, revised creations, as well as a personal statement concerning how and why their writing and their approach to writing have changed. To thrive in the atmosphere of freedom and experimentation that this course encourages, students should possess a self-motivated commitment to the craft of writing and a genuine eagerness to explore (and help others explore) the range and depth of their voices as writers.

### GLOBAL LITERATURE

To a large extent, we are trained to think about literature in terms of nation. The American novel, for instance, has been associated in part with expressing imaginatively what it means to be an American at various moments. In this course, however, we will study literature that is not bound by national borders. Instead, these texts dramatize collisions between different kinds of individuals who have historically never been in contact with each other. How do such encounters challenge us to think carefully about social differences and to read with empathy, cultural openness, and with an eye towards expanding our local perspectives? We will read such books as Aravind Adiga's *The White Tiger*, Joseph Conrad's *Heart of Darkness*, Marina Carr's *By the Bog of Cats*, Chinue Achebe's *Things Fall Apart*, Dai Sijie's *Balzac and the Little Chinese Seamstress*, and Derek Walcott's *Omeros*. We will write regularly and reflectively in our reader's notebooks and on our class blog, and we will create original stories, poems, and personal and analytical essays. Throughout the course, we will journey towards an understanding of what it means for literature to be "global."

### THE HARLEM RENAISSANCE, THE JAZZ AGE, AND THE LOST GENERATION

The interactions of artists, writers, and musicians in New York City and in Paris in the 1920s inspired the creation of some of the defining works of twentieth century American prose, poetry, drama, music, and art. In this course we will read widely in the poetry of the period and explore a variety of longer works published in the 1920s including Nella Larsen's *Quicksand*, Jean Toomer's *Cane*, Alain Locke's *The New Negro*, F. Scott Fitzgerald's *The Great Gatsby*, and Ernest Hemingway's *The Sun Also Rises*. Using David Levering Lewis' *The Portable Harlem Renaissance Reader* as a base from which to examine the social, political, artistic and literary antecedents and opportunities that shaped the Harlem Renaissance, we will also acquaint ourselves with the music and art, the literary magazines and biographies, the salons of A'Lelia Walker and Gertrude Stein, and other elements of the cultural history of the period. Writing will include journal entries, personal and critical essays, comparative analysis and poetry, as well as individual research and group projects and presentations.

### THE HERO IN LITERATURE

Heroism has been a central theme in stories as long as they have been told, bridging time and culture with a recurring power. The world is a hostile place, and the hero musters the courage to face it, often alone. Although the role of the hero changes from era to era and culture to culture, heroes always experience tension between self-preservation and service to the greater good of the community.

Students familiar with the tragic hero, Oedipus, and the epic hero, Odysseus, will notice how these familiar patterns of the hero's story change in later historical and cultural traditions. We will look at the evolving roles of heroes and villains in such works as *Sundiata: An Epic of Old Mali* by D.T. Niane, *Beowulf*, *Grendel* by John Gardner, *Sir Gawain and the Green Knight*, Shakespeare's *Richard III*, *Behind the Mask* by Louisa May Alcott, and *The Things They Carried* by Tim O'Brien. We will especially examine archetypes as they appear in classic literature and in popular culture. In our own writing, we will explore the heroic and anti-heroic through critical essays, stories, poetry, and class presentations.

### THE JOURNEY IN LITERATURE

Jack Kerouac once wrote, "But no matter, the road is life." The metaphor of life as a journey is both a literary tradition and a way of describing each individual's experience and growth. In this course we investigate the journey as the "Hero's Adventure" described by Joseph Campbell and other writers on literature, myth, and culture. We trace the development of the journey motif from ancient times and through different genres. The course begins with Aeneas following in Odysseus' footsteps in Virgil's *Aeneid*. Virgil reappears, a fictional character this time, as guide to the 14th century Italian poet Dante on his imaginative journey through the *Inferno*. Our literary journey continues with pilgrims on the road to Canterbury in 15th century England in Chaucer's *The Canterbury Tales*. Having looked at these major models for pilgrimage, we examine more modern works, perhaps *Into the Wild* or *The Alchemist*. Writing assignments include critical essays, some creative writing, film reviews, and class presentations.

### LITERATURE AND NATURE: THE SONG OF THE WILD

The question of our human place in nature is the oldest subject of art and song. It takes on renewed urgency in the era of modern ecology as we come to understand more fully both the interdependence of all living things and our unprecedented capacity to alter the dynamics of that interdependence. This course explores how that fundamental question of our place in nature has been addressed in the literature of various cultures and eras, culminating in our own urgent quest for sustainable ways of living on a crowded planet. Our inquiry in this class is always aimed toward home— toward a sense of place and a fuller understanding of how we live responsible lives in our communities. Whether we are reading Thoreau, writing about the local landscape, or devoting a class to working in the garden, we will be learning the practice of *stewardship* and the care of self, family, and community. Readings may include *Nature* (Emerson), *Walden* (Thoreau), *Desert Solitaire* (Abbey), *Pilgrim at Tinker Creek* (Dillard), *A River Runs Through It* (Maclean), classical essays in ecology (Lopez, Hoagland, Quammen), and the poetry of nature from ancient pastoral to the English Romantics to such contemporary writers as Gary Snyder, Mary Oliver, and Wendell Berry. Be prepared to spend some time outside during class and on field trips, canoeing in the Pine Barrens and hiking in the Sourlands.

### MULTICULTURAL AMERICAN WRITING

As early as 1611 in William Shakespeare's *The Tempest*, we find the beginnings of the literary dialogue through which authors seek an understanding of our multicultural American selves. This dialogue develops in the works of such 19th century authors as Cooper, Melville, and Twain; continues in the 20th century voices of Ellison, Hurston, and Baldwin; and is alive and well today in the writing of Sherman Alexie, Toni Morrison, Junot Diaz, Kiran Desai, and more. In this course we will examine how our past, our parents, our sense of place, our experiences of language and learning, and our interactions with each other and with popular and ancestral culture shape our identity as Americans. We will read such works as Jhumpa Lahiri's *The Namesake*, Esmeralda Santiago's *When I Was Puerto Rican*, Rudolfo Anaya's *Bless Me, Ultima*, James Baldwin's *Go Tell It On the Mountain*, and Maxine Hong Kingston's *The Woman Warrior*, and make individual selections among a rich variety of other novels, short stories, poems, plays, and essays. Our writing will include journal entries, poetry, memoir, short fiction, and personal and critical essays, as well as group and individual projects and class presentations.

### POETRY MAKING

The making of a poem is a collaboration between poet and reader, and that makes the poem an act of faith — an invitation to stay and a staying. However, a poem is already an act of faith in the writing.



Good poets never know where good poems are taking them, which is why a poem can't be worried into being but has to "ride on its own melting... like a piece of ice on a hot stove" (as Robert Frost says). We are all makers of meaning, and, when life confronts us with the great mysteries, all we can do is keep our hearts open as we ride on the melting of our own joy, fear, rage, love, or grief. In this class we will explore, as poets and readers, how poetry takes us into the unknown and back again. Our guides will be a wide range of recent and contemporary American poets as well as voices from a long tradition of American and English poets and voices in translation. We'll journey into the Lower School to reclaim the open-hearted poetry of childhood. Experimenting with a variety of forms, each student will gradually create a portfolio of poems to share in performance. As readers, we will learn how to dwell with a poem, how to enter into a conversation with it in our journals and class discussion, and how to gather our findings into a focused essay that is at once analytical and personal.

### ROMANTICS TO MODERNS: GREAT WORKS OF ENGLISH LITERATURE

There is no more interesting period of British literature than the one stretching from the Romantics to the present. In 1800, most people in Great Britain (and in Europe more generally) communicated, traveled, worked, and lived in the same basic ways people had been doing for centuries. Now, two hundred years later, the forces of modernization have transformed every aspect of human existence. Indeed, these forces have altered our very notion of what it means to be human. Throughout this period, British writers participated in these dramatic changes, reacting to, writing about, and trying to understand (or run away from) the shifting world around them. Through our readings of novels, plays, poetry, and short stories, we will explore some of the major authors, works, forms, styles, and themes of nineteenth and twentieth-century British literature. Possible readings include Mary Shelley's *Frankenstein*, Charles Dickens' *Great Expectations*, Virginia Woolf's *To the Lighthouse*, Samuel Beckett's *Waiting for Godot*, and Tom Stoppard's *Rosencrantz and Guildenstern are Dead*, as well as poetry and stories by Keats, Coleridge, Wordsworth, Shelley, Browning, Tennyson, Conrad, Yeats, Joyce, Heaney, and Rushdie.

### SHAKESPEARE AND HIS INFLUENCE

From the playful, gender-bending comedy of *As You Like It* to the withering story of betrayal and loss in the family of *King Lear*, Shakespeare's plays encompass the range of human experience in ways as relevant today as when they were written. In this course we explore the major themes of Shakespearean drama by reading and viewing six plays, by performing scenes in class, and by writing both imaginatively and analytically about the ideas we encounter in the

plays. Readings include history, comedy, tragedy, and romance: *Henry IV Part 1*, *A Midsummer Night's Dream*, *As You Like It*, *King Lear*, *Macbeth*, and *The Tempest*. We also read some of Shakespeare's sonnets and foray occasionally into more recent works of drama and fiction to observe Shakespeare's influence.

### Third Trimester

#### JUNIOR WRITING SEMINARS

During the third trimester, juniors choose one of a series of writing-intensive seminars designed to help them strengthen their writing and editing skills and achieve a sense of ownership of the writing process. While writing is a key component of all upper school English classes, the junior writing seminars aim to give students, at a critical juncture in their high school career, confidence that they are ready to handle the challenges that will face them as writers during their senior year and beyond. Meeting this aim entails both an emphasis on the fundamentals – sentence structure and elements of style and usage – and an opportunity to experiment with a range of voices and genres. While each seminar focuses on a distinctive topic, they all emphasize the writer's craft, and all juniors in the third trimester keep a writer's notebook and produce a writer's portfolio that includes a personal essay, an essay in response to a text, and some other form of imaginative or research-based writing.

Seminar topics vary from year to year, and juniors sign up for their spring courses in January. For example, the spring 2012 junior writing seminars included *The Future Present*, *The Listening Mind*, *Reading & Writing The New Yorker*, *Springtime in Paris*, *Utopian Literature*, *What Do I Stand Up For?*, and *Words & Music*.

#### SENIOR SEMINAR: A LIFE THAT WORKS

During their abbreviated third trimester prior to the beginning of senior projects, all seniors participate in this five-week seminar, which explores the role that work plays in our lives. Through readings, seminar discussions, and presentations by guest speakers (parents, teachers, alumni/ae, and others), students explore such questions as how people actually choose their careers, how they integrate work and family, and how their work embodies or informs their values. Other topics include non-traditional careers and career changes, gender issues in the workplace, and the changing nature of work as shaped by changes in technology and in the economy. This course is designed to empower seniors to confront career-shaping decisions with a sense of perspective, understanding, and self-confidence.

For detailed information on current English classes, see the [US English website](#).

## HISTORY and RELIGION

Every upper school student is required to take **two years** of history, one of which is the required American History course in Grade 10. In addition, every upper school student must take **one year** of religion or philosophy. Priority is given to freshmen when enrolling students in *The Bible as a Basis for Western Civilization*, *Sacred Traditions*, and *World Studies*. If spaces in these courses remain after enrolling all interested freshmen, then sophomores wishing to take an additional history/religion course will be enrolled. Seniors should note for spring project purposes that they must remain in their history/religion course the entire year if that course is needed to fulfill their requirement.

Seniors do have the option, however, to petition the department for an alternate solution that would satisfy their course requirement while on senior project. Admission to 11<sup>th</sup> and 12<sup>th</sup> grade electives will be subject to department review based on numbers and size of sections. Admission to all AP courses requires department approval. We anticipate that electives will be offered annually unless indicated otherwise in the following descriptions. Please note that some electives for 11<sup>th</sup> and 12<sup>th</sup> graders are full year courses; others are either 2-trimester (fall and winter) or 1-trimester (spring) offerings as described below.

### HISTORY

#### Grade Nine

#### WORLD STUDIES

This course will explore the major political, social, and economic developments in Asia, Europe, Africa, and the Americas and will focus on building historical analysis, research, and writing skills. Students will examine the cultural values that shape societies with the intention of developing greater understanding and appreciation for their differences and their similarities. Beginning with the ancient world, students examine the rise of cultures in Mesopotamia, Egypt, India, and China. Students then look at the rise and fall of Classical empires. The course also introduces world religions and philosophies, including

Confucianism, Daoism, Hinduism, Buddhism, Zoroastrianism, Judaism, Christianity, and Islam. The curriculum features the geography and history of Eurasian trading networks and the intensification of global cultural interaction during the Age of Exploration and the colonization of the Americas. Great changes in world societies, including the Enlightenment, the French and Haitian Revolutions, and 19th century imperialism, are also explored. In the spring, students study the rise of nationalism in India and China and the rise of religious fundamentalism in Iran. Readings from the iPad version of the textbook, Robert Strayer's *Ways of the World*, are supplemented with primary sources from relevant periods and comprehensive research assignments.

## Grade Ten (Required)

### AMERICAN HISTORY

American History is a comprehensive survey course for all sophomores that examines historical, geographical, social, political, economic, cultural, and other interdisciplinary perspectives of the American experience using an interactive, iPad compatible version of Eric Foner's *Give Me Liberty!* as a primary textbook supplemented by numerous primary source readings. Students will come to understand the broad themes of American history as well as improve their communication and critical-thinking skills with particular emphasis given to the development of research and writing skills. While individual sections under different instructors may vary as far as emphasis on particular topics, all sections are taught with a philosophy of intense student involvement both inside and outside the classroom.

## Grades Eleven and Twelve

### INTERNATIONAL RELATIONS (first two trimesters)

This course is an interdisciplinary study of contemporary issues on areas such as national sovereignty and international human rights, national interest, diplomacy, military power, economic development, refugees and transnational environmental challenges. Students will survey the history of states as an organizing principle of political activity, covering the rise of the Greek city-states, the emergence of diplomatic-commercial missions during the European Middle Ages, Westphalian ideas of sovereignty, and the triumph of the nation-state. They will also explore the evolution of alternative models such as those represented by ethnic and regional blocks like the Arab League and the Organization of American States, broad international organizations like the United Nations, specialized multilateral entities like the World Trade Organization and the World Bank, and controversial developments in international justice like the International Criminal Court, and the Kyoto Protocol on Climate Change. (offered in 2015-2016; not offered in 2016-2017)

### AMERICAN FOREIGN INVOLVEMENT (first two trimesters)

Covering the history of American foreign relations from the Early Republic to the present day, this course is designed to allow students to become familiar with, explore, and analyze the actors, issues, processes, and political conditions involved in the making of American foreign policy. In this course students will identify and evaluate the strategic and political importance of various actors and groups (governmental and societal) in the making of U.S. foreign policy. Topics will include: the evolution of major U.S. foreign policies such as the Monroe Doctrine, Open Door, and Dollar Diplomacy; the national debate following the Spanish-American War over imperialism; Woodrow Wilson and internationalism; the growth of American power as the "Arsenal of Democracy" during the 1940s; the conduct of the Cold War and the management of crises/conflict in the Caribbean, Vietnam, and Middle East; 9/11 and the Global War on Terror; prospects for America's future global engagement. Text: George Herring, *From Colony to Superpower: U.S. Foreign Relations Since 1776* (not offered in 2015-2016; offered in 2016-2017)

### REVOLUTIONS AND REBELLIONS (third trimester)

Global in scope and comparative in nature, this course will focus on the conditions leading to the emergence of revolutionary movements during the second half of the 20<sup>th</sup> century, methods and ideologies used to change the established political and social order, as well as their successes and failures. Through the use of personal testimonies, works of historical fiction, and official documentation, we will also explore how people experienced these periods of upheaval. The course curriculum will feature revolutions and rebellions in the Americas (Cuba and Chile), Asia (Cambodia), Africa (South Africa), Europe (Hungary and Poland), and the Middle East (Iran and Arab Spring countries).

### WOMEN, CULTURE, AND POLITICS (third trimester)

This course will focus on the women's rights movement in the United States from the 1960s to the present. We will analyze and evaluate the different strategies and arguments activists used to assert women's rights to a full and fair share of political power, economic opportunity, and personal autonomy, as well as the work of trailblazing women who challenged the status quo in the public and private spheres, in courts and in Congress, in industries, and in education. We will also learn

about the challenges, setbacks, and redefining moments of the women's rights movement throughout these decades. Through the use of primary documents, including speeches, autobiographical accounts, television programs, print advertisements, and campaign material and featuring the voices of those who led the movement, those who opposed it, and those first generations to benefit from its success, we will delve into the victories, frustrations, and evolution of a movement that revolutionized the United States.

### THE HISTORY OF OIL: BLACK GOLD, TEXAS TEA, WORLD

#### CHANGING COMMODITY (first two trimesters)

Few commodities have shaped the modern world more than oil. Its story impacts economic development, the rise of modern corporations, domestic politics, international relations and environmental regulation. Though centered on Daniel Yergin's *The Prize: The Epic Quest for Oil, Money and Power*, this course will use a multidisciplinary approach to follow the flow of oil from the fields of western Pennsylvania in the late 19<sup>th</sup> century to the current instability in global prices. (offered in 2015-2016; not offered in 2016-2017)

### LAW AND SOCIETY: CONSTITUTIONAL INTERPRETATION (first two trimesters)

The Bill of Rights guarantees freedom of speech. At the time of its drafting, however, moveable type print was cutting edge technology. The question of how the courts should interpret this right in the Internet Age therefore stimulates much debate and controversy. To delve into this issue, we will first analyze competing philosophies about how to interpret the Constitution in an evolving world. Next, we will use landmark Supreme Court decisions to understand how and why the protections afforded by the First Amendment evolved over time. Finally, we will investigate other constitutional rights and controversies through a series of moot court exercises. Students will demonstrate their understanding of and perspective on this content through a variety of activities, including presentations, tests, legal briefs and oral argument. (offered in 2015-2016; not offered in 2016-2017)

### NELSON MANDELA: MAN AND ICON (third trimester)

Through his fight against Apartheid and championing of peace and reconciliation, Nelson Mandela emerged as one of the truly iconic figures of the 20<sup>th</sup> Century. Centered on his autobiography, *Long Walk to Freedom*, and supplemented with primary documents, identification of intellectual predecessors, and competing perspectives on his methods and legacy, this course will attempt to provide context and appreciation for this extraordinary life and its impact on Africa and the world. (offered in 2015-2016; not offered in 2016-2017)

### ECONOMICS (full year)

The purpose of this course is to give students an understanding of how society allocates its resources and how the United States and global economies function through an examination of the practical, theoretical and historical underpinnings of microeconomics and macroeconomics. In addition, the course provides students with an understanding of how markets value and trade financial assets. After a brief introduction to economic fundamentals, Microeconomics examines how individuals and producers make decisions and how the government can become involved in those choices. Macroeconomics looks at a country's economic system as a whole through an exploration of (1) national income, prices, and measurements of economic performance; (2) the financial sector and the markets; and (3) monetary and fiscal policy. Finance will include the study of corporate finance, basic financial analysis and an overview of the capital markets. Course materials include Gregory Mankiw's *Principles of Economics*, articles from current sources such as the *Economist*, *The Wall Street Journal*, the *New York Times*, and a variety of graduate business school case material. The class visits New York City to study the role of the Federal Reserve and financial intermediaries. Although basic mathematics is used to study many of the course's topics, there are no math prerequisites to enroll in the class; the course is intended to be equally appropriate for students with primary interests in either humanities or math/science.

### AP ART HISTORY (full year)

This course examines art produced across the world from the ancient Near East and Egypt to the present day. Classroom time is largely devoted to discussions based on slides and readings in the course textbook (*Gardner's Art Through the Ages*, Fred Kleiner, ed.). The course provides a survey of the history of Western art and a solid

foundation in art beyond the European tradition. Students visit museums and galleries in the area over the course of the year, including trips to the Philadelphia Museum of Art and/or the Metropolitan Museum of Art in New York. Goals of this course include building an understanding and appreciation of art and learning to write about it in a clear and coherent manner. This AP course moves at a fast pace and is geared to the material covered on the AP exam in May, which students are required to take.

#### **AP COMPARATIVE GOVERNMENT AND POLITICS** (full year)

This course introduces students to the comparative study of politics, an area of political science that looks at different political systems and compares them in an effort to make informed observations about political ideologies, structures, processes, institutions, and leaders. We will begin the year with a general study of comparative theory and concepts before moving on to an examination of the history, structure, and policies of the European Union. We will then move on to the core curriculum, a study of the political and social systems of the UK, Russia, China, Nigeria, Mexico, and Iran. As students examine each nation, they will be developing the skills necessary to engage successfully in both single nation and comparative studies. Course materials include primary source material from a variety of sources, Internet resources (including a data web site and a PDSnet conference for analysis of current events), and a textbook, Kesselman's *Introduction to Comparative Politics*. The course concludes with the required AP exam in May.

#### **AP EUROPEAN HISTORY** (full year)

This course considers the evolution of European history from 1450 to the recent past. Students will also develop a familiarity with those aspects of the late medieval period that have had an impact on post-1450 events. Students are expected to demonstrate a knowledge of basic chronology and of major events and trends from the High Renaissance through the end of the Cold War. The study will focus on cultural, diplomatic, economic, intellectual, political, and social history. Strong emphasis will be placed on the evolution of modern political systems such as liberal democracy, Marxism-Leninism, and modes of Fascism. The foundations of capitalism and evolution of the market economy will also inform our inquiries. Other themes of note include the relationship of church and state, the impact of European imperialism on non-European cultures, and the concept of the nation-state. We will use an AP level text along with supplemental readings

such as primary documents, interpretative essays, and selections from historical fiction. Students are required to take the AP examination in May.

#### **AP U.S. GOVERNMENT AND POLITICS** (full year)

This course is intended for students who have excelled in American History and who wish to gain an analytical perspective on the government and politics of the United States. The course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. Students gain a familiarity with the various institutions, groups, and ideologies that shape U.S. politics. Course materials include short articles and primary source material in *The Enduring Debate: Classic and Contemporary Readings in American Politics* (Canon, Coleman, and Mayer, eds.); *American Government: Roots and Reform* (O'Connor and Sabato); and a variety of primary source case studies. Additional course material includes C-SPAN footage, films, Internet data, and, if scheduling allows, an intensive trip to Washington, D.C. to meet with government officials, lobbyists, and reporters and to attend sessions of the Supreme Court and Congressional committees. Students are required to take the AP examination in May. (not offered in 2015-2106; offered in 2016-2017)

#### **ASIAN STUDIES** (first two trimesters)

This course may be used to fulfill either a history or religion requirement but not both. Please see the section below for a full description.

#### **ISLAM AND THE MODERN MIDDLE EAST** (third trimester)

This course may be used to fulfill either a history or religion requirement but not both. Please see the section below for a full description.

#### **ANCIENT GREEK THOUGHT I** (first two trimesters)

This course may be used to fulfill either a history or religion requirement but not both. Please see the section below for a full description.

#### **ANCIENT GREEK THOUGHT II** (third trimester)

This course may be used to fulfill either a history or religion requirement but not both. Please see the section below for a full description.

## **RELIGION AND PHILOSOPHY**

### **Grades Nine and Ten**

#### **THE BIBLE AS A BASIS FOR WESTERN CULTURE**

This course, intended for freshmen, is the first of a possible five course sequence exploring the roots of the Western moral and intellectual tradition. Over the course of the year, students piece together the seminal story of the origins of Jews and Christians from the six days of Creation in Genesis 1 to Judgment Day and beyond in the Book of Revelation. In so doing, students will explore the Hebrew and Christian Scriptures (the Old and New Testaments), probably the most influential texts in the Western canon, using an analytic method that encompasses both secular and religious understandings of a more than 3000 year old shared tradition. Using an online source for the New Revised Standard Version translation, students build their own Bibles on iPads as the year progresses.

#### **SACRED TRADITIONS**

This course will explore the beliefs and practices of the world's major religious traditions. The goal of the course is to provide students with a rich understanding of these religious traditions that is balanced, sympathetic, and nuanced. While emphasis is placed in the class on the study of the history, belief structures, and religious practices of the major world religions, it is enriched and supplemented by looking at the religious literature, art, architecture, and music which emerges from these traditions. The course begins with Eastern religion, looking at the religious traditions that developed in India, such as Hinduism, Jainism, and Buddhism. Then our attention turns to the religions that are indigenous to China (Daoism and Confucianism) and to Japan (Shinto). After this survey of the Eastern religious traditions, the course takes up the study of Western religion, studying Judaism, Christianity and Islam. As the year progresses students are invited to

compare the religious traditions they have studied, looking for connections and patterns, similarities and differences. The textbook used in this class is an iPad compatible, digital version of Michael Molloy's, *Experiencing the World's Religions*.

### **Grades Eleven and Twelve**

#### **WESTERN ETHICS I** (first two trimesters)

This course is the fourth of a possible five course sequence exploring the roots of the Western moral and intellectual tradition. Plato writes in the *Apology* that Socrates, on trial and facing execution in 399 BCE, told the Athenian jury "an unexamined life is not worth living." How, then, shall we live? The answer according to many Western moral philosophers is, "we must live according to the Good." But what is the Good? Can we be good without God? And if so, how so? One way to proceed will be to develop a coherent method of informal argumentation that will help to place the Bible, Aristotle, David Hume, and Immanuel Kant in proper context. The summer reading text is Chaim Potok's *My Name is Asher Lev*. The primary texts for the course are Aristotle's *Nicomachean Ethics*, Hume's *An Enquiry Concerning the Principles of Morals*, and Kant's *Groundwork of the Metaphysics of Morals*.

#### **WESTERN ETHICS II** (third trimester)

This course is the fifth of a possible five course sequence exploring the roots of the Western moral and intellectual tradition. How do Friedrich Nietzsche and the existentialists determine meaningful ways to lead life? Am I the master of my fate or not? The primary texts for this course are Nietzsche's *AntiChrist* and Samuel Beckett's *Waiting for Godot*.

**ASIAN STUDIES** (first two trimesters)

This course, intended for juniors and seniors, will examine the broad sweep of Asian history from ancient times up to the present. The course will focus on three major Asian civilizations (India, China, and Japan). Emphasis will be placed on understanding the philosophical, religious, and cultural traditions of Asia in historical context. In the fall trimester, we will study ancient Asian history and the development of its major religious and philosophical traditions. In the winter trimester, we will investigate modern Asian history and the emergence of India, China, and Japan from colonial dominance. Along with the course textbook (Ebreys's *East Asia*), students will read a variety of primary and secondary sources, ranging from the ancient texts to the modern. Examples include *The Upanishads*, the *Analects of Confucius*, the Japanese feudal text *The Tale of Genji*, Gandhi's "Satyagraha," and *Quotations from Chairman Mao*. This course may be used to fulfill either a history or religion requirement but not both.

**ISLAM AND THE MODERN MIDDLE EAST** (third trimester)

In today's world understanding the Middle East is of crucial importance to American and world policymakers and diplomats, and there have been few issues more hotly debated and more frequently misunderstood than the role of Islam in the modern Middle East. This class, a one trimester course offered in the spring, will explore the history of the modern Middle East and the resurgence of Islam during this period. We will study the rise of radical Islamic movements such as the Muslim Brotherhood, the Taliban, and al-Qaeda. We will also examine moderate and reformist voices within modern Islam. The Iranian revolution of 1979 will be a special focus along with a consideration of issues that divide Sunni and Shi'a Muslims. As well, we will explore the history of the Israeli-Palestinian conflict. In the final weeks, students will investigate and write a research paper on a relevant topic of their own choosing. Resources include James L. Gelvin's *The Modern Middle East: A History* (Oxford: Oxford University,

2004), John L. Esposito's *Unholy War: Terror in the Name of Islam* (Oxford: Oxford University, 2003) and Vali Nasr's *The Shia Revival: How Conflicts within Islam Will Shape the Future* (New York: W.W. Norton, 2006). This course may be used to fulfill either a history or religion requirement but not both.

**ANCIENT GREEK THOUGHT I** (first two trimesters)

This course is the second of a possible five course sequence exploring the roots of the Western moral and intellectual tradition. Imagine, as you read them in translation, listening to Homer, the allegedly blind bard, and Herodotus, "the father of history, the father of lies", spin their linked tales of passion and heroism in the Trojan and Persian Wars, respectively. Paris refuses to give Helen back; Achilles meets Hector in mortal combat. Gyges murders Candaules and claims his wife; the 300 Spartans defend Thermopylae to the death. But what is myth, what is legend, and where does history begin? The summer reading text for this course is Hesiod's *The Theogony*; the primary texts are Homer's *The Iliad* (*Fagels translation*) and Herodotus's *The Histories*. This course may be used to fulfill either a history or religion requirement but not both.

**ANCIENT GREEK THOUGHT II** (third trimester)

This course is the third of a possible five course sequence exploring the roots of the Western moral and intellectual tradition. In arguably the greatest work of Western philosophy, *The Republic*, Plato's beloved teacher Socrates envisions a utopian society led by Guardians who rule by means of the "noble lie" in an attempt to prove that justice is superior to injustice. Or is each of us meant to consider how best to govern her own life in the struggle to distinguish reality from the shadows on the wall of Plato's cave? The primary text for this course is Plato's *The Republic*. This course may be used to fulfill either a history or religion requirement but not both.

**CLASSICAL AND MODERN LANGUAGES**

As many languages you know,  
As many times you are a human being.

Balzac

The languages offered at PDS are French, Spanish, Latin, Classical Greek, and Chinese (Mandarin). PDS students are required to study **two years** of a modern or classical language. In some cases students pursue studying more than one language. Faculty members and language clubs sponsor cultural events and field trips related to language study. International exchange or home-stay trips give many students the opportunity to travel and broaden their experience of a chosen language and culture. Note that all class offerings are dependent on enrollment.

**Placement**

Students new to PDS are placed in the appropriate language course by the department; this placement is based on the student's communicative proficiency, which is evaluated through a written placement test, an oral interview, and previous experience.

All students must meet department standards to qualify for and retain honors/AP placement. Honors sections are designed for students with an exceptionally strong grasp of the material covered in the prior year. Honors level students progress at an accelerated pace, work well independently, and are held to a stricter grading standard.

**CLASSICAL LANGUAGES: LATIN & GREEK**

"Classics starts the conversation of the Western world... It is the basis of law, literature, language, engineering, and much more. The study of Classical Languages accelerates any student's reading and thinking skills and exposes students not only to sublime literature but to the works of the founders of virtually every humanistic and scientific discipline. Classics is the original multidisciplinary study..."

Michael Putnam, Professor of Classics, Brown University

Latin classes at PDS offer a balance between consistent progress in grammar study and translation and a close investigation of the history, culture, and literature of the Ancient Mediterranean World. In addition, a coherent word study program helps students improve their English vocabulary through their Latin studies. Latin courses range from

introduction to grammar and Roman history to advanced courses such as AP Virgil and Ancient Greek and the Hellenization of Rome. "Classics" as a twenty-first century discipline overlaps with and influences many other disciplines in the humanities: history, theology, philosophy, anthropology, literary criticism, archaeology, numismatics, epigraphy, and paleography. Therefore, the pleasures of learning Latin are many: serving as an entry point into many other of the human sciences, Latin is a beautiful, elegant language with over a thousand year tradition of literature.

**LATIN I**

First year students learn from *Units 1 and 2 of the Cambridge Latin Series* and from Sally Davis' *Review for the Beginning Latin Student*. English and Latin grammar are studied through reading historical fiction about the family of Lucius Caecilius Iucundus. The "plot" unfolds in exotic territories of the Early Roman Empire – Pompeii, Roman Britain, and Alexandria – as students translate, write, and even speak the language of the Ancient Romans. Emphasis is placed on the building blocks of Latin grammar: the noun case system and verb conjugation patterns. Greco-Roman history and culture is taught through various activities and projects such as architectural drawings of Roman villas and historical analyses of films with text, e.g. Plutarch's *Lives* and Stanley Kubrick's *Spartacus*.

**LATIN II**

*Wheelock's Latin* provides grammar review through the translation of Roman proverbs, myths, historical anecdotes and philosophical musings. Much attention is paid not only to Latin vocabulary building, but also to word origins and derivatives -- students are trained to become etymologists, capable of tracing many of the 60% of English words that derive from classical Latin. Finishing up *Unit 2* and beginning *Unit 3 of the Cambridge Series*, the class will follow Quintus, sole survivor of the Caecilii family, from the tumultuous city life of Alexandria to the frontier towns of Britain and the capital city Rome. Roman art and architecture, military life, the Roman patronage system, and Roman religious and philosophical practices, are covered extensively in this course. Finally, Robert Graves' novel and BBC film

series, *I, Claudius*, introduces students to the palatial intrigues of the Julio-Claudian rulers.

### LATIN III

Students read extended excerpts from classical authors such as Martial, Ovid, Pliny, Catullus, Tacitus, and Virgil in the *Cambridge Latin Series: Unit 4*. As the year progresses, they finish Latin grammar study in *Wheelock's Latin*, and in the spring an introduction to next year's curriculum – either AP Virgil and Caesar or Latin IV, Ovid and Cicero. Second century imperial history is emphasized -- especially the reigns of Domitian and Trajan. Further study of Roman art and architecture culminates in a group research project. Students are well informed about the cultural treasures of the *urbs aeterna* if they choose to take part in the biennial Rome Trip.

### LATIN IV- OVID AND SELECT AUTHORS

Latin IV begins with a close study of Ovid's epic *Metamorphoses*: Apollo and Daphne, Baucis and Philemon, Pyramus and Thisbe, and Pygmalion are translated and discussed from the original Latin. Those four myths are then used to explore the influence of Greco-Roman mythology on literature and the fine arts. The second half of the course features a survey of Latin Literature from contrived stories of mythology from Ritchie's *Fabulae Faciles* to excerpts from the *Cambridge Unit 4* reader of Roman authors Juvenal, Martial, Pliny, Phaedrus, Virgil, Cicero, and select medieval authors. Latin IV will consolidate students' knowledge of Latin grammar and vocabulary and hone translation skills so that they are well prepared for the Virgil and Caesar course the following year.

### ANCIENT GREEK AND THE HELLENIZATION OF ROME

The aims of this course are two fold. Students learn Ancient Greek and Ancient Greek culture through the native language and creative writings of ancient historians, poets, dramatists, and biographers. Excerpts from writers as diverse as Sappho and the Apostle Paul are encountered in the introductory text, *Athenaze: An Introduction to Ancient Greek, Book 1*, and a supplementary reader entitled *Greek Through Reading*. The second part of the course continues to develop students' Latin reading comprehension with a focus on Latin texts on or about Ancient Greek culture and history. Cicero's eloquent plea for Roman citizenship for the Greek poet Archias in his oration *Pro Archia* will be studied. Within this oration Cicero articulates the ideals of a liberal arts education for the first time in Western thought. Furthermore, some odes of Horace are read and compared to the Greek models from Sappho, Alcaeus, and Theocritus. The course is designed for upper level Latin students, but juniors without Latin who are interested in studying Ancient Greek their senior year may be considered for the course.

### MODERN LANGUAGES – FRENCH, SPANISH, AND CHINESE

French, Spanish and Chinese are taught through a communicative approach stressing proficiency in listening, speaking, reading, and writing. All classes are conducted in the target language with the goal of enabling students to converse with native speakers, think in the language, and understand and appreciate other cultures. Placement in language courses is determined by the proficiency level of the student when he or she enters the upper school.

PDS is offering six levels of French and Spanish and five levels of Chinese. At the beginning levels, students learn how to communicate using basic vocabulary, grammar, and syntax and become familiar with culture and civilization. In advanced levels they study literature, history, civilization, and contemporary culture. Elective courses allow students to pursue specific aspects of the language and culture and to reinforce conversational skills. At all levels individual sections of the course are tailored to the abilities and strengths of the group.

### FRENCH

French has played a vital role in world culture, history, and science for centuries. It is the official language of 28 countries spread out in five continents; it is one of the two official working languages of the United Nations, UNESCO, NATO, the International Olympic Committee, and the European Union. For this reason our curriculum exposes students to the rich diversity of the Francophone world, nurturing in them openness to and understanding of other cultures.

### FRENCH I

Students learn to communicate, using everyday vocabulary, elementary grammar, and basic syntax. Through individual, paired, and group exercises, we encourage students to express themselves in typical situations and everyday activities. Students are involved in meaningful interactions from the start. Topics include, among others, the family, clothing, weather, time, food, pastimes, and seasons. Students learn to use the present tense, the immediate future, and the *passé composé*. Since culture is an essential component of the curriculum, students are exposed to short readings and activities infused with cultural aspects of both the French and Francophone worlds. An interactive website as well as other multimedia materials reinforce class presentations and facilitate each student's active practice of the language.

### FRENCH II

At this level students continue to expand their knowledge of vocabulary, verb tenses (*imparfait/passé composé* with *être*), grammatical structures of intermediate difficulty (such as object pronouns), and general communication. The emphasis is on advancing and integrating listening, speaking, reading, and writing skills. Reading passages of progressive difficulty are introduced to enrich the full immersion in the French language and culture. Students read short authentic texts and are asked to memorize a poem. Projects are also a part of the curriculum, used to link student interests with aspects of contemporary French and francophone cultures. Films, songs, and other interactive media reinforce essential vocabulary, linguistic structures, cultural knowledge, and listening comprehension.

### FRENCH III

At this level students develop their ability to express more complex thoughts and feelings both orally and in writing. Students learn to read and understand increasingly difficult literary and expository texts, to discuss their ideas, and to organize them in composition form. Students reinforce and expand their knowledge of verb tenses (*imparfait/passé composé*, *futur simple*, *conditionnel*, *subjonctif*) and other grammatical structures (such as double pronouns, comparatives and superlatives and interrogative pronouns) in order to communicate more effectively. Students begin to read authentic works, such as an adaptation of Gaston Leroux's *Le fantôme de l'opéra*. Movies reinforce the themes and culture of the texts read in class. Music and excerpts from audio-visual media (such as news on the radio, internet, or TV) enrich the cultural component of the class.

### FRENCH IV

At this level students study and review the most difficult forms of grammar and verb usage. Critical thinking skills and fluency of expression are fostered through reading selections from newspapers, magazines, and major literary works, such as *Le comte de Monte-Cristo* by Alexandre Dumas. The cinematic version of the novel will be shown along with other films to increase listening comprehension as well as to enrich cultural understanding. The literary and cultural components of this level serve as an introduction for those students who are interested in continuing at the AP level. In Honors sections students are introduced to more advanced literary texts.

### AP FRENCH LANGUAGE AND CULTURE

Beyond preparing students to take the AP French Language exam, this course is designed to help them develop their command of the French language and their knowledge and appreciation of French and francophone culture. Students entering the class should already have a solid grasp of French grammar and vocabulary, and their aural/oral competence should also be strong. During the course of the year, through different activities (study of press articles and literary works, oral presentations, journaling and essay writing, comprehension activities about audio and audio-visual material...), the students will improve their four skills (reading, writing, listening and speaking) with a special emphasis on written and spoken expression in French. They will review advanced grammar topics and will write essays on various subjects with a focus on the six thematic content areas prescribed by the College Board (personal and public identities, families and communities, science and technology, global challenges, contemporary life, beauty and aesthetics). All students will take the AP Language exam in May.

**Requirements:** Students must show mastery of the grammar points taught in French IV Honors, demonstrate high proficiency in reading

and aural comprehension as well as speaking and writing with fluency and accuracy, earn a grade of A- in French IV Honors or an A in French IV, and receive recommendation of the department.

### **FRENCH V**

This advanced French course, open to students who have completed either French IV or an AP class, is designed to develop knowledge of the French language and appreciation of francophone societies and cultures. Students will increase their vocabulary and develop their linguistic skills while studying topics presented primarily in French films. The texts, press excerpts, movies, and songs studied in class will provide a rich historical and cultural background from which students will expand their understanding of the multiple aspects of French and Francophone contemporary societies.

### **ADVANCED FRENCH LITERATURE**

This course is a survey of all the major movements in French Literature from the 16<sup>th</sup> to the 20<sup>th</sup> century. The class is comparable to a college-level course. Its goal is not only to perfect the students' already advanced level of proficiency in French, but also to develop a fuller understanding of and appreciation for French and Francophone literature and culture. The students will familiarize themselves with great works of French literature of intermediate to advanced difficulty and mature content. They will be provided with methods for literary interpretation through close reading of those texts. They will practice formulating critical opinions in spoken and written French and will be asked to participate actively in discussions on literary topics. The corpus of texts will include poems (by authors such as Ronsard, Baudelaire, Apollinaire), novels (by Balzac, Choderlos de Laclos), short stories (by Anna Gavalda, Camus) and plays (by Molière, Sartre). This course is open to students who have completed AP French (or French 4 Honors with recommendation of the department).

### **SPANISH**

Spanish is an increasingly important language locally, nationally and internationally. Our curriculum develops proficient speakers of the language who learn to appreciate and interact with the rich diversity of the Hispanic culture.

### **SPANISH I**

Students learn to communicate using everyday vocabulary, elementary grammar, and basic syntax. Through individual, paired, and group exercises, we encourage students to express themselves in typical situations and everyday activities. Topics include the family, clothing, weather, time, food, pastimes, and seasons. Students learn the present tense, affirmative informal commands, and the simple future. Culture is an essential component of the curriculum; activities are constantly infused with aspects of the respective cultures and their contributions to our global society. Interactive digital materials provide authentic language in context and facilitate each student's active practice inside and outside the classroom.

### **SPANISH II**

At this level students continue to develop their communicative skills by reinforcing concepts covered in Spanish 1 and expanding their knowledge of vocabulary, verb tenses, and grammatical structures. Emphasis is given to deepening students' understanding of Hispanic cultures, customs, habits, and traditions. Topics include festivals, travel, health and wellness, and modern life. Authentic sources in a variety of media such as news articles, songs, images, and short videos are used to create a context for active practice of listening, speaking, reading and writing skills. Group and pair work in the classroom is essential to acquire new concepts and promote a meaningful communicative experience. Students are introduced to the preterite and imperfect tenses and the command forms of verbs. Oral and written assignments help students move toward proficiency in the language.

### **SPANISH III**

Conducted entirely in Spanish, this course leads students to develop their communicative abilities through an exploration of themes critical to understanding the Latin American and Spanish experience and to gaining a global perspective. Through authentic oral and written materials, such as short stories, current articles, video archives, film, music, and blogs, we address varied themes such as children's rights;

heroes, heroines, and story-telling; environmental issues; life in a Latin American city; and cinema and art. In addition to an intensive review of concepts covered in Spanish 2, students are introduced to new vocabulary, the present subjunctive, the present perfect, and the formal future. A variety of oral, written, and reading assignments challenge students to grow both as speakers of Spanish and as critical thinkers. Group and pair work in the classroom is essential to developing fluency skills as well as to acquiring new concepts and promoting a meaningful communicative experience.

### **SPANISH IV**

This course prepares students to build their proficiency through interpersonal and interactive communication and is conducted entirely in Spanish. Classes focus on developing presentation skills and strengthening students' written and oral production. The curriculum reviews and builds upon the four skills of speaking, listening, writing, and reading, and moves on to an advanced proficiency level. Topics include family life, historical and sociopolitical issues, and understanding cultural differences across the Spanish-speaking world. Critical thinking skills and fluency of expression are promoted through authentic sources such as short stories, newspaper articles, and movies from modern Spanish and Latin American sources. Grammar focuses on the most advanced verb tenses, including review of the subjunctive mood and expansion of its many uses. The year culminates with group projects of an interdisciplinary nature, which include multimedia presentations.

### **SPANISH V - CONVERSACIÓN Y CULTURA: EL MUNDO HISPANO**

This course promotes Spanish and Hispanic culture through media, film, short story, art, and music from the vast Spanish-speaking world. Making a shift from the grammar-based textbook structure of the previous levels, this course brings the beauty, traditions, and culture to students in a relaxed and communicative classroom. Enrollment is open to students that have completed level IV, AP Spanish Language, and/or AP Spanish Literature courses.

### **AP SPANISH LANGUAGE AND CULTURE**

This is a college-level course that concentrates on developing and refining all four basic language skills: listening, reading, speaking, and writing. The course is conducted entirely in Spanish in order to assist students in progressing toward fluent, proficient oral and written communication and to prepare them for the AP exam in Spanish language and culture. Students read and discuss major works of Spanish literature and art as well as newspaper and magazine articles. Authentic audio sources such as songs, podcasts, T.V. commercials, and video clips, are used to develop students' listening comprehension skills. Students make formal oral presentations on various topics of general interest, and practice numerous informal conversational skills. The study of culture is woven throughout the course in film, literature, and historical research. Students review advanced grammar topics and are required to write essays on a wide range of themes. All students sit for the AP Language exam in May.

**Requirements:** Students must show mastery of the grammar points taught in Spanish IV Honors, demonstrate high proficiency in reading and aural comprehension as well as speaking and writing with fluency and accuracy, earn a grade of A- in Spanish IV Honors or an A in Spanish IV, and receive recommendation of the department.

### **AP SPANISH LITERATURE AND CULTURE**

The AP Spanish Literature and Culture course is designed to challenge advanced Spanish students to develop their written, oral, reading and auditory skills to analyze and interpret a variety of literary genres and the socio-historical and cultural contexts from which they emerged. We will study an overview of Peninsular and Latin American literature from the medieval period up to and including current literary trends. Students will engage with a variety of cultural products, such as paintings, drawings, sculpture, architecture, music, film, criticism, and author interviews, in order to deepen their understanding of the works. In addition, students will learn to apply appropriate literary terminology to assist in the close readings of the texts. This course is comparable to a third year college introduction to Hispanic literatures course and will be conducted entirely in Spanish. Significant student participation and contribution to class activities are expected. Students enrolled in the AP class take the AP Spanish Literature and Culture exam in May.

**Requirements:** An honors grade in AP Spanish Language and Culture and recommendation of the department

## CHINESE

The study of Chinese provides a way for our students to interact with the most populous nation and a leading country in the fastest growing economic area in the world. Furthermore, our department believes that cultural understanding of the oldest continuous civilization is as important a goal as developing language proficiency.

### CHINESE I

Students learn to communicate, using everyday vocabulary, elementary grammar, and basic syntax. Through individual, pair, and group exercises, we encourage students to express themselves in typical situations and everyday activities. Topics include the family, time, food, pets, and pastimes. Students acquire the speaking, listening, reading, and writing skills necessary for basic communication in Mandarin Chinese. The course emphasizes good pronunciation with particular attention to the four tones. In addition to the pinyin system, which is used to introduce pronunciation, vocabulary, and grammatical structures, students learn to read more than 170 Chinese characters and write approximately 110 Chinese characters. Calligraphy practices, videos, and interactive CDs reinforce class presentations and facilitate each student's active practice of the language. The curriculum addresses cultural topics and enables students to make connections and comparisons between Chinese and other languages and cultures. The course also encourages students to use their knowledge of Chinese culture in the wider community.

### CHINESE II

At this level, students continue to expand their knowledge of vocabulary, grammatical structures of graduated difficulty, Chinese characters, and general communication. Through individual, paired and group exercises, the students are encouraged to express themselves on the following topics: sports, school related activities, identifying locations, giving directions, shopping and bargaining, making appointments, and commenting and comparing concepts of punctuality. The emphasis is on advancing and integrating listening, speaking, reading, and writing skills. Students demonstrate more accuracy in tones and continue to build basic to intermediate skills in reading and writing. Students learn to read more than 400 Chinese characters and write approximately 250 Chinese characters. Reading passages of progressive difficulty are introduced to enrich the full immersion in the Chinese language and culture. Short writings by contemporary Chinese authors are introduced. Term-project presentations on Chinese culture are also an integral part of the

curriculum, linking student interests with aspects of Chinese culture. Calligraphy practices, video materials, films, and interactive CDs reinforce essential vocabulary, linguistic structures, listening comprehension, and cultural knowledge.

### CHINESE III

Students continue to develop their communicative competence in reading, listening, speaking, and writing. They approximately double their knowledge of vocabulary words and characters. Students are able to read and write short passages of familiar and personal topics. Units on Chinese history and culture help students develop a broader understanding and appreciation of this civilization. Students develop reading strategies to comprehend material composed in formal written Chinese.

### CHINESE IV

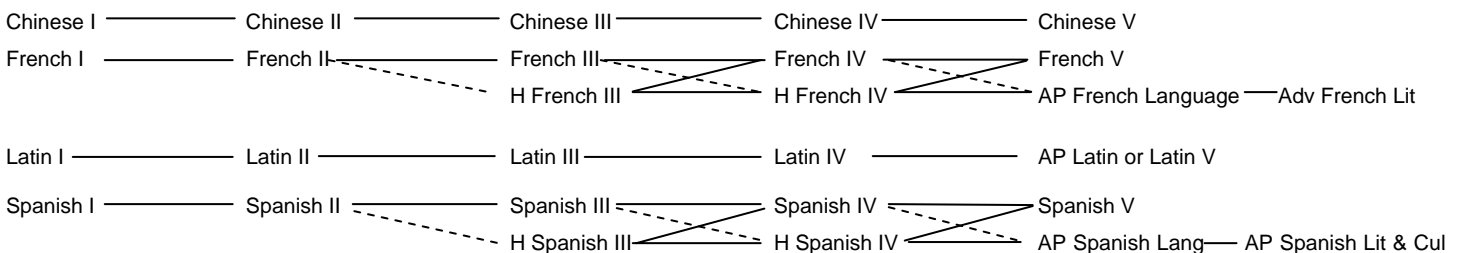
Students will be able to engage in communicative tasks in three modes: interpretive communication, interpersonal communication, and presentational communication. Students will be able to understand the main ideas and facts from texts and read consistently with increased understanding. They will be able to demonstrate increased ease and accuracy in pronouncing Chinese sounds and tones and to handle successfully a variety of communicative tasks and social situations. They will give brief oral presentations and develop their writing and speaking proficiency by reading texts written in colloquial Chinese. In addition, students keep gaining understanding of Chinese cultural practices and traditions and study important places in China and the values and morals embedded in proverbs. Moreover, students will be able to make connections between Chinese and other subjects such as geography, social studies, and the fine arts.

### CHINESE V

This course is designed for students who are prepared and motivated to participate in the extensive and intensive study of language and culture. Students will have the opportunity to engage in classroom discussions and research projects in order to allow them to use the language to explore in depth topics related to Chinese literature, history, education, traveling, music, entertainment and technology in school. Strong organizational skills and the ability to work independently are required. AP material will be included in the course, such as reading from the Internet, materials from the Chinese-speaking world, essays, short stories, comic books, magazines, Chinese movies, and newspapers. The goal of this course is to further the students' intercultural and communicative competence.

## SOME POSSIBLE LANGUAGE SEQUENCES

Students entering the Upper School are placed in language classes according to their proficiency and prior teacher's recommendation. Freshmen and other newly entering students may be placed in levels I, II, or III initially. The following charts show the possible language sequences. (The "H" refers to Honors sections, which are created according to sufficient enrollment. Dotted lines in the charts indicate choices dependent on teacher recommendation.)



## MATHEMATICS

### Grades Nine through Eleven

All students must complete **three years** of mathematics. A student's initial course selection is dependent upon his or her previous math background and performance. Algebra I, Geometry, and Algebra II are required courses. The department offers honors and college level courses. Required courses and electives develop strong reasoning skills and broad conceptual understanding. Computers and graphing calculators are integrated throughout the math curriculum.

### ALGEBRA I

The beginning algebra course substitutes letters for numbers and shows how expressions containing variables can represent real world quantities. Solving equations through the use of algebraic axioms leads naturally into word problems with practical applications. Students explore both linear and quadratic equations along with topics such as exponents, rational expressions, and inequalities. The course ends with the idea of function and how it pertains to more advanced topics.

## GEOMETRY

This course consists of a study of geometry integrated with a review of skills from Algebra 1. Students see the development of Euclidian proofs through the study of congruence and similarity, attain a working knowledge of trigonometry as it applies to right triangles, and apply area and volume to practical use. Using classical and modern construction techniques, students will investigate and learn properties that proofs verify. Students will see how geometry relates to the physical world, through problem settings and potential projects involving design, architecture, construction, archaeology, etc. Placement is based on academic achievement in previous math classes, teacher/department recommendations, and a math aptitude profile.

## ACCELERATED GEOMETRY

This course offers a clear introduction to the fundamental concepts and operations of plane geometry. Students use sequential logic and deductive reasoning skills throughout the course to provide informal justifications and arguments as well as formal ones that are the basis for two-column and paragraph proofs. Students see the development of Euclidean proofs and attain a working knowledge of trigonometry as it applies to right triangles. Areas and volumes are examples of additional topics. Placement is based on academic achievement in previous math classes, teacher/department recommendations, and a math aptitude profile.

## HONORS GEOMETRY

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. The class includes a more sophisticated study of all of the topics of the Accelerated Geometry class. The faster pace also allows for an in-depth study of the first chapter of the Algebra II curriculum. Placement is based on academic achievement in previous math classes, teacher/department recommendations, and a math aptitude profile.

## ALGEBRA II

This course provides the essential concepts and skills of algebra and the study of functions that are needed for the further study of mathematics. Topics include linear and quadratic, higher polynomial, rational, exponential, and logarithmic functions. If time permits, additional topics might include probability and sequences and series. Placement is based on academic achievement in previous math classes, teacher/department recommendations, and a math aptitude profile.

## ACCELERATED ALGEBRA II

This course combines a highly analytical and graphical approach to functions. Applications are also used to reinforce theory and concepts. All of the topics of the introductory course are covered in depth and a transformational approach to graphing is emphasized. If time permits, additional topics may include probability, conics, and sequences and series.

**Requirements:** Teacher recommendation and a minimum of a B average each term in Accelerated Geometry; or teacher recommendation, an A average in each term in Geometry, and additional work prescribed by the department

## HONORS ALGEBRA II

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. The class includes a more sophisticated study of all of the topics of the Accelerated Algebra 2 class. The faster pace also allows for an in-depth study of trigonometry: circular functions, graphing, and identities are all included.

**Requirements:** Teacher recommendation and a minimum of a B average each term in Honors Geometry; or teacher recommendation, an A average in each term in Accelerated Geometry, and additional work prescribed by the department

## Electives

### DISCRETE MATH AND TRIGONOMETRY

The Discrete Math and Trigonometry course will be a one-year course focusing on new and exciting math concepts that a student may not

have seen yet in their high school career. Such topics as financial math, number theory, matrices, election theory, history of math, math in nature and architecture, conics, series and sequences, logic, set theory, and trigonometry will be covered. The course will offer students project-based work as well as outside research in modern mathematics.

**Requirements:** successful completion of Algebra II

### PRECALCULUS

Precalculus continues the study of functions begun in Algebra II. Elementary functions are revisited in greater depth, and an emphasis is placed on properties and transformations of graphs. Polynomial, rational, exponential, and logarithmic functions and their graphs are studied thoroughly. Additionally, trigonometry is covered in depth. Students review the basic trigonometric functions in preparation for discussions about the unit circle, trigonometric graphs, trigonometric formulas and identities, and applications of trigonometry.

**Requirements:** Teacher recommendation and B average in Algebra II

### ACCELERATED PRE-CALCULUS

This course is designed to prepare students for a college level calculus class. Students will study properties of polynomial, rational, exponential and logarithmic functions. An in-depth study of trigonometry includes the properties of circular functions, inverse trigonometric functions, identities, vectors, and polar graphing. Limits, parametric functions, and continuity are used to study each family of functions.

**Requirements:** Teacher recommendation and a B average in Accelerated Algebra II; or an A average in Algebra II, the recommendation of the teacher, and additional work prescribed by the department

### HONORS PRE-CALCULUS

This course is intended for students with a strong mathematical ability and desire to study deeply the structure and applications of mathematics. This course uses limits to continue the study of polynomial, rational, exponential, logarithmic, and trigonometric functions. The faster pace allows the class to begin the study of differential calculus. If time permits, additional topics may include sequences and series, conics, and matrices.

**Requirements:** Teacher recommendation and a B average in Honors Algebra II; or teacher recommendation, an A average each term in Accelerated Algebra II, and additional work prescribed by the department

### PROBABILITY AND STATISTICS

Probability studies uncertainty and randomness. Statistics collects and organizes data for analysis. Together, these two fields of mathematics provide a powerful vehicle for understanding the world around us. In this course students will develop the foundational tools for both probability and statistics. Using data from a variety of sources, students will learn how to create and interpret graphs, calculate measures of central tendency and spread, determine the probability of independent and conditional events, explore and utilize normal distributions and the Central Limit Theorem, and test hypotheses about approximately normally distributed data sets. The course culminates with a final project in which students will gather information about themselves and their peers to test a hypothesis and interpret the data.

**Requirements:** Successful completion of Precalculus or Discrete Mathematics and Trigonometry.

### CALCULUS

This course provides a numerical, graphical, and analytical introduction to the study of calculus. Functions are revisited before expanding upon the theory of limits in order to develop the concept of the derivative and the definite integral. The definition of the derivative and the Fundamental Theorem of Calculus form the basis to study the mechanics of derivatives, anti-derivatives, and definite integrals. Applications that focus on real world situations are emphasized. Technology is used throughout. While this course gives a sound foundation for the study of calculus in college, it is not intended as preparation for the advanced placement test.

**Requirements:** Successful completion of Accelerated Precalculus or all of the following: a B+ average in Precalculus, a suitable score on a placement test, and teacher recommendation.



**AP CALCULUS AB**

This course follows closely, but is not limited to, the guidelines of the Advanced Placement Calculus AB syllabus. Following a short review of functions, trigonometry, and graphing, the concept of a limit and the definition of the derivative are introduced. The theory and techniques of differential calculus are developed and applied to topics including optimization techniques, related rates, and the study of change in physics, economics, and life science models. Numerical approximation methods and integration techniques are applied to the contexts of areas, volumes, and curvilinear motion. The distinctions between antiderivatives, definite integrals, and improper integrals are addressed.

**Requirements:** B average in Accelerated Precalculus

**AP CALCULUS BC**

A continuation of the honors math curriculum, this course follows closely, but is not limited to, the guidelines of the Advanced Placement Calculus BC syllabus. After a brief review of limits and the fundamentals of differential calculus developed in the Honors Precalculus class, students apply these ideas to their perspective of functions. Topics include optimization techniques, related rates, and the study of change in physics, economics, and life science models. Numerical approximation methods and integration techniques are applied to the contexts of areas, volumes, and curvilinear motion. The distinctions between antiderivatives, definite integrals, and improper integrals are addressed. Other topics include series convergence, vector theory, and polar and parametrically defined functions.

**Requirements:** Teacher recommendation and a B average in Honors Precalculus; or an A average in Accelerated Precalculus, the recommendation of the teacher, and additional work prescribed by the department

**AP STATISTICS**

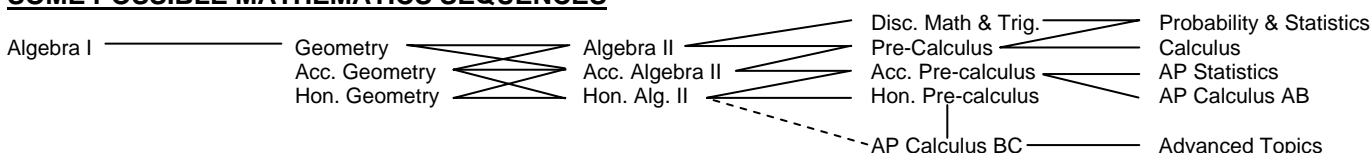
The Advanced Placement Statistics course is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four major conceptual themes of the course are exploring data, planning a study, making inferences from data, and modeling. Many real world situations will be explored and students will learn to gather and analyze their own data. Students will use the TI-83 calculator and will also be asked to communicate their analyses through formal writing assignments. The course will follow the College Board's curriculum, and the students will take the AP test in the spring. AP Statistics sectioning is based on previous grades, teacher/departmental recommendations, and a math aptitude profile.

**Requirements:** B average in Accelerated Precalculus or departmental approval

**ADVANCED TOPICS IN MATHEMATICS: ORDINARY DIFFERENTIAL EQUATIONS**

Advanced Topics in Mathematics is designed primarily for students who completed an AP calculus course in their junior year and are interested in continuing their math education beyond high school. The course introduces students to various topics in advanced mathematics. While every year's curriculum may be different, in the past such topics as advanced techniques of integration, partial derivatives, extremas and saddle points of 3-dimensional functions, linear and Bernoulli differential equations, hyperbolic functions, and factorials of fractions have been covered. In addition students in the past had researched and presented papers on various topics such as linear algebra, number theory, mathematics of economics, and others.

**Requirements:** successful completion of an AP calculus course and a recommendation of the AP calculus teacher

**SOME POSSIBLE MATHEMATICS SEQUENCES**

While there is some "tracking" in mathematics, students who have performed extremely well at one level and would like to move to a higher "track" the following year may do so with departmental approval, if they learn the requisite material over the summer. Similarly, students who have found a particular level too challenging may be moved to a more appropriately paced level in the following year.

**COMPUTER STUDIES****COMPUTER I — WEB DESIGN AND MANAGEMENT (minor)**

Students learn the flow of information, the impact of information flow to themselves and to society, methods to find useful information effectively, and techniques to be a part of the information web. This year long minor course offers students the experience of designing, building, promoting, and managing a Web site. They learn HTML and CSS techniques for putting together a nice looking Web site according to their own design. The goal is to have their Web site polished and shown to all upper school students and then published to an outside Web hosting site for interaction with Web users all over the world. Students will also learn the basic concepts of computer science, the evolution of computation, and the trends and impacts of the future.

**COMPUTER II — INTRODUCTION TO PROGRAMMING (minor)**

Students learn the methods of direct interaction with computers. They will learn several programming languages, including Alice (created by Carnegie-Mellon University) and Java. This year long minor offers an easy start for students to see quickly the graphical results of their programs before they add up their logic pieces to accomplish a useful application. They then go through a more traditional programming experience to grasp the essence of computer science. Students will be able to build impressive games or conduct interesting analyses.

**Requirements:** Successful completion of Computer I, or completion of

the 8<sup>th</sup> grade Web course and permission of the instructor

**COMPUTER III — IOS APP PROGRAMMING (minor)**

Students learn to utilize smart devices (iPads, robots, and drones). They learn to build device specific programs to produce reusable applications. This year long minor course is designed to improve students' programming skills. Students may choose to build a long term project with Tetrix robot and iPad.

**Requirements:** Successful completion of Computer II

**AP COMPUTER SCIENCE A (MAJOR)**

The AP Computer Science A course is intended for students with an interest in pursuing computer science in college and in their future professional careers, as well as students who intend to pursue other curricular and career paths which require significant involvement with technology. The main part of this course is built around the development of computer programs that correctly solve given problems. Specifically, this course focuses on an object-oriented approach to problem solving using Java. These programs should be understandable, adaptable, and reusable. The design and implementation of these computer programs is used as a context for introducing other important aspects of computer science, including the

development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and effective methods. In addition, the responsible use of these systems is an integral part of the

course. All students are expected to take the AP Computer Science A Examination and achieve a qualifying score on the exam.

**Requirements:** Successful completion of Computer III and permission of the instructor

## SCIENCE

Students are required to take **two years** of a laboratory science, usually beginning with Biology in the 9<sup>th</sup> grade, but most students are strongly encouraged to complete introductory courses in biology, chemistry, and physics prior to graduation. Research and writing skills are reinforced throughout the curricula. A student may enroll in an AP science course only after completing an introductory course in that discipline. If a student is considering doubling-up in the sciences, the Science Department will take into consideration the student's past and present performance, the enrollment of the courses selected, and the overall course load requested by the student.

### Introductory/Core Courses

#### BIOLOGY

This introductory course provides a survey of the major concepts ranging from the molecular to the community level. Topics include up-to-date coverage of cells, genetics, DNA, evolution, ecology, plants, animals, and human biology. Hands-on laboratory investigations, as well as computer-assisted labs, enable students to take a firsthand look and gain experience in the scientific methods and data-collecting techniques used by biologists. In addition, the course develops scientific literacy as well as prepares students for future science courses in our Upper School.

#### APPLIED CHEMISTRY

This is an introductory course emphasizing the practical role chemistry plays in modern society and daily life. Based on a curriculum designed by the American Chemical Society, this course provides an introduction to the fundamental principles of chemistry and covers traditional chemistry topics but within the context of societal issues and real-world scenarios, such as petroleum shortages, alternative energy, and access to clean water and air. Units of study stress organic chemistry, biochemistry, environmental chemistry, and industrial chemistry. This laboratory-based course focuses on generating data from investigations, analyzing that data, and then applying a knowledge of chemistry to solve problems that arise in everyday life. Concepts are introduced as they are needed to solve problems, and then arranged in meaningful patterns that lead to an understanding of nature. Analysis of written material, proficiency in problem-solving, and debating risks and benefits of issues presented are emphasized.

**Requirements:** Completion of Biology

#### CHEMISTRY

This course provides an introduction to the fundamental principles of chemistry. Topics of study include atomic and molecular structures, the periodic table, bonding, chemical reactions and nomenclature, states of matter, stoichiometry, and acids and bases. Emphasis is placed on mastery of the theoretical framework of modern chemistry and the mathematical skills necessary to achieve this understanding. While this course is more traditional in design than Applied Chemistry, frequent laboratory investigations provide for a hands-on approach to learning the material, giving students the opportunity to discover practical applications and strengthen their observational and analytical skills. The laboratory experience is enhanced by the use of computers as well as microchemical approaches to traditional experiments. This course is a challenging and creative journey in understanding chemistry and its place in science, technology, and society.

**Requirements:** Completion of Biology and concurrent enrollment in Accelerated Geometry or higher and permission of the department

#### HONORS CHEMISTRY

This course is intended for students with a strong mathematical ability, an inclination towards problem solving, and a keen interest in the finer details of chemistry. As an introductory course, it includes everything described above for Chemistry. However, a faster pace allows for a greater breadth and depth of topics, including thermodynamics, kinetics and nuclear chemistry, chemical equilibria, redox reactions

and electrochemistry, an introduction to organic chemistry, and a deeper probing of the concepts of quantum mechanics and molecular structure. Furthermore, advanced applications of the material are examined, particularly in the stoichiometry unit.

**Requirements:** Permission of the department and successful completion of Biology (B+) and of Accelerated Geometry (A-) or Honors Geometry (B-) or higher

#### PHYSICS

This course is an introduction to the physical laws of nature. Topics covered include motion (linear, projectile, and circular), forces, gravitation, energy, momentum, electricity, sound, and optics. Emphasis is placed on conceptual reasoning and problem-solving skills. There are demonstrations and labs for each topic, as well as projects (rubber band car, bridge building). Weather permitting, we usually go to Great Adventure in the spring to experience physics in action.

**Requirements:** Successful completion of Biology; of Applied Chemistry, Chemistry, or Honors Chemistry; and of Algebra II or higher

#### HONORS PHYSICS

The honors course includes everything described above for Physics (with additional topics) and is intended for students with strong math abilities. The problems are more extended and/or complex and involve using trigonometry, quadratic equations, systems of equations, and logarithms. Inquiry based methods of learning the content are emphasized, as are other foundational science practices, such as data analysis and engaging in critical thinking and questioning. Students may opt to sit for the AP Physics 1 exam with additional self-study.

**Requirements:** Successful completion of Chemistry (B+) or Honors Chemistry (B-) and of Accelerated Algebra II (B+) or Accelerated Precalculus (B) or higher, and permission of the department; freshmen placed in an honors math course are also eligible to take the course with departmental permission

#### Electives

#### HUMAN ANATOMY AND PHYSIOLOGY

This elective introduces students to the structure and function of the human body. The textbook was chosen for clarity, excellent illustrations, and appeal to students at this level. A wide variety of classroom activities helps to maintain a high level of interest and participation. These include labs, demonstrations, guest presenters, audiovisual materials, and open discussion of topics that are pertinent and of interest to students. A workbook is employed that integrates a traditional study guide approach with visualization, drawing exercises, and questions that challenge the students to apply their knowledge to clinical situations. With the completion of this course, students should have greater awareness of the factors that influence their health and well-being.

**Requirements:** Completion of Biology and of Applied Chemistry, Chemistry, or Honors Chemistry or permission of the department

#### ENVIRONMENTAL SCIENCE

The purpose of the Environmental Science elective is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems (both natural and human-made), to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental Science is an interdisciplinary lab science; it embraces a wide variety of topics from different areas of study. Incorporating primarily the disciplines of chemistry, physics and biology, using field work experience, engaging in projects, and using a team approach to problem solving, the course intends to spark students' interest in the environment and enable students to apply the sum of their science experience at Princeton Day School. In addition,



## THE ARTS

One of the hallmarks of a PDS education is the incredible arts program. The school is committed to developing a rigorous and thorough program in diverse fields of art practice that will provide a solid general understanding of the arts and the opportunity to develop portfolios for college. The breathtaking new arts wing facilities clearly indicate PDS's commitment to the importance of the arts in a student's education, and we encourage all students to take full advantage of the wonderful opportunities we offer. The Visual and Design Arts and Performing Arts Departments are committed to being flexible in our offerings to students. The departments have worked hard to develop platforms of shared skills and vocabularies and students are encouraged to work in different disciplines. Each area is structured to meet different needs. Some of the art programs allow for students to take the major as a minor; others allow students to take the major repeatedly. Please feel free to discuss the opportunities with the specific art teacher whose course you're interested in taking.

The art requirement, which can be fulfilled by completing **two minor courses or one minor and one major course**, presents students with a choice of courses in fine and performing arts. Students are encouraged to continue beyond the one credit requirement and to take advantage of the range of offerings as well as to deepen skills in selected areas. All arts courses, both majors and minors, are graded on an A-F scale, though students who have completed their graduation requirement may request taking further arts courses on a pass/fail basis. The program accommodates both students who have general interest and those who are willing to make a significant commitment to the discipline. In addition to course work, students participate in seasonal exhibitions and performances, which include numerous school concerts; the performing arts festival, fall play and spring musical; and on-going opportunities to exhibit art work at various locations in the school, including the Anne Reid Gallery. Interested students are invited to present and participate in regional, national and international competitions, exhibits, and performances.

### VISUAL AND DESIGN ARTS

The Visual Arts and Design Department offers a studio-based program for the development of inquisitive, imaginative, and analytical skills as an essential part of a liberal arts education. The art department believes that the complex set of skills, habits and attitudes learned in the arts not only contribute to greater visual literacy, but also to more flexible, creative and humanistic minds.

integrated with digital presentations and technical demonstrations. The program encourages diversity and creates a forum for the exchange of ideas among students of all levels of experience within the various art disciplines.

Teachers encourage research, critical inquiry, experimentation, technical proficiency, and the collaborative process as a means of learning about art and of exploring personal vision. Students examine art works from different historical periods and from different cultures, learning both the social and historical context and the methods used in production. Museum visits, gallery talks and visiting artists are

All introductory courses are taught as foundation courses and will require regular sketchbook work to support the development of habits and skills essential to learning within the arts and design. All introductory courses meet three times per week and are prerequisites for the advanced courses. All advanced (major) courses meet four times a week. Every art student is encouraged to develop a portfolio in digital format or as a web page.

### STUDIO ART: DRAWING, PAINTING, AND MULTIMEDIA

The studio art program focuses on training students in the use of materials, choices of style, and historical references as they approach a varied and complex range of subject matter. No one set of skills or approaches will function effectively in every environment. The goal of the program is to provide students with growing comfort and skill in making these choices. A strong focus on both technical and conceptual development provides the basis of both foundation and advanced work. All studio programs provide the student with an opportunity for building a college portfolio.

ongoing studio focus of the program will be fully integrated with books. The work produced in the 20<sup>th</sup> century will form the historical and theoretical foundation of the program. This course provides students with the opportunity to develop work for competitions, exhibits, and college portfolios.

**Requirements:** Completion of any introductory visual or design art course

#### INTRO TO FINE ART (minor)

The fine art minor is the prerequisite for the major. Increasing visual literacy, developing a range of technical skills and establishing a solid conceptual foundation are the main goals of the class. The class includes work in both two and three dimensions (drawing, painting, multi-media) and introduces students to critique and historical analysis. Students are taught to experiment with a wide range of materials, to develop an understanding of design, to increase their technical skills, and to work collaboratively.

#### INTRO TO VIDEO AND MEDIA ARTS (minor)

This is a full year offering in film and media history and production. Students will be exposed to a survey of 20th century American and international films focusing on traditions of narrative, documentary and experimental filmmaking. These three areas will also form the basis of the production side of the class. Video pre-production will concentrate on scripting, storyboarding, use of camera, lighting, and sound. Post-production will focus on editing using iMovie. There will be a strong focus on team production.

#### ADVANCED FINE ART (Major)

In this advanced-level class, which meets four days each week with one double period, students are introduced to the tools, materials, and approaches necessary to respond to a full range of contemporary issues. One of the goals of the class is to gain strong skills in working from life. Students will work from a live model on a weekly basis. Drawing, painting, sculpture and conceptual interpretations of the figure will be taught and explored. Along with developing a strong technical foundation, students will develop conceptual strategies for approaching subjects in a non-literal representational form. The

#### ADVANCED MEDIA (Major)

This class will continue on the foundation established through the media minor, concentrating on a mix of history, analysis, and studio production. We will focus more closely on a number of directors and film genres and learn Final Cut Pro as our main editing software. There will be a continued focus on storyboarding and writing for short film narrative. Documentary and experimental traditions of filmmaking will be explored in greater depth, and students will be given the opportunity to begin developing a focus. A goal in this major is to develop a strong portfolio of short films.

**Requirements:** Completion of Intro to Video and Media Arts

### CERAMICS

The craft and art of working in clay has become a monumental force in the fields of industrial design and contemporary studio art. The ceramics suite at PDS is a 2,000 sq. ft., fully equipped professional studio and an ideal space for creative development and educational

instruction in the field. Historical studies, contemporary issues, artists and their works are woven throughout the curriculum. The studio environment is one where form and surface design are taught along with ceramic sculpture, emphasizing a hands-on approach to creative

learning. In addition to traditional techniques of hand-building, wheel-throwing, and mold-making, the student's intellectual engagement is heightened through concept development and artistic expression.

#### **INTRO TO CERAMICS (minor)**

This foundation course in ceramics provides a thorough introduction to the fundamentals of 2-dimensional and 3-dimensional concepts and techniques in the field with an emphasis on direct studio experiences, technical proficiency and personal expression. Students learn the fundamentals of wheel-throwing and hand-building while realizing the vast potential for surface techniques using carving tools, slips, glazes, and resist printmaking processes. This course provides an inspiring realm of possibilities with the versatile material of clay including ancient, traditional techniques and new, innovative materials and processes. Historical and contemporary ceramic artists will be referenced throughout the course for their artistic and cultural significance. Group critiques, as a way of formulating educated and analytical opinions about their work and that of others, are practiced throughout the course.

#### **MATERIALS AND PROCESSES: WHEEL-THROWING AND BEYOND (Major)**

This class provides students with the opportunity to develop their wheel-throwing skills and to undergo a more in-depth study of a variety

of ceramic processes. Technical proficiency with the potter's wheel can be practiced, along with a curriculum based in exploration and experimentation within the many facets of the process (including slip-casting, glazing, digital decal production and non-traditional forming and firing processes). Research and discussions surrounding contemporary topics in the field will be studied as students acquire more sophisticated skills. Portfolio development is encouraged. This course may be repeated.

**Requirements:** Completion of Intro to Ceramics

#### **INTERMEDIATE/ADVANCED CERAMICS (Major)**

In this studio, a greater emphasis will be placed on developing more advanced techniques within the realm of hand-building and wheel throwing. Vessel aesthetics and sculptural principles will be explored to expand one's potential for innovation. Historical and contemporary topics will be regularly referenced throughout the course for a comprehensive understanding of the vast field of ceramics. The regular use of a sketchbook, as a means of journaling concepts and ideas becomes second nature in the studio and begins to craft a personal artistic vision. Students who have become comfortable with the demands of a studio practice are invited to design their own projects and develop their portfolios. This course may be repeated.

**Requirements:** Completion of Intro to Ceramics

## **PHOTOGRAPHY**

PDS has a state-of-the-art photography facility containing a large digital lab, a darkroom, a film developing room, and a classroom/studio. Classes run for a full year. Concentration is on creative expression, technical proficiency, image content, and historical context. Students participate in field trips to shoot film or to visit museums and galleries. They exhibit work both inside and outside of school and interact with visiting photographers. All photography courses require a \$150.00 lab fee and a 35mm analog camera, film, paper, and a print storage box. Students with financial need will be assisted.

#### **INTRO TO PHOTOGRAPHY (minor)**

This is a foundation course, the prerequisite for all advanced photography classes. It covers the basic camera controls, composition, digital imaging, black-and-white film developing, darkroom printing, and mounting. Students scan film and take photos with the school's digital cameras, using Lightroom and Photoshop to enhance their images. Each young photographer is expected to take part in critique, to exhibit work, to maintain a sketchbook, and to become familiar with some of the major figures in the history of photography.

#### **ADVANCED PHOTOGRAPHY – FINE ART (Major or minor)**

This course covers both analog and digital capture as well as advanced printing techniques in the darkroom and the digital lab. Students use the medium-format camera, the Holga camera, and the iPhone (or a school iPod). They explore lighting and lenses and learn about the work of current and past fine-art photographers. The young photographer is expected to develop a personal style, to participate actively in critiques, to maintain a sketchbook, and to produce a portfolio of work.

**Requirements:** Completion of Intro to Photography

#### **ADVANCED PHOTOGRAPHY – PHOTOJOURNALISM (Major or minor)**

The emphasis of this course is on creating documentary photo essays that are presented in book form. Students learn new skills including how effectively to tell story through images, incorporating text. They also learn the art of bookmaking, advanced digital capture, the use of flash, and the sequencing of images. We touch on the history of photojournalism, current figures in documentary photography, ethical questions that arise for photojournalists, and the art of critiquing both one's own and others' work. Students are expected to maintain a sketchbook.

**Requirements:** Completion of Intro to Photography

## **ARCHITECTURE**

The Architecture studio at PDS has come to mean the study of the whole built environment, which also includes Landscape Architecture and Urban Planning. The studio incorporates studies in design, rendering, history, theory, model making and social and cultural responsibility. Here the student will begin to master three areas: *critical thinking* (in research, analysis, design and in understanding of the built environment, as well as the theoretical and cultural context of its production); *design* (the ability to produce architecture through both reflection and invention); and *representation* (the ability to assemble, analyze, develop and communicate ideas through a wide range of media, especially drawing, model making, writing, and speaking).

The Architecture/Design student is unique in the sense that she/he needs to have a keen eye for history and society, because the role of the architect is a communicator of culture and a builder of structure that responds to social needs. Knowledge of history and literature is essential for meaningful participation in contemporary life as artists and designers in any field. Thus, the design student needs to think broadly and creatively and be open to new ideas.

Student work is evaluated through numerous critiques and reviews. In addition, field trips and visiting artists/architects help expand the realm of exposure to developments within the field. Returning PDS graduates who are currently working on degrees in architecture are especially inspiring during their visits throughout the year.

The fourth year architect student may develop a year of independent study in the studio with the permission of the instructor.

#### **INTRO TO ARCHITECTURE (minor)**

In order to understand architecture, engaging in a direct experience of space is critical. Fundamentally, the physical scale model allows us to perceive the three-dimensional experience rather than having to try to imagine it. In this studio, students profit from the dynamic relationship between learning basic design and architectural concepts and physically employing them in the construction of prototypes. Important architectural principles will be introduced through studio exercises, presentations and demonstrations. Here the student is introduced to historical ideas in architecture and begins to build informative models of influential designers to understand concepts. This course will help

to sharpen the student's powers of observation as well as his ability to conceptualize, analyze, and create within the world of architecture and design. Students will also explore concepts through drawing and abstract three-dimensional design constructions. The studio will focus on creative problem solving as well as artistic experimentation. Each student will be required to obtain basic construction and design tools.

#### **ADVANCED ARCHITECTURE II: THE PRIVATE HOME (Major)**

In this course students take all that they learned in the introductory course and begin to refine the ideas. Drawing and sketching become more pivotal as does problem solving through abstract three-dimensional constructions. Model making takes on a more important role as the process is used to explore and understand pivotal contemporary architectural movements. Group projects are used for some aspects of this course, but the main focus will be on individual

studio work with the design and construction of scale models for site-specific houses, one iconic and the other the creation of the student.

**Requirements:** Completion of Intro to Architecture

#### **ADVANCED ARCHITECTURE III: PUBLIC STRUCTURES (Major)**

Here the student becomes immersed in the concepts of public space: plazas, parks, memorials, museums, and performance centers. The student takes on complex ideas and finds solutions which express the needs of a particular culture and client. In the studio, which begins with some very abstract design problems, the student finds that seemingly diverse ideas can be beautifully orchestrated together. The final project brings all of the student's presentations and rendering skills together in one site-specific model.

**Requirements:** Completion of Advanced Architecture II

### **THE 3-D DESIGN STUDIO: FURNITURE AND SCULPTURE**

Design shapes our daily lives in so many ways. It creates both environments and objects while influencing our culture. It allows us to intentionally interact within our world and convey ideas, produce artifacts, affect behaviors and stimulate our imaginations. Today, furniture design and sculpture are breaking their traditional boundaries and expanding their concepts of design. Building an understanding of the connection between research, process, and the creative results, today's design students need to develop skills within a wide range of materials and techniques. This enables them to integrate concepts with studio abilities, helping them to realize their ideas. While inviting experimentation, these studios address practical matters of craftsmanship in conjunction with overall aesthetic considerations. Rigorous and innovative engagement with each assignment is critical for the success of a design studio. Excellence in both concept and execution is encouraged with each assignment. Drawing from rich traditions, both furniture design and sculpture bridge disciplines and historic movements that change and grow along with shifts in culture. Inspired by historical and iconic designs, the student is asked to respond and produce for the 21<sup>st</sup> century.

#### **INTRO TO FURNITURE DESIGN (minor)**

In this course students are introduced to basic design and woodworking skills that allow for creative self-expression. Students explore wood as a material, learn and practice proper safety procedures, and become acquainted with the tools and machinery of the design studio. Each student is required to design and build an original piece of furniture. Throughout the processes of design and fabrication, students are asked to explore and problem-solve, an

exploration that will include sketching and model making as well as some historical referencing. Projects will be evaluated and critiqued during various stages of these processes. This class encourages self-motivation, originality, and creative thinking. A disciplined work ethic is essential.

#### **ADVANCED FURNITURE DESIGN (Major)**

This studio is for serious, self-directed students who have demonstrated a proficiency in both design and fine woodworking and wish to continue to develop more advanced and refined skills. During the course of the year, students will create several pieces of their own design. Students will learn more sophisticated applications of joinery, material, and building techniques. Projects will be evaluated and critiqued during various stages of design and fabrication. For the student who has become comfortable with the demands of the design studio, this course invites self-motivation and original thinking.

**Requirements:** Completion of Intro to Furniture Design

#### **INTERMEDIATE SCULPTURE (Major)**

This course aims at developing a personal vision of sculptural forms and spaces. We will use traditional and contemporary materials to investigate a wide range of fabrication techniques. With a developed visual vocabulary, we will use additive and subtractive processes to explore line, texture, form, space, value, unity, proportion and balance. Students will build personal sculptures as well as collaborate on installations and large-scale outdoor works.

**Requirements:** Completion of any introductory visual or design art course

## **PERFORMING ARTS**

### **DANCE**

Dance at PDS offers opportunities for both the performer and choreographer, for beginners as well as advanced dancers. The impressive dance studio is home to all of the dance classes and rehearsals. An annual trip to NYC for all dance students, performances for all divisions at PDS, creation of dance videos, and a large showcase at the Performing Arts Festival are all opportunities for PDS' dance students. Beginning and intermediate dancers may take the year-long course The Performer in Action for art credit or a one trimester PE Dance course for PE credit. One trimester of PE Dance is typically devoted to world dance styles and musical theater while the other uses jazz/hip-hop in a performance-based class. Please contact Ann Robideaux, the dance teacher, to clarify which trimester is best in line with your interests. PE Dance is highly recommended for students interested in auditioning for the upper school musical or continuing on to the Advanced Dance class here at PDS.

#### **THE PERFORMER IN ACTION (minor)**

Musical theater, stage combat, physical theater, movement improvisation, the basics of dance technique, and acting are taken

from beginning stages through to production stage in this year-long course. This comprehensive view of theater, being comprised of voice and body, will allow each student to be prepared to encounter any opportunity that may surface in the theater world. Stan Cahill, theater artist-in-residence, leads students in the basics of acting while Ann Robideaux, PDS choreographer and dance teacher, hones in on essential dance skills and movement for the actor. Jeff Van Velsor, PDS Technical Director and Resident Set Designer visits at the end of the year to guide students through a theatrical production for the Spring Performing Arts Festival.

#### **ADVANCED DANCE: STYLES (minor)**

This course is for students interested in developing a conscious use of the body as an instrument of artistic expression. For dancers with a developed technical base, a number of movement styles will be explored at a quick pace, with a heightened emphasis on polishing performance. Choreography for small groups, duets, and solos also comprises a regular part of class work.

**Requirements:** Permission of instructor

## MUSIC

Opportunities to learn and participate in Music fall into three categories: performance based courses (Band, Chorus and Orchestra) which are graded, credited courses that meet during the class day; academic music courses, (Music Theory I, AP Music Theory and Music Technology); and extra-curricular activities for enrichment, which meet outside the class day (Chamber Music, Madrigal Singers, a Cappella Groups and the Musical production). Private music lessons in voice and all instruments are also available through the Adjunct Music Faculty for an additional fee.

### **BAND (minor)**

This course is for students who play woodwind, brass or percussion instruments and have the desire to practice and perform with an instrumental ensemble of their peers. The course is designed to help students improve both playing technique and music reading as well as to teach valuable performance and ensemble playing skills. Students in this course will study a wide variety of music including repertoire of various genres, composers, and style periods. The course meets two days each week during the class day. Students may be expected to attend sectional rehearsals (grouped by instrument) twice each month. The Band performs several times a year in school concerts and other community events. Students interested in playing guitar or piano require special permission of the instructor. An audition/interview may be required to determine the level of experience.

### **CHORUS (minor)**

This course is for students who enjoy singing and have the desire to practice and perform with a choral ensemble of their peers. The course is designed to help students improve both individual vocal technique and music reading and to discover how the voice works, as well as teach valuable performance and ensemble skills. It is understood that students have some background in music literacy. Students in this course will study a wide variety of music, including repertoire of various genres, composers, and style periods. Students are graded largely on participation and acquisition of singing skills. Students will have both written and individual performance exams each trimester. The Chorus performs several times a year in school concerts and other community events.

### **ORCHESTRA (minor)**

This course is for students who play string instruments and have the desire to practice and perform with an instrumental ensemble of their peers. The course is designed to help students improve both playing technique and music reading, as well as teach valuable performance and ensemble playing skills. Students in this course will study a wide variety of music including repertoire of various genres, composers, and style periods. The course meets two days each week during the class day. Students are also expected to attend sectional rehearsals (grouped by instrument) twice each month. The Orchestra performs several times a year in school concerts and other community events.

\*NOTE: A student may be a member of more than one of the above ensembles at the discretion of and through arrangement with the directors.

### **INTRODUCTION TO MUSIC THEORY I (minor)**

This course is for the student who wishes to pursue more knowledge of the inner workings of music. It is an introduction to the principles and practices upon which music is built. Students will learn analytical and compositional techniques that will be valuable to them as performers, listeners, and creators of music. This course will cover the following topics: rhythm, pitch, keyboard, intervals, major and minor scales, key signatures, and the circle of fifths. Students will also begin to develop their aural skills through sight-singing and melodic dictation. No prerequisite or prior knowledge of music is required.

### **MUSIC TECHNOLOGY (minor)**

This course focuses on the creative use of computers in music composition and production. Students will learn about the tools and techniques needed to produce high quality audio work. They will have the opportunity to learn these skills by creating their own compositions and arrangements on different types of software and hardware. Topics to be covered will include MIDI sequencing, sound synthesis, audio sampling, digital audio recording, and digital music notation. Students will be expected to acquire a basic understanding of music theory prior to taking this course.

### **AP MUSIC THEORY (Major)**

This is a course for the experienced music student (grades 10-12) to develop his/her creative skills while preparing to take the AP Music exam. Topics will include figured-bass realization, four-part voice leading, form, and analysis. Emphasis will be placed on mastery of aural skills including rhythmic, melodic, and harmonic dictation as well as sight-singing. Students will be expected to take the Advanced Placement Music Theory exam in May.

**Requirements:** Completion of Introduction to Music Theory

### **CHAMBER MUSIC (extra-curricular)**

Instrumental students are placed in small ensembles and work with a faculty member on selected repertoire of various styles. Rehearsals take place outside the school day or at mutual free times for the players and teacher. Emphasis is placed on collaboration, ensemble playing, and musical independence. Students participating in the Chamber Music program (open to grades 9-12) must be taking lessons with a private instructor (either at PDS or elsewhere). Chamber groups will perform in various settings throughout the year, including a Chamber Music Concert in the spring. (Chamber Music is also open to capable vocalists). Students must be enrolled in Band, Orchestra or Chorus to participate in Chamber Music.

### **MADRIGAL SINGERS (extra-curricular)**

The Madrigal Singers (open to grades 9-12) is an auditioned, mixed (SATB) group, which performs highly challenging music of various languages and styles, including classical, contemporary jazz, and pop styles, with a focus on a *cappella* singing. Princeton Day Singers will perform several times throughout the year at school concerts and community events. Students must be enrolled in Chorus, Band or Orchestra in order to participate in the Madrigal Singers. Auditions are held within the first weeks of the school year.

### **A CAPPELLA GROUPS (extra-curricular, student lead)**

PDS traditionally has an all female and an all male *a cappella* group. These groups rely heavily on student leadership and work in conjunction with the music faculty. Repertoire is generally contemporary pop. Auditions are held within the first weeks of the school year.

### **MUSICAL PRODUCTION (extra-curricular)**

Students (grades 9-12) interested in musical theater can audition to be part of the annual musical production, which is a joint project of the Theater, Dance and Music faculty in the Upper School. Rehearsals and performances run throughout the winter term. Auditions are held in November each year.

### **PRIVATE LESSONS (extra-curricular, additional fee)**

Private lessons are available in piano, voice, guitar and all string, woodwind, brass, and percussion instruments. PDS has an excellent Adjunct Music Faculty comprised of qualified instructors in each instrument. There is an additional fee for private instruction. Details about the Private Lesson Program, including fees, scheduling, and instructor bios can be obtained from the Music Department.

## THEATER

The Theater program stems from a long PDS legacy of high quality, multi-dimensional theater education and offers students experience in both live performances and technical theater. A wide range of opportunities is available, including classes, independent projects,

three annual Main Stage productions and frequent visits from theater professionals and guest artists. The award-winning program is housed in the McAneny Theater within the school complex. This 350 seat, state-of-the-art facility is augmented by a dance studio, a scene shop,

dressings rooms, costume rooms and a full range of technical facilities, including digital lighting and sound equipment.

### THE PERFORMER IN ACTION (minor)

This interdisciplinary course includes both dance and theater components. For a complete description, please see the entry in the Dance sub-section above.

### PERFORMANCE LAB (minor)

This class is dedicated to the cultivation of acting, directing, and writing skills through scene-study and performance. In addition to reading, analyzing, and performing scenes from contemporary playwrights, students will also work on material developed by their peers. The year will culminate in a fully mounted, public performance of one-act plays. Since the material covered is tailored to each class, students may take this course more than once.

**Requirements:** Completion of Foundation in Theatre/The Performer in Action

### INDEPENDENT STUDY

This option is available to students with specialized or advanced areas of interest. Proposals are subject to faculty approval. Previous areas of study have included topics ranging from Theater of the Absurd to computer-assisted design for the stage.

### THEATER PRODUCTION AND DESIGN (extra-curricular)

Students have the opportunity to work in all aspects of theater

production, including lighting, sound, costumes, props and stage management. Students will work with professional designers and technicians, using state of the art technology and equipment. Students also support assemblies, US productions, and visiting artists and serve as mentors to MS technicians. Student crews meet in the afternoons and at other scheduled times. (*Year round*)

### FALL PRODUCTION (extra-curricular)

Students experience all aspects of mounting a full-scale theater production. Cast members focus on character development, intentions and obstacles, stage composition and memorization. Student crews are responsible for running the show during performance. An audition is required. (*Fall term only*)

### MUSICAL PRODUCTION (extra-curricular)

This is the largest and most complex Main Stage production. Students work with guest artists while refining and building on performance skills. Students will also gain professional dance training as well as experience in solo/choral singing. High quality production values provide opportunities for advanced work by student crews. An audition is required. (*Winter term only*)

### PERFORMING ARTS FESTIVAL (extra-curricular)

This is a three-day marathon of shorter performances, many written, directed, and produced by students. Faculty and Guest Artist participation is also a valued part of the event. (*Spring term only*)

## TABLE OF ARTS OFFERINGS: 2 year-long arts minors or 1 year long art major are required for graduation.

Course	Major/Minor	Prerequisite
Intro to Architecture	Minor	None – foundation course
Advanced Architecture II: The Private Home	Major	Intro to Architecture
Advanced Architecture III: Public Structures	Major	Advanced Architecture II: The Private Home
Intro to Ceramics	Minor	None – foundation course
Advanced Ceramics	Major	Intro to Ceramics
Materials and Processes	Major	Intro to Ceramics
Intro to Fine Art	Minor	None – foundation course
Advanced Fine Art	Major	any introductory visual/design art course
Intro to Furniture Design	Minor	None – foundation course
Advanced Furniture Design	Major	Intro to Furniture Design or Intro to Architecture
Intermediate Sculpture	Major	any introductory visual/design art course
Intro to Video and Media Arts	Minor	None – foundation course
Advanced Media	Major	Intro to Video and Media Arts
Intro to Photography*	Minor	None – foundation course
Advanced Photography – Fine Art*	Major and Minor	Intro to Photography
Advanced Photography – Photojournalism*	Major and Minor	Intro to Photography
Intro to Music Theory	Minor	None
AP Music Theory	Major	Intro to Music Theory
Music Technology	Minor	None
Chorus	Minor	None
Orchestra	Minor	None – other than some instrumental proficiency
Band	Minor	None – other than some instrumental proficiency
The Performer in Action	Minor	None
Performance Lab	Minor	Foundation in Theater/The Performer in Action
Advanced Dance	Minor	Permission of instructor

\*N.B. All photography courses have a lab fee of \$150.00.

## HEALTH AND PHYSICAL EDUCATION

### PHYSICAL EDUCATION

All students are required to take six trimesters of physical education, one of which must be Health. A student may choose to fulfill the other five trimesters of this requirement either by taking regularly scheduled physical education classes or by joining athletic teams. All such activities are designed to instill a life-long commitment to physical

activity and maintaining good health and wellness. Physical education classes allow students to improve physical skills while learning to enjoy exercise and interaction with others. Some of the activities that are available include: strength training, ice skating, PE dance, and yoga. In addition, an adventure education course offers students a non-traditional approach that includes a combination of individual and group



challenges in an outdoor setting. Note that not all options are available every term. Also, PE Dance is designed for beginning and intermediate level dance students. One trimester of PE Dance is typically devoted to world dance styles and musical theater while the other uses jazz/hip-hop in a performance-based class. Please contact Ann Robideaux, the dance teacher, to clarify which trimester is best in line with your interests. PE Dance is highly recommended for students interested in auditioning for the upper school musical or continuing on to the Advanced Dance class here at PDS.

### HEALTH EDUCATION

As one of their six trimesters of physical education, students are required to take one trimester of Health; this is usually taken during the tenth grade year. This course includes an introduction to the concept of health, substance abuse, human sexuality, sexually transmitted diseases, contraception, and nutrition. The primary objective of the course is to provide students with information so they will be able to make responsible choices. Health is intricately involved in every aspect of human life, and we feel that students should be made aware of the value of attaining and maintaining good health. This course is required for graduation; therefore, a student who enters PDS after the sophomore year will need to be scheduled into this class unless he/she has completed an equivalent course at his/her previous school.

### PE INDEPENDENT STUDY

The Health and Physical Education Department will accept and evaluate applications to substitute outside activities in place of regular physical education classes for up to two terms of the school year. These activities must be supervised by an instructor/coach and not already be offered at PDS. Additionally, 10 hours of instruction is required weekly and progress report log sheets must be completed and submitted to the department head every other week. A student who is enrolled in a pre-

professional dance program may apply for an exemption for a third trimester of P.E. For more information contact the department head, Mark Adams.

### INTERSCHOLASTIC TEAMS

The PDS athletic department administers all varsity and sub-varsity teams for boys and girls. Interscholastic competition begins in sixth grade and continues through upper school. PDS fields 52 teams in 15 sports. By competing with other schools, students broaden their outlook while matching their physical skill and knowledge of game strategy against their peers. Coaches instill the values of team play, good sportsmanship and respect for rules and authority.

### GIRLS' TEAMS

**Fall:** field hockey, soccer, tennis  
**Winter:** basketball, ice hockey, volleyball  
**Spring:** lacrosse, softball

### BOYS' TEAMS

**Fall:** soccer  
**Winter:** basketball, ice hockey  
**Spring:** lacrosse, baseball, tennis

### COED TEAMS

**Fall:** cross-country  
**Winter:** fencing, squash  
**Spring:** golf, figure skating

### SIGN-UP PROCEDURE

Students sign up for PE/Health courses and athletics at the same time that they sign up for all of their other courses, though they may make changes later as space permits.

## PEER LEADERSHIP TRAINING

Peer Leadership Training is both a two-thirds-credit leadership course for seniors and a mandatory year-long orientation program for all freshmen making the transition to the upper school. Eighteen seniors are selected as peer group leaders and are trained by faculty supervisors in group dynamics and leadership techniques in a class that meets three times a week. The student training begins in the late summer with a three-day overnight retreat. The program for freshmen

begins with an all-day retreat away from school to acquaint them with each other and with program objectives. Throughout the academic year, peer leaders conduct weekly discussions with freshmen on topics such as peer pressure, academic concerns, drug and alcohol abuse, and boy/girl relationships. Peer leaders sponsor a parent/student get-together to discuss conflict mediation between parents and adolescents.

## COMMUNITY SERVICE

By September of the senior year, all students must complete a minimum of 50 hours of service, the majority of which must be focused within a single area of concentration. While opportunities to serve with local agencies or at individual events are regularly posted and announced by members of the Community Service Committee, which oversees and promotes the program, students are actively encouraged to develop and specifically guided in carrying out their own projects aimed at addressing a genuine need, whether in the neighborhood, state, country, or world around them. A central goal of the program is to help students better appreciate both the value of selflessly sharing their time and talents and the natural interconnectedness of our lives, in short, to enrich the human connection. See the school website at <http://www.pds.org> for more details.

### TAP PROGRAM

As service to the PDS community is one of the recognized areas of concentration, students may elect to work with lower or middle school teachers in the Teacher Assistant Program (TAP), which places the upper-schooler under the direction of a single teacher who facilitates the student's interaction with the younger children: one-on-one help, aiding in the direction of classroom activities, even teaching the full class. Both the younger and older students benefit, gaining valuable experience and knowledge and forming special bonds, further knitting together the three divisions of the school.

## EXCHANGE PROGRAMS

PDS offers upper school students in their junior year a remarkable array of opportunities to pursue studies off-campus, both through semester schools and study abroad programs. PDS also offers admission to one foreign exchange student in their sophomore or junior year. Students who are interested in participating in these off-campus opportunities, as well as PDS families interested in hosting a foreign exchange student, should contact the Exchange Program Coordinator, Maria Shepard, either via email at [mshepard@pds.org](mailto:mshepard@pds.org) or by phone at 609-924-6700 x1747.

### SEMESTER SCHOOL PROGRAMS

#### CHEWONKI SEMESTER SCHOOL

Formerly known as the Maine Coast Semester, Chewonki Semester School was established in 1988 by S. Scott Andrews, currently a faculty member teaching U.S. History. Located in Wiscasset, Maine, Chewonki offers 11<sup>th</sup> grade students a challenging academic program with an emphasis on environmental studies. Students in the school

study the natural history of the Maine coast, work on an organized farm, go on two short wilderness trips, help maintain the campus, and participate in a rigorous academic program. Each semester is sixteen weeks long, and up to 40 students are offered admission for each. For more information, please visit The Chewonki Semester School website: <http://www.chewonki.org/mcs/>.

#### **CONSERVE SCHOOL**

Established in 2002 and located in Land O'Lakes, Wisconsin, Conserve School is a semester school for environmentally and outdoor minded high school juniors. For seventeen weeks, students pursue a program of environmental studies and outdoor activities designed to deepen their love of nature, reinforce their commitment to conservation, and equip them to take meaningful action as environmental stewards. The program interweaves college-preparatory academics with the study of environmental history, nature literature, and the science of conservation, environmental service work, exploration of careers related to conservation, training in teamwork and leadership, and engagement with the outdoors. Up to 60 students are offered admission each semester. For more information, please visit the Conserve School website: <http://www.conserveschool.org/>.

#### **HIGH MOUNTAIN INSTITUTE**

Formerly known as the Rocky Mountain Semester, the High Mountain Institute was founded in 1995 by Molly and Christopher Barnes in the spirit of combining wilderness education with traditional academics. Located in Leadville, Colorado, the HMI Semester offers 11<sup>th</sup> grade students the opportunity to live, travel, and study in the mountains of central Colorado and the canyons of southeastern Utah. Students spend five weeks over the course of the semester on three wilderness expeditions that focus on leadership and community-building and twelve weeks on campus completing a standard junior year curriculum. Each semester up to 42 students are offered admission. For more information, please visit the HMI website: <http://www.hminet.org/HMIsemester>.

#### **SCHOOL FOR ETHICS AND GLOBAL LEADERSHIP**

Located in Washington, DC, and established in 2006, the School for Ethics and Global Leadership is a semester school for high school juniors. The school's residential facilities are located on Capitol Hill right behind the Supreme Court, and its academic building is a block from Dupont Circle. Its rigorous academic program focuses on ethical thinking skills, leadership development, and international studies. In addition to completing a standard junior year curriculum, students take an ethics and leadership course. The program features visits to and by prominent speakers in such fields as foreign policy, public service, diplomacy, law, and humanitarian aid. Each semester is sixteen weeks long, and up to 24 students are offered admission for each. For more information, please visit the School for Ethics and Global Leadership website: <http://schoolforethics.org/>.

## **STUDY ABROAD PROGRAMS**

#### **SCHOOL YEAR ABROAD**

Founded in 1964, School Year Abroad is an academic program which places American high school juniors, seniors, and post-graduates in 4 countries, including China, Italy, France, or Spain, for a year. Students intensively learn the respective language of their country and live with a host family. The program includes extensive cultural immersion and a number of select courses taught in the native language. Requisite subjects, such as math and English, are taught in English. Extracurricular activities and organized travel round out the year. The program provides academic advisors and college counseling services and administers the AP, SAT, SAT II, and PSAT tests at each school. Each year SYA brings around 60 juniors and seniors to each of its locations around the world. For more information, please visit the School Year Abroad website: <http://www.sya.org/>.

#### **FOREIGN EXCHANGE STUDENT**

Each year PDS serves as a host school to one foreign exchange student. Foreign exchange students are selected from a pool of ASSIST scholars. ASSIST is a non-profit organization founded in 1969 with the mission to discover, select, place, and support outstanding international students in American independent schools. Since 1987, we have hosted 21 ASSIST scholars from Germany, Spain, Hungary, the Czech Republic, Sweden, and Australia. Because of the high academic caliber of the exchange students and the generosity of PDS families who have opened their homes to these young men and women, this program has been a success. Any PDS family is eligible to serve as a host family, although preference will be given to families with children in the Upper School. If you are interested in hosting an ASSIST scholar, please contact the Exchange Programs Coordinator, Maria Shepard, either via email ([mshepard@pds.org](mailto:mshepard@pds.org)) or by phone at 609-924-6700 x1747. For more information, please visit the official website for ASSIST: <http://www.assist-inc.org/>.

#### **ADDITIONAL INFORMATION**

PDS encourages students to attend the programs listed above; however, students may ask the school to consider other programs as well. Upon further review of such programs, decisions will be made on an individual basis in consultation with the Head of Upper School. Special consideration will be given to study abroad programs endorsed by the Council of Standards for International Educational Travel (CSIET), an accrediting body to which PDS belongs.

While PDS tuition may be waived for students participating in all long-term programs, no more than 3 students can receive such financial consideration at one time; such decisions will be made by PDS on a first-come/first-served basis.

## **SENIOR PROJECT**

Each senior is required to arrange for an independent project, which will take the place of courses other than AP courses or courses required for graduation (such as a religion course) during the last six weeks of the third trimester. Faculty advisors guide students to create projects that suit individual interests and needs. Senior Projects include a wide variety of internships, research projects through the school or local

universities, and community service organizations. Seniors have also chosen to write and produce plays, produce films, or perform musical concerts. All projects include a presentation to a committee of students and teachers plus a written report. Successful completion of the Senior Project is a requirement for graduation. For more information, contact Elizabeth Monroe or Brian Mayer.

## CURRICULAR CHOICE FROM A COLLEGE COUNSELING PERSPECTIVE

### WHAT COURSES SHOULD BE TAKEN FOR COLLEGE?

While many factors enter into college admissions decisions, an applicant's academic performance is paramount. When colleges evaluate a high school transcript they look into two factors: the rigor of the program of study and a student's level of achievement. **This means that students should take the most demanding program that they can comfortably handle, balancing rigor and achievement.** With the wide range of offerings at Princeton Day School, students can be tempted down new and interesting avenues. The College Counseling Office encourages students to follow their passions and explore their curiosities while fulfilling their PDS diploma requirements and meeting, if not exceeding, colleges' entrance requirements. **In addition, before enrolling in six majors, know that doing well in five courses is better than struggling in six.**

### WHAT COURSES ARE DESIRABLE WHEN APPLYING TO COMPETITIVE COLLEGES?

In general, most four-year colleges expect to see the following classes on a high school transcript. However, one should check the admission requirements for each school in which one is interested. Keep in mind that the courses listed below are the minimum recommendations.

- 4 years of English
- 3-4 years of mathematics, or through pre-calculus
- 3 years of one modern or classical language
- 3 years of science (at least 2 lab courses)
- 3 years of history/religion
- 1 year of fine arts

Having four years in as many core areas as possible is often most desirable to traditional colleges. During their senior year, some students may choose to forego a fourth year of science, history, or language in order to "double up" in a favorite area. Students are strongly recommended to take at least four of the five core curricular areas (English, math, science, history, language) during their senior year.

### WHAT IF YOU ARE DOING POORLY IN A COURSE?

If you have consistently struggled with one subject, stopping your work in that area once you have met PDS's graduation requirement probably makes sense. If you generally do well in a subject area but have had one bad term, however, we encourage you to continue with the discipline and the level. Our hope is that you will be able to improve your grades in subsequent terms and thereby demonstrate that the earlier low grade was an aberration.

### HOW DO SELECTIVE COLLEGES VIEW ARTS COURSES AND MINORS?

We offer an unusually rich and diverse array of arts courses at both the major and minor level. Art Schools and colleges view majors in the arts as a core course and put a great deal of academic consideration into these courses. However, other colleges generally view art courses, as well as Peer Group and other minors, as extremely valuable and interesting additions to a curriculum but not as replacements for the "core" building blocks.

### WHAT ARE SPECIALIZED PROGRAMS LOOKING FOR?

While many students ultimately enroll at liberal arts institutions, several each year consider a focused, post-high school study in a specialized field. The appropriate high school curriculum for these programs may

look a bit different. Be sure to meet early on with your adviser and the head of the appropriate department for suggestions on how to select those courses that will prepare you best.

**Architecture Schools** prefer several years of architecture as well as courses in the fine arts. These are needed in order to create a required portfolio. Architecture programs vary widely in their requirements, however. For example, some programs desire coursework and SAT Subject Tests in math and physics.

**Engineering Programs** generally require four years of rigorous math and science, including at least basic courses in both chemistry and physics. Many programs require SAT Subject Tests in math and science for admission. Coursework in computer science is also a plus.

**Art, Drama, or Music Programs** vary a good deal. Conservatory programs, which focus almost entirely on your major, primarily consider an audition/portfolio. However, many comprehensive universities and small colleges also have exceptional programs in the arts. These colleges require the same demanding courses and grades for all applicants.

### WHAT ARE AP CLASSES AND ARE THEY IMPORTANT?

AP (Advanced Placement) classes follow a nationally prescribed curriculum that culminates in a comprehensive exam in May. If one does well on this exam (usually a 4 or a 5), some colleges grant credit, placement into a higher-level college class, and/or exemption from college distribution requirements. (At PDS, all students enrolled in an AP class are required to take the exam.) AP courses are considered college level courses, use college level texts, have college level expectations, and demand a college level commitment. AP classes, therefore, are one way to add rigor to one's schedule.

Different AP classes have different prerequisites; please carefully review the prerequisites listed in each course description.

Please note that there is no course called "AP English". All of our junior and senior English electives are taught at the advanced level. In addition, some students still choose to take the AP English Literature exam. Students interested in pursuing this option should talk to the English Department Chair.

AP scores are not sent to colleges by PDS and are not college admission tests. However, you may include them on your application if you choose.

### CLASSES AT PRINCETON

Princeton University allows local high school juniors and seniors to take classes in math, biology, physics, chemistry, modern/classical languages, computers and music -- if they have completed all the possible course work at PDS in the field of interest, received no grade below an A- in those courses, and have an overall GPA of 3.5-4.0. Additionally, the student must take either the AP exam or the SAT Subject Test and achieve a minimum score set by the university.

### WHAT IS THE TYPICAL CURRICULUM FOR EACH GRADE?

The typical expected course load is five "core" majors plus one or two minors. Students' advisors, the department chairs, and the college counselors work together to help students craft an academic schedule that incorporates the appropriate mix of challenge and balance across core academic disciplines and the arts. Please refer to the individual department sections of this guide for possible course sequences in each grade level.