

UPPER SCHOOL
COURSE SELECTION GUIDE



2018 - 2019

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Course Descriptions Choosing Your Courses

PLEASE NOTE:

Major courses meet four or five days per cycle;
most minors meet two or three days per cycle.
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.



2018 - 2019

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
- 3 credits of history, including American History in 10th grade and one religion
- 2 credits of core (laboratory) science
- 2 credits of one modern or classical language
- 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 10th 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.

TABLE OF CONTENTS

COURSE DESCRIPTIONS

English	1
History.....	4
Classical and Modern Languages.....	6
Mathematics	10
Some Possible Mathematics Sequences	11
Computer Science	11
Science	12
The Arts	14
Visual & Design Arts	14
Studio Art (Drawing, Painting, Multimedia).....	15
Ceramics	15
Photography.....	16
Architecture	16
3D Design Studio	17
Performing Arts	17
Dance	17
Music.....	18
Theater.....	19
Table of Arts Offerings	19
Health and Physical Education	20
Bridges.....	20
Peer Leadership Training.....	20
Community Service.....	20
Exchange Programs	21
Senior Project	21

CURRICULAR CHOICE - COLLEGE COUNSELING PERSPECTIVE

What Courses Should Be Taken for College?	23
What Courses Are Desirable When Applying to Competitive Colleges?.....	23
What Is the Typical Curriculum for Each Grade Level?	23
What Are Specialized Programs Looking For?	23
How Do Selective Colleges View Arts Courses Taken at PDS?	23
What Are AP Classes and Are They Important?.....	23
Classes at Princeton University	23

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.

ENGLISH IX—SEARCH FOR SELF: LITERATURE ACROSS CULTURES AND AROUND THE GLOBE

Students entering the ninth grade are just beginning to step back and question themselves and their surroundings, exploring in various ways their autonomy. This course is designed to help them discover and nurture their powers of self-reflection in thought, feeling, and expression. English IX will examine an essential question: Who am I? It will explore the power of words and of storytelling to help us give shape and meaning to our experience and to our sense of self and community. Reading and discussing texts that span the globe, students will come to understand themselves, others, and the interconnectedness of all cultures.

As the humanities component of the PDS ninth grade experience, English IX will work to accomplish distinct literature goals and introduce essential skills. The course will be divided into three parts.

To help ninth graders transition to upper school at PDS and to establish a sense of belongingness and inclusivity, we will begin the year with personal narrative writing. Using our required summer reading as a point of comparison, students will define and question their own backgrounds and values. They will reflect on how they have emerged into their present states. This part of the course will provide opportunity to share personal and culturally diverse narratives.

Working with a selection of foundational literary texts, first trimester will introduce and hone critical reading skills and seminar style discussion. Students will read for theme, character, symbol, tone, voice, and style. They will write formal, analytical essays and personal responses to the stories they read. They will also craft short stories and poems. During the third trimester, students will write a short research paper that will help them become familiar with the resources available through the

PDS libraries, strengthen their research skills, and learn to use information technology efficiently and wisely. The goal is not simply to improve writing skills, but to strengthen the students' sense of self-confidence about their individual powers of self-expression.

During the second and third trimesters, we will read stories from different cultural perspectives. *Purple Hibiscus*, *To Live*, *Persepolis*, *When I Was Puerto Rican*, and *The Odyssey*, among others, will showcase characters in conflict with their familial, religious, and/or cultural roots. These stories of journey and self-discovery align with the global case studies students will be examining in their Religion in World History course across Shepherd Commons. There will be ample opportunity for shared discussion and assessments as well as a final project that will allow students to articulate their understanding of how stories help determine self and how they teach, preserve, and build cultural identity.

ENGLISH X—AMERICAN LITERATURE: JOURNEY, CONFLICT, AND THE AMERICAN DREAM

Tenth grade is a year when students come into their intellectual and analytical power. English X nurtures this developmental phase by focusing on close reading and analysis of text. The course is designed to help students grow as readers and thinkers who can interpret beyond the literal and respond to a text in more nuanced and complex ways, both critically and creatively. Whereas English IX looked outward to examine literature from around the globe, English X will turn inward to examine American literature.

Ours is a rich literature of trials and tribulations, successes and failures, hopes and dreams. It is a literature of journey and self-discovery, a literature of grappling with and articulating the American dream, a literature of assimilation and self-reliance, of subjugation and betrayal. English X will trace the competing narrative threads that define American literature and the American sense of self. Essential questions of the course include: What does it mean to be an American? What are the distinguishing features of American culture and of the American story?

Students will engage in close reading of *The Scarlet Letter*, excerpts from the essays of Ralph Waldo Emerson and Henry David Thoreau, *Adventures of Huckleberry Finn*, *The Great Gatsby*, *Slaughterhouse-Five*, *The Bell Jar*, *Song of Solomon*, and select plays, poems, and short stories. They will be encouraged to ask open-ended questions in writing and discussion and to connect one piece of literature to another, to the U. S. history they are studying, and to their own experiences. Students will write both critical and creative responses to the texts they read. They will also assemble a poetry portfolio and draft several short pieces of fiction. The course will culminate in a research project that will allow students to draw explicitly on materials, information, and knowledge they have gathered in both English X and U.S. History.

Grades Eleven and Twelve - Electives

Next year as we move to semesters, the English Department will continue to offer a range of electives for juniors and seniors. During the fall semester, juniors and seniors will enroll in one of fourteen electives designed to strengthen their skills as readers, writers, and critical thinkers. In late January, juniors will begin a second semester English course with a focus on writing; seniors will participate in a short reading intensive course followed by our signature A Life that Works seminar.

Semester Electives for Juniors (Fall and Spring) and Seniors (Fall Only)

Please Note: What follows is a general listing of frequently offered English electives. An updated list of English electives scheduled to run for the coming fall is published each spring, at which time students sign up for a course through their current English classes. Spring electives will be selected late in the fall semester.

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 *Black Boy* (Wright); *A Prayer for Owen Meany* (Irving); *Emma* (Austen); *All Quiet on the Western Front* (Remarque); *The Glass Menagerie* (Williams); *The Absolutely True Diary of a Part-time Indian* (Alexie); *Extremely Loud, Incredibly Close* (Foer), *The Glass Castle* (Walls), and/or *Drown* (Diaz), as well as selected poetry and short stories. 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.

CONSTRUCTIONS OF RACE IN AMERICAN LITERATURE

In 2013, The New York Public Library sponsored a conversation between Toni Morrison and Junot Diaz. At one point in their discussion, Diaz described Morrison's work (both as an editor and a writer) as significant because it "shift[ed] the narrative center of the telling." Morrison then added that the "shift" allowed many writers, especially those of color, to "dig" into their own soil.

In this course, we will explore how race is constructed in literature by holding texts from different time periods (from colonization all the way to globalization) in conversation with one another. As we do so, we will explore these essential questions: What are the stories of the American soil? What happens to "race" and "nationality" when the "narrative center of the telling" begins to shift and dismantle? What does it mean to be an American? How is contemporary literature by writers of color helping to revise, rewrite, and reimagine America? How does American literature help us think through privileged and marginalized identities? Over the course of the term, we will dig into a variety of authors and theorists including: Ben Franklin, Ralph Waldo Emerson, Mark Twain, Walt Whitman, James Baldwin, Toni Morrison, Cornel West, Henry Louis Gates, Octavia Butler, Maxine Hong Kingston, Kwame Appiah, David Mura, Jhumpa Lahiri, Sherman Alexie, Junot Diaz, and Chimamanda Adichie. Expect lots of lively discussion and self-reflection.

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 setting and character sketches, dialog, poetry, short stories, sudden fiction, literature-based responses, plays, and screenplays. 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. 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 an eagerness to explore (and help others explore) the range and depth of their voices as writers.

GENDER AND LITERATURE

From 1966 until 2014, the comic book character of Thor epitomized heroic masculinity. Last year, Thor became a woman. Marvel writer Jason Aaron wrote that he wanted someone else to "pick up the hammer," and that someone should be a woman. In "Flawless," Beyonce samples Chimamanda Adichie's Ted Talk: "Everyone should be a feminist." What it means to be a male or female seems to be quite complicated these days. Yet, from the mythic Guan Yin to the prophet Tiresias to the cross-dressing Shakespearean players/characters, these issues of sex and gender aren't necessarily new. In this course, we will explore constructions of gender identity in literature and language. To what extent is it merely a switching out of roles and, to use Aaron's words, "picking up the hammer?" What does it mean to have a gender identity? How does one's gender identity affect how one perceives and is perceived by the world around him/her? To what extent does race, class, and language shape gender?

In this two-term course, we will read a range of texts including fiction, non-fiction, memoir, poetry, and gender theory. Topics will include:

gender roles/performativity, feminism, race, and sexual orientation. Possible texts include: Virginia Woolf's *Orlando*, Beauvoir's *The Second Sex*, Diaz's *Drown*, Eugenides' *Middlesex*, Kingston's *The Woman Warrior: A Girlhood Among Ghosts*, Palahniuk's *Fight Club*, and Kristof's and Wu Dunn's *Half the Sky*. We will also read shorter selections by Edwidge Danticat and Haruki Murakami. If time permits, we'll watch *Miss Representation*.

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 various essays and shorter pieces 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. Yes, the world is a hostile place, and the hero must muster 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 the familiar patterns of the hero's story change in later historical and cultural traditions. We will look at the changing roles of heroes and villains in such works as *One Flew Over the Cuckoo's Nest* by Ken Kesey; *Beowulf*, *Grendel* by John Gardner; *Sir Gawain and the Green Knight*; 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, creative writing, formal research, and class presentations. We'll search for the heroic within and talk about how literature and stories can inform our inner lives.

(HI)STORY IN FILM AND LITERATURE

Every picture tells a story and every story is made up of words spun together to form vivid images on the page. "(Hi)Story in Film and Literature" will explore the ways in which both film and literature work to preserve, critique, and even reinterpret the past. Working with the assumption that history books, historical documents, artifacts, and public records are not the only way to learn about the past, this course will look to film and literature as valid forms of a collective "cultural memory." Whether we are examining the French Revolution, the antebellum South, WWII, the Native American experience, or Vietnam, we will seek to understand significant moments in history through stories that have been crafted in words or in moving pictures. We will explore how artistic works of various eras celebrate, criticize, or reconstruct the past. Alongside our study of *what* story is being told, we will question the different perspectives *from which* all (hi)stories can be told (victor, victim, male, female, upper class, the masses, the young, and the old). Works read may include Dickens' *A Tale of Two Cities*, Benioff's *City of Thieves*, Zusak's *The Book Thief*, Hemingway's *A Farewell to Arms*, and Saffron Foer's *Extremely Loud & Incredibly Close*. Films may include *Marie Antoinette*, *Au revoir les enfants*, *Bonnie and Clyde*, *Little Big Man*, *Django Unchained*, and *Zero Dark Thirty* or *American Sniper*. Students will do historical research on each period studied, present "History blips" to the class, and keep a journal of the discoveries they make while reading and viewing works from different moments in history. They will craft several close analysis essays, a film review, and a creative story retelling an important historical event from an "untraditional" perspective.

HOMER'S ODYSSEY: ANCIENT MYTHS/MODERN LIVES

American students sometimes feel guilty about their limited knowledge of Greek mythology, much of which may be based on unreliable sources: Disney movies, novels by Rick Riordan, or a favorite childhood storybook. Yet even greater writers like Shakespeare and Chaucer borrowed selectively from Greek mythology, putting together parts of the whole that best served their artistic purposes. The surest remedy to complete one's imperfect understanding of mythology is to read Homer. All mythic roads lead back to Homer in 800 BCE, and hundreds of tales and characters are embedded within his epic, *The Odyssey*. Homer stands at the end of a four-hundred-year bardic tradition of storytelling, and through his artful digressions, ecphrastic poetry, flashbacks, biographies of warriors, and stories within stories, he fashions a comprehensive and curious mythological world, a world that many subsequent writers and artists reference, re-fashion, reject, or emulate.

In this course students will first read and study Homer's *The Odyssey* in its entirety and then explore how Homer's mythic universe helped to shape the visions of later artists and intellectuals throughout the world. After a close reading of the epic, a review of Trojan War myths and tales from *The Iliad*, and an introductory study of the Greek alphabet and language, students will critique works of secondary criticism, essays, poems, short stories, and works of art inspired by Homer and Greek mythology. In addition to *The Odyssey*, possible readings and art works include: Margaret Atwood's *Penelopiad*, the Coen brothers' film *O Brother, Where Art Thou?*, Ovid's poem *Heroides*, Book 3 of Plato's *Republic*, *Odyssey* paintings by John William Waterhouse, the poems of C. P. Cavafy, Derek Walcott's *Omeros*, and the opera *Les Troyens* by Berlioz.

LIGHTING OUT

Are there answers and strategies you might put in place right now that could help you rethink—and then improve—your approach to living, your journey through life? Or, as Steinbeck indicated, are you only pretending you might have control: "A journey is a person in itself; no two are alike. And all plans, safeguards, policing, and coercion are fruitless. We find that after years of struggle that we do not take a trip; a trip takes us." But if he is wrong, could you create a life that is based more on *well-being* and *being well*—right now at P.D.S.?

In *Lighting Out* you will explore this journey-based question by reading texts that capture the key stages of the human journey through time (childhood, adolescence, emerging adulthood, adulthood, parenthood, mid-life crisis, old age, death). The conflicts and potential solutions you gather while reading longer works—*Half Broke Horses* (Walls), *The Alchemist* (Coelho), *Clockwork Orange* (Burgess), *A Raisin in the Sun* (Hansberry), *Candide* (Voltaire), *Slaughterhouse Five* (Vonnegut), *Siddhartha* (Hesse) in addition to your own experiences and real-life observations and stories of others—will allow you to compare and contrast as well as form hypotheses. Psychological studies, poetry, plays, short stories and films (*The Red Balloon*, *Rebel Without a Cause*, *Parenthood*, and *The Color Purple*) will also serve as supplemental guides as well. Your quest will also involve visits to kindergarten and eighth grade, interviews with college students and emerging adults, discussions with parents and grandparents, and a visit to a home for the elderly. You will write creatively and analytically and explore—from fuzzy first memory to your Last Will and Testament—what you think about how to live, how not to live, and why. "It is good to have an end to journey toward; but it is the journey that matters, in the end." (Hemingway)

THE MARRIAGE PLOT IN BRITISH AND AMERICAN LITERATURE

From William Shakespeare to Jeffrey Eugenides, writers have long contended with the complexities of marriage. In her essay "Why the Marriage Plot Need Never Get Old," novelist Adelle Waldman suggests that the endurance of the plot "derives from the internal and the timeless—from conflicts rooted in...human nature and the persistent difficulties of social life." Out of that difficulty rises a desire for the happy ending, which in literature so often takes the form of a marriage. In this course we will consider marriage in its literary, cultural, legal, and historical contexts, beginning with *Much Ado About Nothing* and moving through such classics as *Wuthering Heights*, *Emma*, *The Custom of the Country*, and the play, *The Importance of Being Earnest*. Through satire, comedy, and gothic drama, with men as maddening as Heathcliff and intelligent as Mr. Knightley and women as ambitious as Undine Spragg and as acerbic as Gwendolyn Fairfax,

these texts will challenge and shape our concept of the marriage plot. We will also examine the ways in which contemporary texts question the validity and significance of the marriage plot, most notably in films like *Four Weddings and a Funeral* and Eugenides' aptly titled novel *The Marriage Plot*. We will also write critical essays and reflections as well as engage in research and creative projects.

THE MODERN PICARESQUE NOVEL

With its style originating in the sixteenth century and, arguably, its roots going back 2700 years ago, the picaresque novel typically depicts a hilarious tale of satire and adventure, a story about a *picaresco* or rogue, typically a person of low social class who lives off of his wits in a corrupt society. Like Holden Caulfield and Huck Finn, the rogue, while highly flawed, is at heart a romantic and preferable to those around him. As we navigate the texts of the course, we will come back to certain key questions over and over again: Why has this four-hundred-year-old-plus genre that predates the novel endured? What role does the environment we live in play in the shaping of the rogue? Does the physical or psychological journey that the rogue embarks upon shape his or her ideals or do his or her ideals shape the journey? And why are we almost always charmed by the rogue despite his or her numerous faults? Naturally, there is a good degree of variation in the modern picaresque novel. Earlier works may include excerpts from Miguel de Cervantes' *Don Quixote*, Geoffrey Chaucer's *Canterbury Tales*, and Homer's *The Odyssey*. More contemporary works may include *Bridget Jones's Diary* by Helen Fielding, *Cannery Row* by John Steinbeck, *Straight Man* by Richard Russo, *Karoo* by Steve Tesich, and *Angela's Ashes* by Frank McCourt. Writings will include critical essays, short responses, personal narratives, and creative pieces modeled on some of the works we read.

NEW YORK STORIES

"There are roughly three New Yorks," E.B. White writes in *Here is New York*. "There is, first, the New York of the man or woman who was born here, who takes the city for granted and accepts its size and its turbulence as natural and inevitable. Second, there is the New York of the commuter—the city that is devoured by locusts each day and spat out each night. Third, there is the New York of the person who was born somewhere else and came to New York in quest of something...Commuters give the city its tidal restlessness; natives give it solidity and continuity; but the settlers give it passion." In this course we will explore New York City's restlessness, solidity, and passion as reflected in stories, novels, and poems written over the last 150 years. We will begin in the "Gilded Age" of the late 1800s; pass through the buoyant, claustrophobic immigrant tenements of the early 20th century; and revel in the excesses of the Jazz Age in the roaring twenties, when the arts budded on street corners from Greenwich Village to Harlem. Our literary tour will end "after the fall" in today's post-9/11 city. Readings will include such works as Melville's *Bartleby, the Scrivener*; Wharton's *Age of Innocence*; Fitzgerald's *The Beautiful and the Damned*; White's *Here Is New York*; Hamill's *Invisible City*; Smith's *A Tree Grows in Brooklyn*; and a range of poems, short stories, and essays. Writings will include critical essays and creative pieces growing out of the reading, and students will complete a research project on a topic of their choosing, as we explore both the literary landscape of New York City and the larger question of what it means to define ourselves in terms of a place.

POETRY MAKING

What is the place of poetry and poetry making in the world today? The poet Jane Hirshfield has said that poetry is "where the thinking of the heart, mind, and body come together. Its role is to forge a musical, intellectual, and emotional knowledge in which those different dimensions of human consciousness can be brought into one field where we can be fully human. The role of the arts, especially in our increasingly technological culture, is to discover and preserve that way of interconnected thinking." In this class, we will explore the role of poetry in our lives and interrogate its musical, intellectual, and emotional forces. We will consider 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. As readers and writers, we will learn how to dwell with a poem, how to enter into a conversation with it in our journals and class discussions, and how to gather our findings into focused essays that are at once analytical and personal. Experimenting with a variety of forms, each student will gradually create a portfolio of poems to share in performance. Along

the way, students will immerse themselves in one poet's work and share what they learn with the class.

PSYCHOLOGICAL LITERATURE

There's a theory that we need the insane to help us define what it means to be sane and to reassure ourselves that we are "normal." Who decides what is "normal"? Is it a goal? Why do we fear, even loathe, the "Other"? How do we move from judgment toward forgiveness, acceptance, connection, and healing? We read several works that present different perspectives on sanity, madness, forgiveness, and redemption and raise questions about how we perceive and interpret reality. A variety of readings—novels, short stories, plays, memoir, non-fiction, and poetry—may include Stephen Chbosky's *The Perks of Being a Wallflower*, Mark Haddon's *The Curious Case of the Dog in the Night*, Fitzgerald's *Tender is the Night*, Iain Banks' *The Wasp Factory*, Peter Shaffer's *Equus*; Kay Redfield Jamison's *An Unquiet Mind*; Sam Shepard's *Buried Child*, Chuck Palaluniak's *Fight Club*; short stories by J.D. Salinger, Flannery O'Connor, and Franz Kafka; poetry by Emily Dickinson and others; and writings by and about Sigmund Freud. Our writings will include personal and creative responses, analytical essays, a short story, and an individual research piece.

RED HERRINGS AND (LITTLE) GREY CELLS: THE DETECTIVE IN FICTION

There is something immensely satisfying about curling up with a good mystery novel, whiling away the time reading about secrets, lies, murder, and mayhem from the safety of our own living rooms. But why? What is it about the genre that has made it so enduringly appealing? Throughout this course we will strive to articulate an answer to that question while we examine the evolution of the fictional detective, from Edgar Allen Poe's Dupin to Walter Mosley's Easy Rawlins. We will consider the ways in which these detectives reflect the time and place of their creation and what their moral codes tell us about our own society. We will also hone our own detective skills as we analyze dialogue for means, motive, and opportunity, dissect plots to distinguish between red herrings and genuine clues, and, of course, try to figure out "whodunit." Possible texts include *The Moonstone* by Wilkie Collins, *The Hound of the Baskervilles* by Sir Arthur Conan Doyle, *Murder on the Orient Express* by Agatha Christie, *The Maltese Falcon* by Dashiell Hammett, *Devil in a Blue Dress* by Walter Mosley, *A Dark Adapted Eye* by Ruth Rendell, *In Cold Blood* by Truman Capote, and *The Manual of Detection* by Jedediah Berry, as well as selected short stories, essays, and excerpts from movies and TV shows. Writings will include analytical essays, personal responses, and original mystery short stories.

SHAKESPEARE AND HIS LEGACY

In anticipation of the 400th anniversary of Shakespeare's death, we will embark on a celebration of his enduring works and remarkable legacy. Shakespeare's plays and sonnets encompass the range of human experience in ways as intriguing and provocative today as when they were written. For this reason they continue to inspire new generations of writers, filmmakers, and musicians who recast Shakespeare's work in innovative and surprising interpretations. In addition to reading selected sonnets and such plays as *Romeo & Juliet*, *Much Ado About Nothing*, *Henry IV Part 1*, *Macbeth*, and *King Lear*, we will consider contemporary works like *West Side Story*, *Shakespeare in Love*, *A Thousand Acres*, and *William Shakespeare's Star Wars: Verily a New Hope*. Throughout, we will consider themes of conflict, loyalty, self-awareness, romantic and family love — always keeping in mind the central question of why Shakespeare has stood the test of time. We will explore these ideas through performance and classroom discussions, in our reader's and writer's notebooks, in original writing, and in analytical essays on the plays and sonnets. We will bring the plays to life by reading aloud, performing scenes informally in class, reciting memorized speeches, and seeing various productions on screen, and, whenever possible, on stage. Students will also have the opportunity to research some aspect of Shakespeare's life, theater, or world and present their findings to the class.

WILD INSIDE, WILD OUTSIDE

"At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and unexplorable."

- Henry David Thoreau

Just beneath the veneer of civilization are our animal selves. We are a part of nature, living not just by societal rules, but by deeply engrained and ancient instincts. Artists have been exploring our linkage to the natural world since the very first cave painting. As we probe our own psyches, we cannot help but think about the ways we are connected to the environment and each other. This course will explore our relationship to the wild and our own untamable spirits. The more deeply we examine human psychology and the more we physically experience nature, the more we understand the universal truths that govern both. Texts may include: *The Hobbit*, (J.R.R. Tolkien), *The Tracker* (Tom Brown), *Walden* (Henry David Thoreau), *Nature* (Ralph Waldo Emerson), *The Bear* (William Faulkner), *Pilgrim at Tinker Creek* (Annie Dillard), *Desert Solitaire* (Edward Abbey) *H Is For Hawk* (Helen MacDonal), selections of Native American and contemporary essays and poems (Gary Snyder, Wendell Berry, Mary Oliver, Robert Frost, and the 19th century English Romantic poets), and a few films: *Into the Wild*, *Journey of the Universe*, and *Never Cry Wolf*. Writing assignments will include poetry, personal narratives, descriptive essays, and critical essays.

HISTORY

The History Department offers courses in art history, economics, geography, government, history, philosophy, and religion. We believe a diverse offering with a global outlook is important in developing our students for future success and we require that each student take at least three classes in the department

A distinctive element of a Princeton Day School education is our commitment to exposing students to religion through an academic, global and historical lens. Therefore, as one of the three required departmental courses, all students must take a religion course. All incoming freshmen will take *The Search for Self: World Religions in History*. Current members of the classes of 2017, 2018, and 2019 who have not satisfied their religion requirement must take either *Asian Studies* or *Philosophy* before they graduate.

In 10th grade all students must take *American History*.

Finally, every student must take at least one Junior/Senior elective. Students are welcome to take more than four courses from the department, and we encourage a variety of global and disciplinary perspectives. Please note that not all electives are offered every year. Admission to any individual elective may be restricted to ensure seminar size classes. Admission to all AP courses requires

department approval. Junior/Senior Electives will be offered as noted, subject to sufficient enrollment.

Grade Nine (Required)

THE SEARCH FOR SELF: WORLD RELIGIONS IN HISTORY

This course will investigate how religion and philosophy provide meaning to the human experience. During the first half of the course, we will create a foundational understanding of the major families of religion and philosophy by exploring the relationship between the individual and society. These families include, in chronological order: Indic (Hinduism and Buddhism), East Asian (Confucianism and Daoism), Abrahamic religions (Judaism, Christianity, and Islam), and humanist thought.

During the second half of the year, we will examine how these worldviews evolve and maintain their traditions as they come into contact throughout world history. We will take a case study approach to explore themes of intellectual evolution, cultural assimilation, and syncretism, as well as conflict and conquest. Examples of case studies could include the interaction of Hinduism and Islam in Mughal India; the intersection among Christianity, Islam, and African traditional religions; the relationship between the Reformation and the

Enlightenment; and the tension between traditional Chinese thought and Maoist philosophy.

Grade Ten (Required)

AMERICAN HISTORY

American History is a thematic based examination of our nation's development. The themes of Identity, Work, Peopling, Ideas, Environment, Politics, and America in the World offer our students a chance to explore the rich American story more deeply and from a variety of perspectives. Our students will improve their ability to communicate clearly and think critically, with particular emphasis given to the development of their research and writing skills. To enhance our enduring learning, we will take an interdisciplinary approach and work closely with English as they explore American literature.

Grades Eleven and Twelve (At least one required)

AFRICAN STUDIES

In this year-long course, we will examine the long arc of African history from prehistory to present day. In the fall we will explore the migrations of early African peoples and the evolution of their languages, key moments in African commercial and economic development, the diversity of pre-colonial African states, and the continent's cultural patrimony. In the spring we will turn our attention to African Traditional Religion (ATR), its relationship to philosophy, the historical and intellectual development of Islam and Christianity in Africa, and the place of traditional religions, Islam, and Christianity in African art, literature, and cinema. In addition to challenging stereotypes and preconceived notions, students will become acquainted with current scholarship on Africa and gain an appreciation of the continent's extraordinary history, its abundant intellectual and artistic heritage, and the place of religion and spirituality in this heritage.

ASIAN STUDIES

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 we will study ancient Asian history and the development of its major religious and philosophical traditions. In the winter we will examine the classical periods of Asian history and culture (e.g. Tang Dynasty China, Heian Japan, and Mughal India). In the spring we will move to modern Asian history and the emergence of India, China, and Japan from colonial dominance. Along with readings from textbooks, 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*.

CONTEMPORARY WORLD HISTORY

This first semester course explores the major historical trends and developments in world history since the end of World War II (1945) through the present. Through primary and secondary sources, simulations, and research, students will engage in discussions on nationalism, decolonization, supranationalism, racial and ethnic conflict, democratization, globalization, and the post-9/11 world. Students will develop essential historical thinking skills, including analyzing historical sources and evidence, making historical connections, evaluating continuity and change over time, chronological reasoning, and creating and supporting historical arguments. This course will enhance student understanding of the current geopolitical and economic landscape of the world, will enable them to think critically about world affairs, and will prepare them to take informed action as global citizens. This course must be taken in conjunction with "Global Citizenship in Today's World" in the second semester.

ECONOMICS

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. 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. In this course students will examine all content that is included on the AP exam.

GLOBAL CITIZENSHIP IN TODAY'S WORLD

This second semester course is designed to prepare students to be ethically engaged and informed members of the global community by using current international events and global issues as case studies. Through primary and secondary sources, simulations, discussions, and research, students will analyze and evaluate multiple perspectives on an issue and examine the social, political, economic, cultural, and environmental systems that frame global networks and connections. In addition to developing an understanding of current issues facing different regions of the world and recognizing the relationship between history, politics, geography, economics, and society, students will develop global thinking dispositions and media literacy skills. The course culminates with an inquiry-driven independent project in which students will use the design-thinking process to identify and investigate an important global issue and ultimately create and communicate a plan of action to address that issue. This course must be taken in conjunction with "Contemporary World History" in the first semester.

INTRODUCTION TO PHILOSOPHY

Philosophy has been called "the art of wondering." This is because philosophers ponder and try to answer our most basic questions, such as: What is truly real? How do we know? Is there a God? Why is there evil? What makes a society just? and What is the "good life"? This year-long course for juniors and seniors will examine how philosophers and great thinkers throughout history have tried to answer these questions and more.

As a course in world philosophy, it will take a comparative, multicultural approach. Our topics will range from Western philosophizing over the fabric of reality to Asian philosophical discussions of human nature and cutting-edge debates around artificial intelligence. In the spring we will turn to ethical theory, considering the work of moral philosophers alongside contemporary controversies. As the class meets, students will be encouraged to wonder alongside them as they ponder the great questions of our lives.

LAW AND SOCIETY

While we all strive to create a just society, we often disagree over process and results. This class will explore the theoretical foundations of justice and how America has implemented various philosophical theories over time. The class will first introduce students to the major theories of justice in the Western tradition and then dive into the history and application of constitutional law. Students will read Michael Sandel's *Justice*, significant speeches and treatises from American history, as well as Supreme Court cases. While students will be tested on the basic tenets of political philosophy and the Constitution, most of the assessments will be scholarly essays applying legal and philosophical theories to specific speeches and case studies. (*not offered in 2018-2019; offered in 2019-2020*)

AP ART HISTORY

This course examines art produced across the world from the earliest civilizations to the present (roughly 3000 BCE to 2015 CE), providing students with a global foundation in the history of art and architecture and focusing on a core of 250 works. We will deal with major artistic monuments and movements, paying particular attention to how art shapes and is shaped by the social, historical, religious, and political circumstances of the period and culture. Following the redesign of AP Art History exam, which students are required to take, the three big

ideas of this course. First, artists manipulate materials and ideas to create an aesthetic object, act, or event. Second, art making is shaped by tradition and change, and third, interpretations of art are variable. Our three essential questions for the year will be: What is art and how is it made? Why and how does art change? How do we describe our thinking about art? Our emphasis on culture, history, writing, and critical analysis fosters the kinds of skills crucial for success in any profession involving synthetic thinking. At least two assignments will be based upon visits to the Princeton University Art Museum, and we will take a class field trip to the Metropolitan Museum of Art.

AP COMPARATIVE GOVERNMENT AND POLITICS

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 and Kesselman's *Introduction to Comparative Politics*. The course concludes with the required AP exam in May.

AP EUROPEAN HISTORY

Advanced Placement Modern European History is a full-year course focusing on European history from 1450 to the present, including the Renaissance and Reformation, Absolutism and Constitutionalism, the Enlightenment and French Revolution, Nationalism and Imperialism, the World Wars and the Cold War, and Post-Cold War Modern Europe. Coursework includes analysis of historical documents, student-centered activities and simulations, and writing document-based, long essay, and short answer questions. This course is designed to prepare students for the Advanced Placement Modern European History Exam by making demands upon them equivalent to that of an introductory college course. This includes using an AP-level textbook and supplemental primary and secondary materials. Highly motivated, independent learners who have a strong interest in European history should take this course. Students will be required to take the AP exam in May.

AP HUMAN GEOGRAPHY

This course examines the 'why of where,' as students learn to employ spatial concepts and geographic analysis to understand the economic, social, political, cultural, and demographic organization of human societies and their environmental impact. Content is presented thematically rather than regionally and is organized around the discipline's main subfields: economic geography, cultural geography, political geography, urban geography, and population geography, as well as food production and agriculture. The approach is spatial and problem oriented. Case studies are drawn from all world regions, with an emphasis on understanding the world in which we live today. Major topics include: economic development, cultural change, population growth, migration, ethnicity, gender and race, political conflicts, food production and agricultural land use, urban development, and climate change. By the end of the course, students should be more geoliterate, more engaged in contemporary global issues, and more nuanced in their viewpoints. Geographic understanding should become a source of ideas for identifying, clarifying, and solving problems at various scales and a key component of building global citizenship and environmental stewardship. Students are required to take the AP exam in May.

AP U.S. GOVERNMENT AND POLITICS

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 include 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. (*offered in 2018-2019; not offered in 2019-2020*)

CLASSICAL AND MODERN LANGUAGES

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

The languages offered at PDS are French, Spanish, Latin, Classical Greek, and Chinese (Mandarin). Our languages are taught according to the current ACTFL standards. PDS students are required to study at least **two years** of a modern or classical language, but they are strongly encouraged to continue their language studies throughout their four years in the upper school. In some cases, students pursue studying more than one language. Faculty members and language clubs sponsor cultural events related to language study. International 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 Vergil and Caesar and Ancient Greek. "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*. English and Latin grammar are studied through reading historical fiction about the family of Lucius Caecilius Iulianus. 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

Latin II begins with grammar review through the translation of Perseus and Hercules from Ritchie's *Fabulae Faciles*. 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. The students also explore the Julio-Claudian and Flavian dynasties through film, translation, and research.

LATIN III

Students begin the year with the conclusion of *Unit 3* of the *Cambridge Series*. Advanced grammar is tackled, analyzed, and internalized. As the year progresses, students read extended excerpts from classical authors such as Martial, Ovid, Pliny, Catullus, Tacitus, and Vergil in *Unit 4*. In the spring the class is introduced to next year's curriculum – either AP Vergil and Caesar or Latin IV, Ovid and Select Authors. Culture topics such as military tactics, engineering, art and architecture, and the reign of Domitian are explored. 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 advanced stories of mythology from Ritchie's *Fabulae Faciles* to excerpts from the *Cambridge Unit 4* reader of Roman authors Juvenal, Martial, Pliny, Phaedrus, Vergil, 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 Vergil and Caesar course the following year.

AP LATIN: VERGIL AND CAESAR and LATIN 5

Two primary texts provide the focus of this course: Julius Caesar's military journals *De Bello Gallico* and the poet Vergil's epic *The Aeneid*. The emphasis of this course is to develop a student's Latin reading and translation abilities and analytical writing skills in English. Close attention is paid to the social and political milieu in which the books were written: the tumultuous days of the late Republic and the emergence of Empire during the reign of Augustus. Furthermore, in order to aid understanding of both texts, Roman military history, the Trojan War cycle, and the principles of classical rhetoric are carefully studied. AP designation by permission of teacher.

ANCIENT GREEK (minor)

This course is cross-listed with an English course, *Homer's Odyssey: Ancient Myths/Modern Lives*, and is designed for post-AP Latin students who wish to receive combined credit for both English and foreign language study in their senior year – minor credit for Ancient Greek in an independent study format and major credit for English. Students will attend all classes and fulfill all the course requirements of the English class as well as work independently on the language in one-on-one tutorials with the instructor. Students learn Ancient Greek from *Athenaze: An Introduction to Ancient Greek, Book 1*; cf. the *Odyssey* course description in the English section above.

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. Level 1 and 2 courses are conducted mainly in French; level 3 and higher courses are conducted entirely in French.

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, school, 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*), grammatical structures of intermediate difficulty (such as object pronouns, comparatives and superlatives, reflexive verbs), 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, plus-que-parfait, futur simple, subjonctif*) and other grammatical structures (such as double pronouns, adjectives and adverbs, relative pronouns, and interrogative pronouns) in order to communicate more effectively. 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 (subjunctive with expressions of doubt and with conjunctions; compound relative pronouns, present participle, conditional, demonstrative and possessive pronouns). Critical thinking skills and fluency of expression are fostered through reading selections from newspapers, magazines, and major literary works. 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 the Honors section, students are introduced to more advanced literary texts.

AP FRENCH LANGUAGE AND CULTURE

Beyond preparing students to take the AP French Language exam, this college-level 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, email 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 16th to the 20th 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 La Fontaine, Baudelaire, Apollinaire), short stories (by Maupassant, Balzac) 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). It is conducted exclusively in French.

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. All courses are taught entirely in the target language.

SPANISH I

Although an introductory course, Spanish I utilizes the communicative approach to engage students in the reading, writing, listening, and speaking of the Spanish language. Students learn to communicate and exchange information about familiar topics using phrases and simple sentences. Through individual, paired, and group exercises,

students manage short social interactions in everyday situations. Writing includes short messages and notes on familiar topics related to everyday life. 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.

SPANISH II

This course is designed to develop the grammatical concepts and communicative skills acquired in Spanish I and to expand students' ability to interact more fluidly in Spanish in everyday social interactions. Students will continue to grow in phonology, vocabulary, grammar, and culture through the four language skills: listening, speaking, reading, and writing. The course requires expressing ideas on a variety of topics in written and oral formats with more complex grammatical structures and a wider breadth of vocabulary. The above skills are improved upon through the use of authentic sources, which provides a greater understanding of the cultural complexity of the Spanish-speaking world.

SPANISH III

Spanish III continues using the communicative approach to engage students in the reading, writing, listening, and speaking of the Spanish language. Through individual, paired, and group exercises, students learn to participate in conversations on familiar topics using sentences and series of sentences and to handle short social interactions in everyday situations by asking and answering a variety of questions. They also are able to give presentations on a variety of familiar topics using connected sentences. They are able to understand the main idea of messages, presentations, and texts related to everyday life and personal interests or studies. 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.

SPANISH IV

Spanish IV builds on the communicative skills developed in Spanish III through listening, speaking, reading, and writing. Students can converse with ease and confidence on familiar topics using various time frames. Through individual, paired, and group work, students deliver organized presentations and write on a variety of topics, also in various time frames. They are able to follow stories and descriptions of some length from various genres, even when something unexpected is expressed. Critical thinking skills and fluency of expression are promoted through authentic sources. 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.

SPANISH V - CONVERSACIÓN Y CULTURA: EL MUNDO HISPANO

This course promotes Spanish and Hispanic culture through authentic sources and interactive activities 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

The AP Spanish Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. The course strives to promote both fluency and accuracy in language use and not to overemphasize grammatical accuracy at the expense of communication. In order to best facilitate the study of language and culture, the course is **conducted exclusively in Spanish**. The goal of the course is to provide students with the opportunity to build proficiency at the Advanced level and beyond. The course focuses on the integration of authentic resources with the goal of providing a rich, diverse learning experience. The AP Language and Culture course is divided into thematic units based on recommended contexts and guided by essential questions relating to the AP themes. These essential questions drive instruction; students are regularly assessed and receive formative feedback to refine communication skills and to develop deep understandings relating to the essential questions. Any student enrolled in this course must take the AP Spanish Language and Culture exam in May.

Requirements: Students must receive the recommendation of the department and either **a)** earn a minimum grade of A- in Spanish IV Honors; **OR b)** earn a minimum grade of A in Spanish IV **AND** demonstrate a proficiency level of Advanced Low, as determined by the AAPPL exam.

AP SPANISH LITERATURE AND CULTURE

The AP Spanish Literature and Culture (APSLC) course is designed to provide students with a learning experience equivalent to that of an introductory college course in literature written in Spanish. APSLC introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin American, and U.S. Hispanic literature. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication (interpersonal, interpretive, and presentational) and the verbal goal areas (communication, cultures, connections, comparisons, and communities) outlined in the *Standards for Foreign Language Learning in the 21st Century*. The course respects a meaningful integration of the cultures, connections, and comparisons goal areas of the *Standards*. Emphasis is placed on approaching the study of literature through global, historical, and contemporary cultural contexts. Students are encouraged to make interdisciplinary connections and explore linguistic and cultural comparisons. A key objective of APSLC is to encourage students not only to understand and retell the content of the texts they read but also to relate that content to literary, historical, sociocultural, and geopolitical contexts in Spanish. APSLC aims to help students progress beyond reading comprehension to read with critical, historical, and literary sensitivity. In order to best facilitate the study of language and culture, the course is **conducted exclusively in Spanish**. Any student enrolled in this course must take the AP Spanish Language and Culture exam in May.

Requirements: Students must receive the recommendation of both the Classical & Modern Languages and English Departments and successfully complete either AP Spanish Language & Culture **or** Spanish IV Honors.

LATIN AMERICAN IDENTITIES

This course, taught entirely in Spanish, examines how Latin Americans have constructed and interpreted racial, ethnic, class, and gender identities and ideologies from colonial times to present. Coursework focuses on the intersection of Iberian, American, African, and Asian peoples and the resulting multiethnic societies in three specific regions – Puerto Rico, Mexico, and Perú – as well as on intersections between disciplines (history, geography, literature, music, and art). Students also explore how physical environments and geographies have influenced these identities. The goals of the course are to present principal ideas and themes surrounding these topics and to move students toward an integrated synthesis that reflects the benefit of using interdisciplinary tools to understand a situation or problem. This course is taught exclusively using the Project Based Learning methodology. To that extent, students will gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Upon completion of this course, students should be able to demonstrate knowledge of how content from several different disciplines interacts through classroom discussion, written reactions, and collaborative case study.

Requirements: Successful completion of AP Spanish Language & Culture or AP Spanish Literature & Culture

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.

MATHEMATICS

Grades Nine through Eleven

All students must complete at least **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.

Embedded within each 9th grader's science and math courses is an interdisciplinary seminar that explores issues at the intersection of biology, mathematics, coding, engineering, and design with the goal of giving students an authentic sense of how these subjects apply to practical questions of the kinds they will confront in their future civic and professional lives.

Each year the seminar may have a different theme. For 2017-2018, students will explore the health and safety of the water in their communities through experimentation, data collection, and design. They will be encouraged to think both locally and globally about the safety of their water sources and water use on the PDS campus. Students will have the opportunity to design water collection systems, understand water runoff problems, and engineer methods for water collection, storage, and reuse. In this team-taught course, students will work on specific biology activities, understand necessary mathematics for data collection and analysis, and utilize coding to analyze data and develop problem-solving skills.

The goal of the seminar is to give freshmen, through biological topics, an introduction to programming, an understanding of mathematical modeling, and an opportunity to design and build. This experience is meant to kindle an interest in biotechnology, coding, and building that future course experiences can extend through the rest of their high school careers.

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. 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.* Confidence in mathematics is strengthened. 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. There is an expectation of algebraic proficiency, and algebra is used throughout. 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 deeply study the structure and applications of mathematics. The class includes a more sophisticated and faster

paced study of all of the topics of the Accelerated Geometry class as well as many concepts which the Accelerated course will not have the opportunity to address. Superior algebraic skills are assumed and flexibility is necessary for application to the geometric concepts. The whole course is proof based. 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. Placement is based on academic achievement in previous math classes, teacher/department recommendations, and a math aptitude profile.

ACCELERATED ALGEBRA II

Accelerated Algebra II combines a rigorous study of algebra with an introduction to the family of functions. Students will gain a strong foundation in algebraic skills while exploring linear, quadratic, polynomial, exponential, and logarithmic functions. Applications are also used to reinforce theory and concepts. All of the topics of the Algebra II course are covered in depth with a larger emphasis placed on students developing skills in making connections more independently.

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 focuses 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 recommendation, and a math aptitude profile.

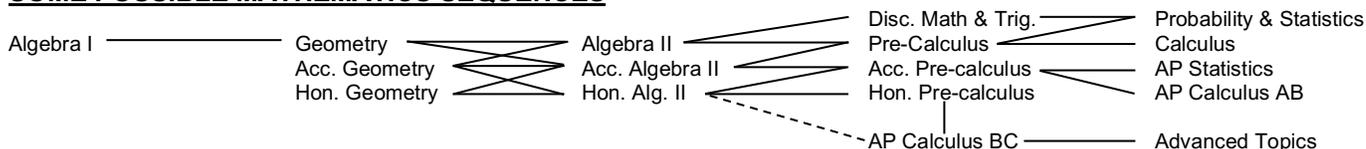
Requirements: B average in Accelerated Precalculus or departmental approval

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 SCIENCE

INTRODUCTION TO COMPUTER SCIENCE (minor)

In this year-long introductory minor, students will explore a variety of computer science topics, including basic programming logic, the

design cycle, block- and text-based coding, web design, and app programming. Projects are designed to appeal to a broad range of student interests, ranging from music and graphic design to community

service and sustainability, demonstrating the power of programming to solve problems across disciplines. By the end of the course, students will be able to code at a basic level and will be ready to dive into more complex programming languages and applications. This course, which will be graded on an A-F scale, is open to all students – no prior experience is required and there are no prerequisite courses.

OBJECT ORIENTED PROGRAMMING (Major)

This year-long intermediate major offers an introduction to object-oriented programming with an emphasis on real-life applications. Students will create a variety of simulations and games, using the Java/C++ and Python programming languages and their graphical packages. Projects include science simulations, computer games, and creating an on-screen piano, as well as programming a single-board mini-computer (Raspberry Pi) or a small robot. Students will gain project development skills applicable in the real world, while working on individual and team projects of their own design.

Requirements: Successful completion of Introduction to Computer Science or Robotics

AP COMPUTER SCIENCE PRINCIPLES (Major)

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. This year-long major will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts on society and the world. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the

course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

Requirements: Successful completion of Introduction to Computer Science or Robotics and of Algebra I

AP COMPUTER SCIENCE A (Major)

AP Computer Science A is a year-long course intended for students with an interest in pursuing computer science in college and in their future professional careers, as well as for students who intend to pursue other career paths which require significant involvement with technology. The main part of this course is built around the design and implementation of computer programs that solve problems relevant to today's society. 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 required to take the AP Computer Science A Exam. The course may be offered as an online course depending on enrollment and other considerations.

Requirements: Successful completion of Object Oriented Programming or AP Computer Science Principles and of Algebra I

SCIENCE

Students are required to take at least **two years** of a core (laboratory) science, usually beginning with Biology in the 9th grade followed by an introductory chemistry course in 10th 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.

Embedded within each 9th grader's science and math courses is an interdisciplinary seminar that explores issues at the intersection of biology, mathematics, coding, engineering, and design with the goal of giving students an authentic sense of how these subjects apply to practical questions of the kinds they will confront in their future civic and professional lives.

Each year the seminar may have a different theme. For 2017-2018, students will explore the health and safety of the water in their communities through experimentation, data collection, and design. They will be encouraged to think both locally and globally about the safety of their water sources and water use on the PDS campus. Students will have the opportunity to design water collection systems, understand water runoff problems, and engineer methods for water collection, storage, and reuse. In this team-taught course, students will work on specific biology activities, understand necessary mathematics

for data collection and analysis, and utilize coding to analyze data and develop problem-solving skills.

The goal of the seminar is to give freshmen, through biological topics, an introduction to programming, an understanding of mathematical modeling, and an opportunity to design and build. This experience is meant to kindle an interest in biotechnology, coding, and building that future course experiences can extend through the rest of their high school careers.

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

microchemical approaches in addition 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 often 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 (A-) or Honors Chemistry (B) and of Accelerated Algebra II (A-), Honors Algebra II (B), or Accelerated Precalculus (B+) or higher, and permission of the department

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, literature, art and selected topics in history will be used to supplement the text. Only one section is offered. Preference is given to seniors who have completed biology, chemistry and physics.

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

ASTRONOMY

This course is an introduction to the universe. Topics covered include the history of astronomy, gravity, light, telescopes, the Earth, the Moon, the solar system (including planets, asteroids, and comets), the Sun, stars, and cosmology. The study of astronomy is presented in a conceptual manner with little emphasis on math, though a knowledge of chemistry and physics is helpful. The course is activity based with demonstrations, experiments, slide presentations, videos, and observing projects. The school's planetarium is used to observe motions of the Sun, Moon, planets, and stars. Weather permitting, there are "star parties" where students use telescopes to observe celestial objects. A highlight of the course is students building and launching their own model rockets. Astronomy is only open to juniors and seniors.

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

ENERGY SYSTEMS

The study of energy in science courses is typically investigated through the lens of each discipline. In this elective course, we will seek to understand how energy is a unifying theme in biology, chemistry, and physics. The course will be project based and hands-on and will take a historical approach to the development of ideas in energy from the Greeks to the Industrial Revolution to the Modern Era. We will investigate mechanical advantage, potential and kinetic energy, heat, electrochemistry, power generation plants, greenhouse effect, and energy transfer throughout the biosphere. The course requires students to consider the impact of energy on policy and economics.

Requirements: Completion of Biology

ROBOTICS AND INFORMATION PROCESSING

Robotics and Information Processing endeavors to give students a broad-based, hands-on exposure to the world of robotics, microprocessors, and artificial intelligence. This introductory course will teach students basic requisite skills in computer programming and mechanical/electrical design that will allow students to create electrical and computerized products with varied applications (including robotics). For example, by utilizing microprocessors such as Raspberry Pi, students will design projects that explore how electronics can interact with the physical world, integrating such components as motors, sensors, and digital interfaces while also emphasizing the positive impact on individuals, the ecosystem, or society. In addition, students will build a foundation of robotics engineering knowledge and skills that will prepare them for participation on the VEX Robotics Competition teams. Finally, students will also be given a historical background in artificial intelligence, robotics, and microprocessors and consider the future ethical and economic implications of these applied sciences.

Requirements: Completion of Biology

INTRODUCTION TO ENGINEERING – ENGINEER YOUR WORLD

Engineering impacts human lives and the world around us. Engineer Your World is an innovative, student-centered course that engages learners in authentic engineering experiences in a hands-on, project-based environment. The course was developed by the University of Texas at Austin and NASA and has been designed to be inclusive of all high school students. In this course students discover how engineering shapes their world, develop engineering skills, build engineering habits of mind, and explore a broad range of engineering fields and professions. Collaborative, student-directed projects and design challenges build resilient problem-solving skills and empower students to think like engineers. They learn to quantify systems; apply common engineering tools and techniques; generate and select concepts; embody, test, and verify designs; and document and communicate their work. Engineer Your World covers the breadth of engineering fields and professions so that students can make informed decisions about pursuing engineering. The skills developed during the

course will be valuable whether or not students decide to further pursue an engineering career.

Requirements: Successful completion of Algebra I and sophomore or higher standing but not technical skills or high level math or science

INDUSTRIAL DESIGN

This course will enable the student to learn how to design and manufacture a new product by exploring iterative processes of the Innovation Ecosystem to develop a portfolio of projects that seek to offer solutions to meet societal needs. Working collaboratively, students will create semester long, hands-on projects that incorporate innovative problem solving while mastering a wide array of skills: concept drawing, drafting, 3D CAD modelling, rendering, and model making. The course will offer an in-depth overview of diverse production methods, manufacturing, and product lifecycle management. The final portfolio will receive feedback from peers, cross-disciplinary faculty, and professionals from the field.

Requirements: Successful completion of Robotics, Introduction to Engineering, or any introductory level visual arts or design course

AP BIOLOGY

This course is the equivalent of a first year college biology course and follows a syllabus approved by the College Board. The four "Big Ideas" are evolution, cellular processes: energy and communication, genetics and information transfer, and interactions. The AP Biology investigative labs are produced by the College Board. These labs lead to student-directed inquiry-based investigations. A lab notebook will contain the information necessary for making formal collaborative lab reports. Students will be able to apply math skills that have been acquired in their mathematics courses, including graphing, modeling, and statistical analysis. Students are required to take the AP exam in the spring.

Requirements: Successful completion of Biology and of Applied Chemistry, Chemistry, or Honors Chemistry and permission of the department

AP CHEMISTRY

This course is the equivalent of a first year college chemistry course. It follows a rigorous syllabus approved by the College Board and requires students to do a significant amount of work outside of the classroom. Laboratory experiences reinforce the quantitative nature of the course and utilize highly analytical pieces of equipment and glassware with an emphasis on inquiry-based investigations. Students are expected to have a strong mathematical background with an emphasis on good problem solving abilities. Students are required to take the AP exam in the spring.

Requirements: Successful completion of Honors Chemistry; concurrent enrollment in Accelerated Precalculus or higher; and permission of the department

AP PHYSICS C: MECHANICS

AP Physics C is the equivalent of a first year calculus-based college course. It follows the curriculum of the AP Physics C courses in mechanics and electricity and magnetism as established by the College Board. This course is intended for students who have a strong inclination toward physics, mathematics, and engineering. The major goal of the course is for the students to understand the fundamental principles of physics and to develop strong problem solving abilities. Physics content is introduced both conceptually and mathematically through the lens of calculus. 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 are required to take the AP exam in the spring.

Requirements: Successful completion of Physics (with teacher recommendation) or Honors Physics; concurrent enrollment in or successful completion of either Calculus BC or (with teacher recommendation) Calculus AB; and permission of the department

RESEARCH EXPERIENCE

The Research Experience course, or REX, will provide students with first-hand knowledge of scientific practices in realistic settings by combining a unique inquiry based curriculum with a laboratory research placement (5-6 weeks, summer 2018). Throughout the course students will be encouraged to explore their individual interests in science through subject specific inquiry, including journal article explorations, laboratory investigations and techniques, and communications with specialists in subject specific fields of research. One of the unique features of the course is its attention to both the breadth and depth of scientific inquiry. The curriculum begins with an overview of the research experience through a guided investigation of scientific journal publications. After an introduction to the process of scientific literature review, students will begin a deeper investigation into a particular area of interest, which can be any area of scientific focus: biology, chemistry, physics, engineering, technology, or computer science. This more nuanced investigation is intended (i) to enable students to become proficient in a particular area of research, and (ii) to help students better navigate the landscape of research opportunities, culminating in a summer research laboratory placement (5-6 weeks, summer 2018), whose research appropriately aligns with the student's interests and preparations.

Requirements: Successful completion of Biology (B+), Chemistry (B+) or Honors Chemistry (B-), and departmental approval. Students entering 11th grade eligible for consideration upon completion of a course application and committee review. Students must agree to fulfillment of approximately 200 hours of summer research (2018) upon acceptance into this course.

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 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.

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 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.

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.

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 accomplished through work in both two and three dimensions (drawing, painting, multi-media) and through introducing 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. Play, exploration, process, and the development of both a strong overview of the meaning and practice of the arts in the 21st century along with a focus on developing an independent approach are the essential goals of the program.

ADVANCED FINE ART (Major)

In the advanced-level class, students are introduced to the tools, materials, and approaches necessary to respond to a full range of contemporary issues. The class concentrates on building a solid technical basis while maintaining a focus on contemporary conceptual strategies for the production of images and objects. Students can enroll in this class for up to three consecutive years after their completion of the foundation prerequisite. To accommodate the range of skills and experience in the class, a new program is built every year. Close attention to the work produced in the 20th and 21st centuries will form the historical foundation of the course. Students are encouraged

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. These courses meet three times per cycle. Introductory courses are prerequisite for the advanced courses. All advanced (major) courses meet four times per cycle. Every art student is encouraged to develop a portfolio in digital format or as a web page. Because all of these courses are studio intensive, equipment specific courses that require students to be in the studio to do the course work, students in the minors must also work in the studio an additional 1 period per cycle while students in the advanced major courses must work in the studio an additional 2 periods per cycle. Homework can count towards studio time when the instructor chooses to assign it.

to develop personal style and direction; 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 VIDEO AND MEDIA ARTS (minor)

This is a full year offering in film and media history and production. The concentration of the program is focused on building media literacy, a historical overview of work in film and television, and a strong focus on producing work in this medium. 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. Much of the work in the first year will be shot and edited using the iPad in conjunction with Final Cut or Premiere on our workstations.

ADVANCED MEDIA (Major)

The Advanced Media class continues to build 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. Students can enroll in this class for up to three consecutive years after their completion of the intro level. Each year is structured in a unique manner to continue building as solid a foundation in media as possible.

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 and contemporary works of art and design are studied throughout all courses and a design thinking approach to project development is emphasized at every stage of the ideation and making process. Students learn to think like artists and designers, while also understanding how this approach to project development and problem solving can be applied to multiple fields of study. The studio environment is one where multiple modes of form and surface design are taught along with ceramic sculpture, emphasizing a hands-on approach to creative learning. In addition to learning and practicing the traditional techniques of hand-building, wheel-throwing, and mold-making, the student's intellectual engagement is heightened through experiencing the design thinking stages, 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. Following the design thinking stages, and understanding the significance of these stages to all fields of study, is emphasized with each project. Students learn the fundamentals of wheel-throwing and handbuilding 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 emphasized. This course may be repeated.

Requirements: Completion of Intro to Ceramics

INTERMEDIATE/ADVANCED CERAMICS (Major)

In this studio course, a greater emphasis will be placed on developing more advanced techniques within the realm of ceramics. 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 deeper, more comprehensive understanding of the vast field of art and design. Students continue to rely on the design thinking stages to develop their projects and many students begin to design their own parameters for their projects, relying on a more self-directed research and design process. The regular use of a sketchbook, as a means of journaling concepts and ideas becomes second nature in the studio and students begin to craft a personal artistic and design vision. Portfolio development is emphasized during this course for both college applications, summer program pursuits, and competition entries. 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 digital SLR camera, film, and paper. Analog cameras are provided. 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 basic camera controls, composition, digital imaging, black-and-white film developing, darkroom printing, and mounting. Students use the school's analog cameras and provide their own digital SLR cameras. Adobe Lightroom and Photoshop are used in the digital darkroom. 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 both analog and digital SLRs, the medium-format camera, the Holga camera, and the iPhone (or a school iPod). They explore lighting and lenses and the large format printer. They study the work of current and past fine-art photographers. Each young photographer is expected to develop a personal style, to participate actively in critiques, to maintain a sketchbook, and to produce a mounted portfolio of work.

Requirements: Completion of Intro to Photography

ADVANCED PHOTOGRAPHY – THE PHOTO ESSAY (Major or minor)

The emphasis of this course is on creating documentary photo essays that are often created in book form. Students learn new skills including the art of digital capture, use of flash, shooting in sequences, incorporating text, and advanced digital imaging techniques. Also covered is the history of photojournalism, current figures in documentary photography, ethical questions that arise for photojournalists, and the art of critiquing 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, drawing, history, theory, and social, cultural, and environmental responsibility. The vehicle used to engage with all of the facets of this learning is through the act of making: model making, sketching, and collage. Over time the student will begin to master three areas: **Critical Thinking:** the ability to research, engage, and analyze the built environment; **Design:** the ability to produce architecture through both reflection and invention; and **Representation:** the ability to assemble, develop, and communicate ideas through a wide range of media, including drawing, model making, writing, and speaking.

The Architecture/Design student is unique in the sense that she/he needs to develop a keen mind for history, society, and human behavior because the role of the architect is a communicator of culture and a builder of spaces who responds to social needs. Knowledge of history and literature becomes 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, visiting PDS graduates who are currently working on degrees in architecture are especially inspiring during their frequent visits throughout the year. Field trips are worked into various studios throughout the young architect's journey at PDS and are critical to a site study and the particular understanding of historical or design significance. Summer programs at major schools of architecture are encouraged as are summer independent projects. If the student has

clearly proven over a few years that they are serious and engaged with the spirit of the studio by thinking critically, working creatively, and continually developing a self-reliant design process, they might be great candidates for an internship at an architectural firm and the instructor will offer to write a recommendation; this could be for summer or for a senior project.

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 and begins to build informative models of influential designers to understand concepts. This course will sharpen the student's powers of observation as well as the student's ability to conceptualize, analyze, and create the world of architecture and design. Students will also explore concepts through drawing and abstract three-dimensional 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, A PUZZLE, AND THE POWER OF MOCK-UPS (Major)

In this course students realize that they are more relaxed than in the first year because they actually learned how to experiment and craft and idea. Now they begin to refine how they work and raise the bar for

themselves to become more independent thinkers. 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 one's research into the study of an architect's ideas or as a method for the student to gain insight into various possible design solutions. 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 and the powerful construction of a complex abstract design challenge which is actually based on the study of Urban Design.

Requirements: Completion of Intro to Architecture

ADVANCED ARCHITECTURE III: COMPLEX AND PUBLIC SPACES (Major)

Here the student becomes immersed in the concepts of complex and public spaces. This might start off with abstract three-dimensional design exercises and even the study of a home that is not a single structure but is made of multi-purposed buildings. Another aspect is the study of urban plazas, urban parks, memorials, museums and

performance centers, and even new city centers like Hudson Yard in New York City. Here field trips are important to use for inspiration and to actually measure and build to scale. The student takes on complex ideas and finds solutions which express the needs of a particular site, 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 projects bring all of each student's presentation and rendering skills together in one site specific model.

Requirements: Completion of Advanced Architecture II

THE MASTER'S STUDIO: ARCHITECTURE IV (Major)

The fourth year architecture student may develop a year of Independent Study Studio with the permission of the instructor. In this studio, the student is invited to work out a thesis project that will develop over the year and either end when the senior project begins or evolve into the senior project. Permission to take this course is determined on an individual basis and must be worked out by the end of the student's junior year.

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 21st 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, from beginning to advanced levels. The impressive dance studio, including full length mirrors and barres, is home to all of the dance classes and rehearsals. Performances for all divisions at PDS, creation of dance videos, an annual spring dance concert, and a performance at the Performing Arts Festival are all opportunities for PDS' dance students. Because the choreography and thematic materials change each year, students are welcome to take this class for more than one year during their time at PDS. The advanced dance class is open to students with prior dance experience and requires an audition/interview. Please contact Ann Robideaux, the dance teacher, to clarify which class is most in line with your interests and skill level.

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.

BEGINNING/INTERMEDIATE DANCE

This class prepares students to dance with healthy alignment through warm-ups and technical skills typical to jazz, ballet, and modern styles. Each class culminates with a dance sequence of varying styles with an optional opportunity to perform in the spring. Because choreography changes each year, students are welcome to take this class for more than one year during their time at PDS.

ADVANCED DANCE (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. 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 will be required to audition and will need the permission of the instructor to be admitted.

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 vocal technique and music reading and to discover how the voice works, as well as to teach valuable performance and ensemble skills. Students should have some background in music literacy. They will study a wide variety of music, including a repertoire of various genres, composers, and style periods. Students are graded largely on participation, concert preparation, and acquisition of singing skills and will have both written and individual performance exams each trimester. The Chorus has several required performances throughout the year in school concerts and other community events.

Requirements: Participation the prior year in Chorus (Upper or Middle School) or by audition

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. 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, dressing 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: 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	Major	Intro to Architecture
Advanced Architecture III	Major	Advanced Architecture II
The Master's Studio: Architecture IV	Major	Advanced Architecture III & permission of instructor
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 – The Photo Essay*	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	Previous experience/audition
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	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, 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 PE. 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.

BRIDGES

The Bridges program is a three-quarters credit leadership course for seniors and a mandatory year-long program for seventh graders. Leadership training begins upon selection in the spring, continues through a three day intensive retreat the summer prior to senior year, and extends throughout the academic year in the form of a leadership training seminar that meet three days of the seven day cycle. Additionally, the Bridges mentors meet with their 7th grade groups once

per cycle in order to prepare them for a successful and balanced experience transitioning from childhood to adolescence and young adulthood. Content covered includes lessons in social emotional learning (SEL), a proven positive predictor for student success. Bridges class serves as a platform for discussing relevant topics in an inclusive, supportive, and emotionally intelligent manner.

PEER LEADERSHIP TRAINING

Peer Leadership Training is both a three-quarters credit leadership course for seniors and a mandatory year-long orientation program (Peer Group) for all freshmen. 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 periods per cycle. 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 regular 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 sophomore and junior years 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 or by phone at 609-924-6700 x1747.

SEMESTER SCHOOL PROGRAMS

MAINE COAST SEMESTER AT CHEWONKI

The Maine Coast Semester at Chewonki program was established in 1988 by S. Scott Andrews, currently a faculty members teaching U.S. History. Located in Wiscasset, Maine, Chewonki offers 11th 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 Maine Coast Semester at Chewonki Semester School website: <http://www.chewonki.org/mcs/>.

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 10th and 11th 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 in 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) 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 four 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.

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 extremely important. When colleges evaluate a high school transcript they primarily consider 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 explore new and interesting avenues. The College Counseling Office encourages students to follow their curiosities while fulfilling their PDS diploma requirements and meeting, if not exceeding, colleges' entrance requirements. **In addition, before enrolling in six majors, we encourage students to recognize that doing well in five courses is better than being spread too thin and 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.

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

Keep in mind that these are the typical *minimum* requirements. For many colleges, taking four years of as many core areas as possible is often most desirable. 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. While this could make good sense for an individual, we still strongly recommend all seniors take courses in at least four of the five core curricular areas (English, math, science, history, language).

WHAT IS THE TYPICAL CURRICULUM FOR EACH GRADE LEVEL?

The typical expected course load is five "core" majors (plus one minor, occasionally two). Students' advisors, the department chairs, and the college counselors work together to help students build 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

WHAT ARE SPECIALIZED PROGRAMS LOOKING FOR?

While many PDS students enroll at liberal arts institutions, several each year pursue a focused study in a specialized field in college. The appropriate high school curriculum for these programs may look a bit different. Be sure to meet early on with your advisor and the head of the appropriate department for suggestions on how to select those courses that will prepare you best.

Architecture Programs prefer multiple years of architecture at PDS as well as courses in the fine arts. These prepare students 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 chemistry, physics, and

calculus. 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 can vary significantly in their requirements. Conservatory programs, which focus almost entirely on one's major, primarily consider an audition/portfolio in making admissions decisions. 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.

HOW DO SELECTIVE COLLEGES VIEW ARTS COURSES TAKEN AT PDS?

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

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 an AP exam (usually a 4 or a 5), some colleges grant credit, placement into a higher-level class, and/or exemption from college distribution requirements. AP courses are considered college level courses, use college level texts, have college level expectations, and demand a college level commitment. Note, however, that AP courses are just one way that a student can add challenge to a course load given PDS's rich array of demanding classes with and without the AP label. Different AP classes have different prerequisites; please carefully review the prerequisites listed in each course description. **Also, at PDS, all students enrolled in an AP class are required to take the corresponding AP exam.**

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, students may include them on their applications if they choose.

CLASSES AT PRINCETON UNIVERSITY

Princeton University allows local high school juniors and seniors to take classes in math, biology, physics, chemistry, modern/classical languages, computer science, 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 IF I HAVE MORE SPECIFIC QUESTIONS ABOUT COURSE SELECTION AND COLLEGE ADMISSIONS?

The information above is a very brief overview. After speaking with the student's PDS advisor first, we encourage students and parents to reach out to the College Counseling Office at PDS if they have questions related to course selection and the college admissions process.