

Curriculum

THE UPPER SCHOOL PROGRAM

Students entering the Upper School (Grades 9–12) should plan their course of study in the context of graduation requirements, college plans, and interest. A well-balanced program that expands perspectives and deepens experiences in interest areas is desirable. All students must take a minimum of five (5) academic courses each term. Students who wish to take more than five (5) courses must get their advisor's recommendation and permission from the Head of the Upper School.

Graduation Requirements

Derryfield graduation requirements are designed to meet the distributional entrance requirements of the most competitive colleges. Students must successfully complete a fundamental liberal arts course of study, develop essential physical skills, and expand interests and competence in visual and performing arts and co-curricular activities. A total of eighteen (18) academic credits is required with the following departmental distribution:

- **English:** 4 credits (electives in grades 11 and 12)
- **History:** 2 credits (must include Asia: East and West and U.S. History)

- **Mathematics:** 3 credits (Algebra I, Geometry, Algebra II)
- **World Language:** 3 credits (must complete successfully level three of one language; two levels must be completed in the Upper School)
- **Science:** 2 $\frac{1}{3}$ credits (Biology and Chemistry, plus one trimester elective)
- **Visual & Performing Arts:** 1 credit
- **Athletics:** All students must satisfactorily participate in either the alternative sports program or a team sport two (2) out of three (3) trimesters each year.

Each student must carry a minimum of five (5) courses for academic credit each term. Graduation requirements may be waived only by the Curriculum Committee, with requests presented through the appropriate department and the Head of the Upper School. An elective course may be cancelled due to insufficient enrollment. The usual minimum class size is six (6) students.

THE UPPER SCHOOL PROGRAM OF STUDIES

Grade 9

Required:

- English IV
- Algebra I (Geometry if Algebra I has been completed)
- Biology
- World Language
- Asia: East and West

Suggested:

- Visual and Performing Arts electives

Note: A student need not take six courses during grade nine in order to fulfill requirements for graduation. Students who express interest in art electives should pay attention to the prerequisites.

Grade 10

Required:

- English V
- Geometry (Honors Algebra II offered to qualified students)
- Chemistry (Honors option available to qualified students)
- World Language

Suggested:

- Modern European History
- Technology electives (F, W, or S)
- Visual and Performing Arts electives

Note: Beginning in their sophomore year, students can vary their course load according to their extracurricular or athletic needs by taking an elective one term and not another.

Grade 11

Required:

- English elective each term (including Composition), with proper distribution
- Algebra II (Honors Algebra II offered to qualified students)
- World Language
- U.S. History (Advanced Placement U.S. History offered to qualified students)

Suggested:

- Precalculus
- Physics (Honors level offered to qualified students)
- Science electives
- Foreign Language
- History electives
- Technology electives
- Visual and Performing Arts electives

Grade 12

Required:

- An English elective each term with proper distribution (AP English offered to qualified students)
- Foreign Language (if language requirement has not been met)

Suggested:

- Topics in Mathematics, Precalculus, Calculus, or Statistics
- Physics or Senior Honors Biology
- Science electives
- World Language
- History electives
- Technology electives
- Visual and Performing Arts electives

Note: Graduation requirements not automatically fulfilled are the VAPA credit and the second year of history. Advisors should note whether these requirements have been met.

THE INDEPENDENT SENIOR PROJECT (ISP) PROGRAM

The ISP is an option for seniors during the final six weeks of spring term. The essential question for the individual is whether his or her skills and interests at that stage of personal and intellectual growth can best be developed in the classroom or by practical experience outside the classroom. The nature of the project is completely up to the student. The Community Service Coordinator and Alumni Coordinator, serving as liaisons with alumni and the Derryfield community at large, can suggest possibilities for internships and apprenticing.

Interested seniors can also refer to the documentation of earlier projects undertaken since the program's inception in 1985. These projects have been as diverse as the individuals who participate: interning in hospitals and law firms, acting as teachers' aides, constructing musical instruments, doing site work in archeology, studying ecology in Costa Rica, interning at radio and TV stations, creating and producing a video or a comic revue, to mention just a few. Students have also selected independent projects in art and writing.

To be eligible, a senior must be in good standing in all senior courses and have consistent attendance throughout the year prior to the start of the project. Courses required for graduation may not be

dropped. If enrolled in math, the senior must understand the ramifications of withdrawing from Calculus or Precalculus. [From the Math Department: The Precalculus course serves as a prerequisite for college calculus. Dropping this course for the final half-term will make the transition to first-year college calculus difficult. Dropping calculus for the final half-term will make it very difficult to begin a second-level calculus course next year. Finally, dropping calculus will have an adverse effect on the Math AP exam in May. If the AP exam is an issue, the school suggests continuing the math course until the exam.]

During the project period, a maximum of two academic courses or one course and one sport may be taken. Details are outlined in the preliminary packet distributed in November of senior year; however, it is not too soon for juniors to plan ahead, given that their course selection will be influenced by the decision to do an ISP.

In planning spring term of senior year, for example, one would not want to be required to complete more than a sports credit and a departmental requirement; certain spring electives cannot be taken given the six-week absence during the ISP. Contact a member of the ISP Committee for further details.

If an ISP is elected, successful completion is a graduation requirement.

COURSE OFFERINGS

ACADEMIC SUPPORT

Academic Skills Development (F, W, S)

This course is designed for students who wish to sharpen the basic reading, writing, and study skills necessary for success in the upper school curriculum. Students learn and practice techniques that require them to take an active role in their learning. Topics include understanding individual learning styles, organizing materials, planning and using time efficiently, note taking, listening, active reading, test taking, and self-advocacy. Writing process and self-editing skills are also addressed.

Students keep a journal in which they set weekly goals and regularly evaluate their progress. The student plan book, course texts, and class notebooks also serve as important materials for applying various learning strategies and developing sound study habits.

- *Admission: By permission of the instructor*

Academic Support II (F, W, S)

Academic Support II is designed for the student who has completed the Academic Skills Development course, has been introduced to a variety of study techniques, and is seeking a program tailored to meet his or her individual academic needs. Each student works with the instructor to develop a plan and practice the specific skills and strategies needed to achieve personal goals. The objective of the course is for the student to gain an understanding of how he or she learns, to adapt study strategies to support learning, and to develop sound study habits.

- *Prerequisite: Academic Skills Development and permission of the instructor*

ENGLISH

THE PHILOSOPHY

In our English classes we cultivate students' personal and intellectual growth through extensive reading, writing, listening, and speaking. At the same time, we strive to develop students' appreciation of and skill with the English language. All this begins with the close examination of literature—the artful expressions of our language which touch on the universal questions of the human condition. In a natural circle, this study of literature helps students' writing, while their writing deepens their appreciation of literature and life. We promote personal growth through deep thinking about moral and ethical questions raised in reading and explored in discussion and writing. We pursue a way of thinking more than a set of moral answers, pushing students to develop their own independent beliefs. Similarly, we pursue students' individual writing processes, rather than strict writing formulas, preparing them to formulate deep critical questions and conceptual frameworks as they approach increasingly challenging material.

To promote further independence, we provide students with a variety of teaching styles and writing expectations, balancing this with common goals for our work with the language and literature. To promote wider perspectives, we study diverse texts from various cultures and eras. In sum, we hope to instill a love of words and books—and the depth of thinking and feeling that one experiences in this lifelong pursuit.

THE OBJECTIVES

The department will provide opportunities for students to:

- develop study skills, including strategies for reading, note-taking, and notebook organization;
- practice close reading in a variety of literary genres;
- sharpen critical and analytical skills with sophisticated literature;
- write literary essays and formulate a thesis from evidence in a text;
- enhance skills of oral expression through discussion and presentations;

- acquire composing skills from sentence to paragraph to essay;
- write and rewrite extensively to develop a mature writing style and to build confidence in their own writing process;
- experiment with writing fiction, poetry, and personal essays;
- master the fundamentals and terminology of English grammar;
- enrich vocabulary.

THE PROGRAM

The English program includes two distinct but not discrete parts. Grades 6–10 include common reading and writing experiences at each level that are built upon in each succeeding year. In grades 11 and 12, students do not take yearlong courses unless they are enrolled in AP English. Instead, each trimester they choose from electives in literature and writing. Each junior and senior is required to take English each trimester. For juniors, one trimester course must be a Group A selection, one must be Composition, and the third may be from Group A, B, or C. The group requirements may be taken in any order during the year, though it is recommended that Composition and Group A courses be taken during the first two terms. Seniors may take one Group A, one Group B, and one other, or two Group A's and one other. Seniors are encouraged to fulfill group requirements in the first two trimesters.

English IV (Grade 9) (Y)

In ninth grade we offer a common set of skills and vocabulary for students as they approach English throughout high school. The course comprises study of literature, writing, and language. We aim to improve students' ability to read and understand literature through instruction in underlining, critical inquiry, appreciation of craftsmanship, and processes by which to connect a text to one's self, other texts, and the world. We examine novels, plays, poetry, and short stories, and we gain skill and pleasure in reading independently. Students develop their own understanding of what it means to be human as they read literature depicting diverse experiences and themes. In their writing, which typically includes both imaginative and critical expression, students learn to become clear, focused, and specific in their essays and creative pieces. We examine language through the vocabulary that emerges from the reading, through formal study of grammar and syntax, and through efficient, evidence-rich participation in discussion. Reinforcing sound practices in organization, managing long-term assignments, and becoming effective members of a community of scholars round out a lively course of study.

English V (Grade 10) (Y)

Tenth-grade English encourages students to participate actively in a seminar classroom, developing their thinking, speaking, and writing skills in response to literature. The course concentrates on the writing process as students write both expository and creative pieces, including personal and literary essays, poems, and short stories. Students do extensive work on revision and editing, through individual and group processes. Weekly vocabulary work continues through this year. Diverse texts—including stories, poems, plays, and novels—challenge students to widen their reading and living experiences. Students will be asked to read closely, examining words, sentences, and scenes to understand the ideas and feelings embodied in literature and to prepare them for their writing.

ELECTIVES FOR GRADES 11 AND 12

AP English (Group A) (Y)

This is a senior course. Students examine challenging literature of different types, from different eras, from various countries. Through discussion and writing, students are exposed to literary ideas as well as critical styles and techniques. Written work focuses on literary essays, including experiments with various critical approaches. Discussion is crucial to this class. The biggest difference between this course and other English courses may be the considerable time spent on word choice and how that affects what an author is trying to say. Interested students spend time preparing for the Advanced Placement test in the spring.

- *Admission: By departmental permission*
- *Application Required*

Composition: The Writing Process Workshop

(Group B; required for grade 11) (F, W, S)

The aim of this course is to improve each student's ability to think and write independently with confidence. The focus is on the development of each student's writing process. The primary material of the course is student essays, developed directly from personal experience. Students read numerous nonfiction pieces to explore diverse voices and the creative possibilities for their nonfiction. Weekly papers challenge the student to discover a subject, focus the material around a single idea, write, rewrite, and edit. Individual conferences and writing workshops provide various opportunities for reader responses. Each student presents a final portfolio of papers chosen from the term's work. The course culminates in a class magazine.

Public Speaking: The Art of Persuasion

(Grades 9–12) (Group C) (F, W)

Designed for those seeking to improve their abilities in speaking before formal and informal audiences, the course focuses on the basics of voice and body control (breathing, intonation, volume, articulation, gesture, posture). In this writing-intensive course, students will learn various forms of public speaking: original oratory, extemporaneous, humorous, dramatic, and oral interpretive. Students will experience writing original speeches and examine different styles of famous historical speeches.

- *This course fulfills either English or VAPA departmental graduation requirements in Grades 11–12. In Grades 9–10, this course fulfills the VAPA departmental grade requirement.*

The Composition of Film: Magic of Movies

(Grades 9–12) (Group C) (F, S)

Watching a movie is like watching an illusion, an unreal image that appears to be real, yet film affects us on many levels. We will look at techniques that filmmakers use to tell their stories—camera angles, lighting, music and sound, plot, costumes, and special effects—in an attempt to better understand how movies express basic human behavior and ideas. As a final project, students create movies of their own to demonstrate their knowledge of the art of film.

- *This course fulfills either English or VAPA departmental graduation requirements in Grades 11–12. In Grades 9–10, this course fulfills the VAPA departmental grade requirement.*

A River Runs Through It: Water in Literature (Group A) (F)

Water runs through us. It is the magic of this planet, allowing us to survive. We enter this life floating in fluid, and this is where we are most at home, most alive, most playful. Naturally, then, our best writers keep turning to water for imagery and inspiration—and great stories! We will read and discuss novels, stories, poems, and essays with water at their center, including *A River Runs Through It*,

Housekeeping, Spartina, The River Why and shorter pieces by authors such as Frost, Eiseley, Atwood, and Melville. In addition, students will experiment with a water piece of writing or art of their own—and perhaps plan a fly fishing field trip!

Personal Battles in Public Spaces: War and Literature (Group A) (F)
Some of the finest writing from the last one-and-a-half centuries has been produced under duress of war. There is something about the frantic physical confrontation, the intense mental strain, and the immeasurable emotional taxation placed upon individuals in battle that allows them to write in a way that both frightens and captivates readers. As civilians, we all too often can not imagine what exactly war does to a person. Through the examination of fiction, non-fiction, and poetry from the Civil War through to the present conflicts in Iraq and Afghanistan students will gain a better understanding of the strengths that those in war exhibit and the weaknesses that war drives to the surface. Authors may include Swofford, Jones, Remarque, Herr, O'Brien, Terkel, Hemingway, Sassoon, and Vonnegut.

Rebel Literature: Youth and Restlessness in America (Group A) (F)
Americans have a complex obsession with rebellion: we celebrate it while simultaneously forbidding it. This course seeks to better understand American identity by looking at stories by and about young people finding out who they are through controversy, quest, and suffering. Discussions will focus on questions such as: Why is rebellion associated with youth? How does rebellion change the rebel, and how does it also change society? By reading the work of beat poets, the journals of a contemporary hobo, and other literary examples of personal quests, we will examine how rebellion is fundamentally the search for identity.

Freaks and Outcasts in Literature (Group A) (F)
Though we will mention Charles Manson and the Elephant Man, they will not be the focus of this course. The focus will be on different sorts of outsiders and their depiction in literature. They might range from characters who resemble us but find themselves in bizarre settings and situations, to the alienated and disaffected, to freaks, oddballs, or the remotely supernatural. Readings will be varied. We will also explore television, movies, current events, and anything else that helps us understand this topic and its implications in literature.

Mythology (Group A) (F)
The hidden and common patterns that lie hidden in all literature—the conquest of death, renewal, the ultimate quest, the response to adventure's call, the lure of the unknown, the heroic journey mirrored by the vital inner journey, and more—can be found ever so clearly in mythology. In fact, a good look at mythology will show us that there are no new stories, situations, or characters, just variations and adaptations (clever and engaging, if the author is good). This course will center on trying to identify these early sources—and on seeing the various ways myths were crucial to early peoples—in order to make all literature clearer. Readings will include Greek, Norse, and others. Students will also read some modern works to practice using the patterns we will be discovering. A significant part of the course will involve having students write their own myths or making up their own mythological systems. The class is aimed at those conversant with the topic and those with very little knowledge of the material.

The American Poet (Group A) (F)
How has poetry helped to develop what Emerson called an authentic American voice? Who are the American poets, and how have they influenced one another? In this course our reading will range from Emerson and Whitman to the performance poets of Def Poetry Jam.

We will listen to both the lauded voices of the past and present and those that are less well-known. To focus their understanding, students will write analytical papers and also exercise their own poetic voices.

Images of Humanity (Group A) (F, W)
Surveying masterworks of the Western tradition, this course will explore literature, art, music, and drama from classical Europe through the medieval period. With an interdisciplinary focus, this course will allow us to synthesize artistic movements and treatments to understand the influence of the past on our ideas about civilization and our understanding of ourselves.

- *This course fulfills either English or history departmental graduation requirements.*
- *Class size is limited. Seniors have first priority.*

Advanced Writing Seminar (Group B) (W)
This senior course is aimed at pushing successful writers to produce more substantial and mature work in the genre of their choice. Weekly work will include individual conferences, group workshops, and discussion. The course will culminate with individual portfolios, a class publication, a reading, and attempts to publish beyond Derryfield.

- *Admission: By departmental permission*
- *Prerequisite: Composition and Creative Writing*

On Justice (Group A) (W)
How should we live together? What does it mean to live justly? In this course we will explore several formulations of justice and its implications in our lives. Most readings will be drawn from philosophical thinkers including Plato (*Republic*), Aristotle (*Ethics*), Thucydides, and various theoretical and literary responses. Students will write analytical essays and also develop and present their own models of a just society.

Urban America (Group A) (W)
America's cities present complicated paradoxes: they are at once bastions of opportunity and ingenuity and concentrations of abject poverty. American cities are centers of learning and self-expression, and the birthplace of cultural trends emulated around the world. This course will focus on the American experience as told through the voices of those living in the nation's cities. Students will examine the proliferation of writing coming from urban centers over the past thirty years, approaching texts from various critical perspectives. We will focus on the timeliness and timelessness of writing as it relates to contemporary issues and the universal human experience; whether or not you believe Tupac Shakur's writing will be considered classic, you will certainly need an understanding of the classics that rivals his to unlock the meaning in his work.

King Arthur's World (Group A) (W)
The stories of Arthur, his knights, their quests, and the dynamic women who inhabited Camelot, Avalon, and the Europe of roughly 1500 years ago still entertain and enthrall us. We have all heard of the sword in the stone, Merlin, and the Round Table, as well as the intense and ultimately destructive relationship linking Arthur, Guinevere, and Lancelot. New books and movies continue to tap into the source; Arthuriana is such a common part of our world, so firmly embedded in it, that it is even the stuff of parody. Singers and writers from the British Isles and Continental Europe created rich and varied characters, based on the Arthurian saga, that appeal to us because they are so recognizably human and yet so magnificently beyond us. They were the role models and pop stars of their day. In this course, intended for those new to the material as well as those somewhat familiar with it, we will examine the sources, the early versions of this age of chivalry, and modern retellings.

What's Going On: Literature and Art of the Sixties (Group A) (W)

The Sixties changed everything in America. Movements and ideas erupted on the scene in stories, poetry, and song, building energy from each other: Civil Rights, Black Power, Feminism, Rock and Roll, The Environment, Earth Day, Native Americans, Woodstock, Peace, Love, Flower Power, Vietnam, Anti-War Movement, The March on Washington, assassinations, The Beatles, Rolling Stones, Motown, and The Doors. Hula Hoops, Twiggy and the Twist. Andy Warhol and Roy Lichtenstein. We need to know how this happened and why. We will study art and literature written during and about this remarkable explosion in American culture.

Literature of the East (Group A) (W)

As the world shrinks and we become increasingly closer to each other, we can learn a lot by seeing the work of authors outside of the Europe-America axis. There is rich work out there, a range of offerings dealing in love and hope, fear and death, violence and victory. One aim of this course is to show students the work of writers from India, Japan, and China. We will see the traditional, the modern, and the fantastically innovational. We will encounter writers totally absorbed in their own cultures, isolated from the rest of the world; other writers strikingly aware of the currents of literature from around the world; and even some who are doing something utterly new.

Reading the Scene: Literature and Film (Group A) (W)

Too often we read a book and exclaim, "this should be made into a movie!" In this course, students will examine literature that has been translated into films along with their visual counterparts. Emphasis will be placed on the analysis of the literature compared with its representation on the screen. How are the two different? How are they similar? How does viewing the film reveal aspects of the literature that are implied through the writing? Can a good book be turned into a film? Selections may include *Being There*, *The Wall*, *The Natural*, *One Flew Over the Cuckoo's Nest*, *Lolita*, *Never Cry Wolf*, and *The Remains of the Day*.

Creative Writing (Group B) (S)

Creative writing, including poetry and short stories, allows students to expand their writing and thinking skills and play with their imagination on paper. Through study of specific techniques and forms, students will understand some of the concrete mechanics and hard work required for what is usually called creative writing. The final goal for the course will be an individual portfolio and a class magazine.

Fiction Around the World: Globalism and Literature (Group A) (S)

As the 21st century progresses, it is becoming startlingly obvious that the geographic and linguistic borders separating people are rapidly eroding. People identify with multiple cultures, speak many languages, and operate their businesses from America while their products are made half a world away. Is "national identity" or awareness a valid concept anymore, or have we begun to overlap each other in a quest to find new experiences and easier money? The class will examine and discuss readings from all parts of the globe—from India, Japan, Mexico, Europe, and America—in hopes of discovering a common thread or a new perspective.

Into the Wild: Adventure Writing (Group A) (S)

To embark on a journey to an unknown place, the only certainty is that one will encounter situations never before experienced. What drives us to explore, to wander, and to seek the unknown? The writing that results from adventuring is rich in its descriptions of places, people, and experiences, but more often than not, it is also revealing.

It allows the writer to examine himself in a light that is completely fresh. From Ernest Shackleton to Jon Krakauer, students will examine writings about far-flung locales and journeys that challenge both the body and the psyche.

Shakespeare for Performance (Group A) (S)

The primary goal of this course is to show that academic study of Shakespeare illuminates performance, and that bringing the characters to life on stage clarifies the meaning on the page. Initial focus will be on what can be derived from the page—elements such as character and theme, supplemented by considering the material as something to be acted out. Gradually the ratio will be reversed, until preparation for performance takes up most of the class time. Writing about the plays and characters will involve both literary and acting slants. An assembly performance is likely to be part of the class. This class is designed for students interested in acting, and/or taking some risks and expanding horizons.

- *This course fulfills either English or VAPA departmental graduation requirements.*

When Cultures Collapse (Group A) (S)

It is no secret that the downfall of civilizations and communities often is the result of a flaw from within. By looking at real and imagined examples of societies that fall, this course aims to identify what holds the fabric of civilization together. Students will read fiction and essays about communities on the edge of self-destruction in order to understand the fragility of societies. The themes we will explore relate directly to questions our society faces in the 21st Century about community, sustainability, and individual responsibility.

- *This course fulfills either English or history departmental graduation requirements.*

The Good (Group A) (S)

Is the Good another word for happiness? Is this the same as pleasure? Do we share a common good or is it a useful lie? This course will examine some of the philosophical writing underpinning ideas of the Good. Readings will draw from classical texts (Platonic Dialogues, Aristotle's *Ethics* and *Politics*) as well as modern theory and literature. To refine their understanding, students will write critical essays examining various arguments about the Good. They will also write to refine and articulate their own formulation of their own "highest Good."

Love and Death (Group A) (S)

"Two things that occur only once in a man's life—the only difference is that after death you don't feel nauseous (sic)"—this line, more or less, comes from Woody Allen, and isn't the gist of this class, which will examine how a range of writers and characters tries to deal with what seem to be the most pressing problems we face. Students will learn how to analyze literature by grasping authors' views of these two major themes, and by wondering why the two are so strongly related. Selections will include serious, sober texts and light, whimsical treatments. The depiction of these ideas in pop culture will also be part of the course. The relationship between love and death will also be explored in student writing.

The Bible and Literature (Group A) (S)

Greek literature is wonderful, but there is one book that has influenced European and American literature more than any other. The patterns that writers have used for much of our culture's history are seen quite clearly in the Bible, a book that has been and continues to be the staple of a vast number of people of every sort, of every class, of every level of education. Even the most illiterate people in the darkest of ages have known the Bible, so its characters and

events have continued as archetypes for everything from our everyday stories to the most exalted literature. In fact, this book has always helped mold the thinking of many of those who have run our government. This course is aimed at people with some acquaintance with the Bible, as well as those who think they know almost nothing. In the course we will examine forty or fifty of the most important stories. There will be individual work on other parts of the Bible. We will also read a few novels to practice finding and applying Biblical material. While most of our discussions will be connected to the Bible, the bulk of our reading will be other books. For consistency, we will all use the King James version, though I hope that students will bring in other translations so that we can explore the significance of some differences.

Modern Theatre: Analysis and Performance (Group C) (S)
(Offered on alternate years. Next offered in Spring 2010)

Today's theatre is continually presenting new insights into our contemporary world as well as creating literary and dramatic techniques by which to express them. Using some of the most stimulating materials in contemporary theatre, this fast-paced course will challenge students to sharpen their analytical skills and then to experiment with creative ways to express their own interpretations. Developing confidence in the student's own voice through intellectual and performance risk-taking is a major component of the class. Although primarily a literature class, students should be prepared to do scene work on a weekly basis.

- Open to juniors and seniors only, this course fulfills either English or VAPA departmental graduation requirements.

HISTORY

THE PHILOSOPHY

Knowledge of the past provides students the essential foundation for democratic participation and global citizenship in a rapidly changing and interrelated world. Our students graduate with a strong grasp of American, western, and non-western history, the abilities to learn independently and to see issues from a variety of perspectives, which all lead to a clearer understanding of the present. While we expect the core skills of analytical reading, writing, debating, and researching to be consistently taught, we encourage creativity and flexibility in the classroom so as to enhance individual learning and to develop within each student a love for historical inquiry.

THE OBJECTIVES

The department expects students to:

- develop close reading skills for primary and secondary sources;
- construct and articulate arguments both orally and in writing;
- write essays and formal papers using a variety of evidence;
- take effective notes from reading, discussion, and lecture;
- improve research skills using print and online resources;
- display knowledge and understanding in public settings;
- develop an awareness of world cultures and geography;
- pursue areas of individual interest;
- cite sources properly.

THE PROGRAM

Asia: East and West (Grade 9) (Required for graduation) (Y)

This course will introduce students to the cultures and histories of the Asian continent. It will examine China, Japan, and the Middle East as case studies to better understand the complexity of the continent as a whole. Confucianism and the Abrahamic traditions, contemporary and 21st century global concerns, and the experiences of being a teenager in Asia will comprise areas of focus within the course. Readings will include primary sources, historical fiction,

and analytical texts. The readings will engage students' intellectual interests and immerse them within the cultures of these areas. Artwork, music, and film will also provide insight into the many experiences of living in Asia, in both medieval and modern times. This course will build a foundation for the analytic writing, note-taking, presentation, and research skills that will be utilized in history courses throughout the next three years at Derryfield. In addition, students will blend scholarship and imagination in multiple creative projects, including computer-designed slide presentations, throughout the year.

Modern European History (Grade 10) (Y)

Modern European History explores the major developments in Europe from the Reformation to the present. These will include movements and experiences related to the Age of Reason and the French Revolution, the Romantic Movement and the Industrial Revolution, European Imperialism and the World Wars, the evolution of Fascism and Communism, and the Cold War. Attention will also be paid to emerging trends and directions for the 21st century. Modern European History continues to build on the reading, research, and writing skills necessary for successful historical understanding and expression.

United States History

(Grades 11–12) (Required for graduation) (Y)

This study of United States history is accomplished by dividing the American experience into distinct units, each one designed around a key period of American history. After utilizing books, monographs, primary sources, maps, and other materials to study multiple views of issues, students are asked to draw their own conclusions. The class is designed to encourage student interaction, and students are asked to take sides and defend their opinions on significant historical questions. Techniques to encourage reflection include debates and historical role-plays, while current events are used to reinforce the themes of the course.

Advanced Placement United States History (Grades 11–12) (Y)

Major periods, episodes, and issues of the American experience are explored in depth through primary and secondary sources, with emphasis on concepts that have shaped American development. Through extensive reading, writing, and seminar discussion, students study the relationship between ideas and institutions, rhetoric and reality, and various interpretations of the American experience. The class is open to those students with both honors achievement and outstanding motivation and interest in history, who enjoy and contribute to the give-and-take of seminars and who have demonstrated a responsibility for their own learning. As this course, in some cases, will be used for college credit, it is taught like a college course and not exclusively to prepare students for the AP exam.

- Admission: By departmental permission
- Application Required

Senior Honors History: Environmental Studies (Y)

Environmental Studies is an individually tailored course geared towards creating an understanding of the sustainability issues facing our global community. By thoroughly investigating our local environment and community, students will see the inter-relatedness of all aspects of human development and gain the tools necessary to analyze the costs and benefits of various approaches to the ever-increasing demands on the planet. The structure and subject matter of Environmental Studies offers a challenge to the serious history student: to use the research, analytical, writing, and speaking skills gained in an academic career to investigate a different field of study. The course will present unique opportunities for students to pursue individual topics of choice, such as environmental history and ethics, climate change, natural resource depletion, waste management,

green design, renewable energy, urban planning, transportation, and pollution. The course will be centered on common themes, case studies, and public presentations, but a significant portion of the course will focus on individually designed research and service learning projects.

- Admission: By departmental permission
- Application Required

ELECTIVES FOR GRADES 11 AND 12

America and the Post Cold War World (F)

This elective explores the advantages and challenges for the single super power to emerge from the cold war. The course will investigate different theories, including Samuel Huntington's "Clash of Civilizations," Thomas Friedman's "globalization," Joseph Nye's "soft power," and Fareed Zakaria's work on the future of democracy. The balance of the course will use these theories to examine United States relations with the Russia, China, India, Japan, or the Middle East.

Holocaust and Genocidal Studies (F)

This elective is designed to examine the recent history of genocide, starting with the Armenian Genocide in the early 1900s, progressing to the Holocaust and ending with an examination of current genocidal events in the world. The class is more than the story of genocide; it is a study of who we are, of human nature, and of stereotype and prejudice. This elective seeks to examine not only the dangers of human inaction and ignorance, but also the factors that led to the tragedies of the Holocaust and other genocides.

Images of Humanity (F, W)

Surveying masterworks of the Western tradition, this course will explore literature, art, music, and drama from classical Europe through the medieval period. With an interdisciplinary focus, this course will allow us to synthesize artistic movements and treatments to understand the influence of the past on our ideas about civilization and our understanding of ourselves.

- This course fulfills either history or English departmental graduation requirements.
- Class size is limited. Seniors have first priority.

Understanding the Middle East (W)

The Middle East has been a focus of United States foreign policy since the early 20th century, but after September 11th it has become the focus of America's war on terror. This elective will explore the dominant historical, cultural, and religious factors that have created the Middle East as it exists today. Topics of inquiry will include: the origins of the modern nation states, domestic challenges for different nations, the complexity of Middle Eastern-American relations, and the prospects for political and economic liberalization within the region.

Think Globally, Act Locally (W)

The 21st century brings challenges that we all need to understand: world hunger and homelessness, poverty, global warming, and natural resource depletion are just a few. What are the causes and consequences of these issues? How do they and will they affect us? Why should we care? What can we do? This elective will give an overview of many world problems and attempt to answer some of these tough questions. We will be reading from books, magazines, newspapers, and the internet to gather and analyze information. A local service project designed and implemented by the students will be an integral part of this class.

Reading the Wall Street Journal and the New York Times (S)

This elective will focus on the major issues of the day for the United States. Students will deepen their knowledge of important domestic and international issues, and sharpen their critical/analytic skills as they follow the political debate through reading the *New York Times* and the *Wall Street Journal*. Additional readings may include other domestic publications, blogs, and international sources to increase each student's global perspective. Expectations will include a research paper and a public presentation at either a school-wide history forum or an all-school assembly.

- A strong interest in international affairs and domestic national concerns is a pre-requisite for this course. Although not required, the electives: *The United States and the Post Cold War World* and *Understanding the Middle East*, will provide important background information.

When Cultures Collapse (S)

It is no secret that the downfall of civilizations and communities often is the result of a flaw from within. By looking at real and imagined examples of societies that fall, this course aims to identify what holds the fabric of civilization together. Students will read fiction and essays about communities on the edge of self-destruction in order to understand the fragility of societies. The themes we will explore relate directly to questions our society faces in the 21st Century about community, sustainability, and individual responsibility.

- This course fulfills either history or English departmental graduation requirements.

Music History: A Survey of Western Music from the Medieval to the Present (S)

Art forms are uniquely related within time periods and can be better analyzed and understood within the context of the social and historical climate of the day. In this course, the distinctive characteristics that define musical eras will be studied and analyzed. Through listening and the study of scores, students will gain an appreciation of masterpieces from each era. Music will be seen in relationship to art, architecture, literature, and history.

- This course fulfills either history or VAPA departmental graduation requirements.

MATHEMATICS

THE PHILOSOPHY

The primary concern of the Mathematics Department is the development of a student's ability to think logically. We believe that even if mathematics is not to be their main area of interest, logical reasoning will be invaluable both in a student's chosen field and in everyday living. We do not believe, however, that this type of logic must be developed at the expense of a firm knowledge of mathematical facts and concepts, but that instead the thinking process should make the facts and concepts easier to understand.

We are also firmly committed to challenging students to the limits of their capacities. Ideally we accomplish this by allowing students to progress at their own rate through the system, within the structural limitations of the classes. We emphasize the development of the individual, both as a thinker and one who computes.

Finally, we feel a strong commitment to and take great pride in the number of students who remain in the mathematics program for their entire high school career. We believe that we can be flexible enough with course offerings to fit the needs of a particular group. This may often require sections of the "same" course moving at quite different speeds, but we are willing to expend the extra effort to make this possible.

THE OBJECTIVES

To implement our philosophy, we believe that each student should:

- understand mathematics as a logical system;
- have a knowledge of, and be competent with, basic mathematical processes and concepts;
- develop efficiency and accuracy in computation;
- acquire the ability to solve problems;
- learn the method of deductive proof;
- use logical thinking to discover both generalizations and applications;
- develop the skills and vocabulary essential to future mathematical study;
- develop creativity and curiosity;
- understand the relationship between mathematics and the other academic disciplines;
- understand and appreciate the role of mathematics in society.

THE PROGRAM

Below are the topics covered in each of the mathematics courses offered at Derryfield. The ability of a particular class may dictate some variance from the outline, but it would involve only slight changes. A student must have completed at least Algebra II in order to graduate. Admission into courses beyond Algebra II is by departmental permission. Students with exceptional interest and ability are urged to proceed through the curriculum at a rate that will qualify them for a year of Calculus.

Algebra I (Y)

- Introduction to variables
- Real number axioms
- Linear equations and inequalities in one and two variables
- Graphing in the plane
- Operations with polynomials
- Factoring
- Laws of exponents including negative exponents
- Rational expressions
- Linear and quadratic functions
- Irrational numbers
- Quadratic formula

Geometry (Y)

- Angles in the plane
- Parallel and perpendicular relationships
- Congruent triangles
- Quadrilaterals and regular polygons
- Similar triangles
- Special triangles
- Circles and angles in circles
- Constructions and loci
- Coordinate geometry
- Areas of polygons and circles
- Deductive proof and applications to three dimensions emphasized throughout
- Trigonometry of right triangles
- Laws of sines and cosines
- *Prerequisite: Algebra I*

Algebra II (Y)

- Real number axioms
- Linear equation and inequalities in 1, 2, and 3 variables
- Linear systems
- Quadratic equations and functions
- Irrational numbers and radical expressions and equations
- Complex numbers

- Techniques for solving polynomial equations
- Exponential functions, equations, and properties
- Logarithmic functions, equations, and properties
- Rational expressions including negative exponents
- Rational expressions and equations
- Basic counting methods and probability
- Conic sections and quadratic systems
- *Prerequisite: Geometry*

Honors Algebra II (Y)

Honors Algebra II covers the same topics as Algebra II but in greater depth and at an accelerated pace. The course covers a small set of unique topics, including matrices and determinants and their applications. In addition, the teacher and students will read a mathematics-related book and discuss it periodically. Group work is a major component of the course and students are expected to take significant personal responsibility for their own learning.

- *Admission: By departmental permission*
- *Application Required*

Topics in Advanced Mathematics (Y)

This course is an alternative to Precalculus for students who do not intend to study calculus in high school. Although mathematically rigorous, the course is more flexible in content and pace than Precalculus. Below is a list of possible topics:

- Logic and set theory (including inductive and deductive reasoning, Venn diagrams)
- Methods of counting and probability
- Foundations of statistics
- Sequences and series
- Solid geometry
- Topology
- *Prerequisite: Algebra II*
- *Admission: By departmental permission*

Precalculus (Y)

- Functional analysis including composition and inversion
- Polynomials with factor theorem and rational roots theorems
- Exponential and logarithmic functions
- Trigonometric functions and their inverses
- Trigonometric identities and proofs
- Advanced triangle trigonometry
- Polar coordinates, including polar form of complex numbers
- Sequences and series
- Mathematical induction
- *Prerequisite: Algebra II*

Advanced Placement Calculus (AB) (Y)

- Limits and continuity
- Derivatives of algebraic and transcendental functions
- Chain Rule, implicit differentiation
- Applications in curve tracing, related rates, and max-min problems
- Mean value theorem
- Integration
- The fundamental theorems of calculus
- Applications in areas, volumes, and length of curves
- Calculus of circular functions, exponential and logarithmic functions
- Methods of integration-substitution, integration by parts
- Approximating integrals by rectangles or trapezoids
- Analytic solution of variable-separable differential equations
- Graphical solution of differential equations by slope fields
- *Prerequisite: Precalculus*
- *Admission: By departmental permission*
- *Application Required*

Advanced Placement Calculus (BC) (Y)

- Improper integrals
- Conic sections and the general second degree equation
- Calculus of parametric, polar, and vector functions
- L'Hôpital's rule and its application to convergence of improper integrals and sequences
- Integration by parts and partial fractions
- Application of integrals to surface area
- Analytic solution of variable separable, linear, and logistic differential equations
- Solution of differential equations graphically by slope fields and numerically by Euler's method
- Infinite series of numbers; tests of convergence
- Power series, Maclaurin and Taylor series with Lagrange remainder
- *Prerequisite: AP Calculus (AB)*
- *Admission: By departmental permission*
- *Application Required*

Advanced Placement Statistics (Y)

This course includes three major areas of emphasis: data collection, data description, and data analysis as described below.

Data collection:

- Surveys
- Comparative experiments

Data description:

- One-variable statistics: measures of central tendency and variability
- Graphs—histogram, box plot, dotplot, normal quantile plot
- Two-variable statistics—measures of linearity and transformation to linear graphs
- Scatterplot, residual plot

Data analysis:

- Probability and probability distributions, including binomial and geometric distributions
- Normal density curves
- Sampling distributions and the Central Limit Theorem
- Hypothesis tests and confidence intervals for means and proportions
- Chi-squared analysis of categorical data
- Inference on slope of a regression line
- Power of a test, Type I and Type II errors
- *Prerequisite: Precalculus*
- *Admission: By departmental permission*
- *Application Required*

PHYSICAL EDUCATION, HEALTH & WELLNESS, AND ATHLETICS

THE PHILOSOPHY

"A healthy mind in a healthy body" defined the Greek ideal and motivates us to provide a variety of wellness activities throughout a student's Derryfield career.

We live in extraordinary times. Today's adolescents face choices and pressures affecting their whole health, the quality of their relationships, and their development as responsible, caring, and educated adults. In keeping with The Derryfield School's commitment to the development of the whole person, our Physical Education, Health & Wellness, and Athletic programs represent a philosophy in which well-being is viewed as coming from a balanced integration of body, mind, and spirit. Health is described as much more than the "absence of disease" and it includes more than being physically fit. It is multifaceted and includes social health, emotional health, intellectual health, physical health, spiritual health, and vocational health concepts.

Each of the three components in this category work to assist students in living a healthy life. Each division has its own objectives that work to meet the goal of developing holistically healthy individuals. To help meet this end, students have access to the Wellness Center, which houses a registered nurse/wellness coordinator, athletic trainer, and PE teacher. Services that are available to students include, but are not limited to, treatment for injuries, care for illnesses, prescription and non-prescription medication administration per the medication policy, and counseling related to health, physical activity, and sports.

PHYSICAL EDUCATION

Derryfield recognizes the vital role that healthy students are able to play in the life of the school. Our physical education program's primary goal is to develop physically, mentally, and emotionally sound students through active experiences and intellectual opportunities which help them gain an appreciation of physical activity as a life-long pursuit.

HEALTH & WELLNESS

THE PHILOSOPHY

The Wellness Program is committed to the belief that health affects and is affected by all aspects of one's life. The curriculum is based on The National Commission's recommendations and the most current research in health education. The goals are to provide the students with accurate information and to help develop healthy individuals.

THE OBJECTIVES

Derryfield's objectives in developing personal and social responsibility and physical health are reflected throughout its educational programs:

- to foster cooperation, open communication, and a respect for individual differences, including gender, race, and culture;
- to provide an opportunity for open, informed dialogue among students, faculty, staff, and parents addressing personal, social, and ethical issues;
- to enhance a student's ability to think independently and take active responsibility for his or her own development and well-being;
- to enable students to make informed and responsible choices regarding sexuality and the use of alcohol, tobacco, and other drugs;
- to encourage students to articulate their personal convictions and to incorporate those values into their decisions and relationships.

THE PROGRAM

Students in grades 9–12 participate in topical Health and Wellness seminars throughout the year.

Introduction to Athletic Training (F)

This trimester course will offer interested students an introduction to the field of Athletic Training and also provide an overview of sports medicine. Included in the course will be an overview of anatomy and physiology, medical terminology, injury mechanism and classification, emergency procedures and immediate injury care, upper and lower extremity injury evaluation and management, fitness/physical conditioning, pharmacological considerations, and nutrition.

- *This course will serve only as a sixth class for a student.*
- *Admission: Juniors and seniors only*

ATHLETICS

THE PHILOSOPHY

Derryfield offers a comprehensive interscholastic athletic and physical activity program on several levels. The school competes in numerous sports in both the Middle and Upper Schools during all three seasons. There are also opportunities to participate in non-team activities. While time of involvement may vary from activity to activity, the school's goal to develop mentally and physically healthy individuals does not. Our main objective is to develop in our students both skill and understanding, as well as an appreciation of maintaining an effective level of fitness. In athletics, we also seek to develop sportsmanship and team attributes such as cooperation, unity, and pride. Physical activity and athletic commitments are firm obligations and must be met as faithfully as all other school appointments.

Each upper school student is required to participate in two seasons of physical activity each year. Only one independent activity per school year is permitted. **Missing a practice or a game is considered as serious as missing a class.** Failure to complete the physical activity requirement will jeopardize graduation.

THE PROGRAM

Derryfield offers a wide range of physical activities and interscholastic athletic competition.

Varsity teams compete in soccer, golf, basketball, skiing, swimming, baseball, softball, tennis, crew, cross-country running, lacrosse, and field hockey. Membership on a varsity team requires a moderate level of playing ability and demands a strong commitment of time and effort including some weekends and vacation time. Try-outs are held for a place on a varsity team.

Interscholastic competition is also available at the junior varsity level in field hockey, soccer, crew, tennis, basketball, ice hockey, and baseball for younger, less-experienced students. The teams provide experience for developing athletes and an opportunity to participate for any underclassman who is willing to make the commitment.

While recognizing that providing a variety of sports and activity choices is inherent in the concept of requiring participation in two seasons of physical activity, it is not always possible that every student will be able to participate in their first choice activity. Each sport/activity does have a maximum number of participants allowed, some of which are dictated by facility restrictions. For example, only 22 students will be allowed to participate in the golf program and 24 girls and 24 boys only in tennis. Students should have a second choice activity in mind if, after try-outs for both Varsity and JV, the maximum numbers are reached and they are not able to participate in their first choice. Students should contact the coach of the sport in which they wish to participate as early as possible, in order to be included in initial sign-ups. If maximum numbers are not reached, then all interested students will be allowed to participate.

The School also offers noncompetitive activities, which include yoga, fitness/weight training (winter), and aerobics (spring). Another option for upper school students is the Independent Physical Activity (IPA) contract, which allows students to design an activity program under the supervision of the Director of Athletics and their advisor. The IPA is designed to accommodate the upper school student who is involved in a physical/athletic activity not offered by the school. Upper school students wishing to pursue an IPA must submit an application for approval to the Director of Athletics. Forms are available in the athletic office. In addition, a trimester of community service or a music/drama commitment in a school production may be substituted for a physical activity once during a student's upper school career.

Managers and scorekeepers are needed to work with the various teams. A student can complete one season of his or her athletic requirement by working conscientiously with a competitive team as a manager or scorekeeper. This option demands a season-long commitment to the team. There is an exercise component attached to this option.

Some sports, such as golf, skiing, ice hockey, and tennis may require students to pay for some use of practice facilities. The school handles the bookkeeping and billing for these charges. Each year there is usually some used equipment (such as cleats, lacrosse/hockey gloves, field hockey/lacrosse sticks, etc.) available at a reduced price. Please see the Director of Athletics for details.

SCIENCE

THE PHILOSOPHY

Science education for our students will provide them with science process skills, scientific concepts, and those resources necessary for the development of scientific literacy. The curriculum is presented in a hands-on approach and is appropriate for the developmental level of all our students. The purpose of the curriculum is to encourage and develop an appreciation of science and the enjoyment of learning.

THE OBJECTIVES

The scientifically literate person:

- uses science concepts, process skills, and values in making everyday decisions;
- understands that the generation of scientific knowledge depends upon the inquiry process and the ability to propose hypotheses;
- distinguishes between scientific evidence and personal opinion;
- identifies the relationship between data and interpretation;
- recognizes the limitations as well as the usefulness of science and technology;
- recognizes the human origin of science and understands that scientific knowledge is tentative, subject to change as evidence accumulates;
- has sufficient knowledge and experience to appreciate the scientific work carried out by others;
- has a richer and more exciting view of the world as a result of his or her science education;
- continues to inquire and increase scientific knowledge throughout life.

THE PROGRAM

Biology (*Required for Grade 9*) (Y)

A strong biological foundation will afford students the ability to critically analyze scientific principles that influence their world. Through a variety of exercises including oral and written projects and experimentation, students will incorporate the scientific approach to question concepts and solve problems. By reading and critiquing published articles dealing with the life sciences on a weekly basis, students will learn the significance of scientific breakthroughs.

A theme common to many of the topics discussed is how diversity of form couples with continuity of function. Special attention will be given to the structure and function of cells and to the role of DNA in variations that lead to success of an organism.

This course will introduce the technology of gene manipulation, providing students with a greater appreciation of the ongoing struggle to cure genetic disorders. Finally, several life processes will be examined in human biology with some emphasis placed on contrasting these systems with lesser-developed organisms.

- Isolation of DNA from an onion
- Protein electrophoresis of sickle cell hemoglobin
- Computer-based lab activities

Chemistry (Required for Grade 10) (Y)

Chemistry is designed to introduce students to the relationships between the composition and structure of matter and the ways in which matter “behaves.” Students completing Chemistry will be familiar with the language of chemistry, the use of the periodic table, the properties of common substances, the principles governing these properties, and a variety of standard laboratory techniques. Emphasis is placed on problem solving, classroom demonstration of chemical phenomena, and student laboratory work.

Honors Option: All students taking chemistry will be presented with the criteria to earn an honors designation for the chemistry course at the start of the year. Students taking this option will be required to have a deeper understanding of the topics presented in chemistry. Students seeking this option should be prepared to work at a higher level and meet an increased work load through higher level assignments and evaluative pieces, as well as through faculty guided study to present and master advanced topics. Students will need to meet required goals each trimester, as well as an overall yearlong goal to earn an honors designation. Not meeting any of these goal deadlines will eliminate a student from earning an honors designation in the course. The honors designation is assigned at the end of the course after having worked at a honors level and shown a consistent demonstration of advanced understanding of the topics presented in the course.

- Full-scale use of experimental glassware and chemicals
- Identification of mystery compounds
- *Prerequisite: Biology and Algebra I*

Physics: Mechanics (Y)

Mechanics studies the traditional topics associated with physics, motion, forces, and energy. The course will begin by learning how to describe the motion of an object and then learn how to apply Newton’s laws of motion to the situation. The course will conclude with energy relationships and how they apply to Newton’s laws. Some of the labs that will be conducted during the year include solving for acceleration due to gravity, projectile motion (cannon) lab, and centripetal acceleration lab.

While mathematical relationships will be used throughout the course, the laws of physics and various phenomena will also be described conceptually to help balance the impact of the mathematical component of the class.

- Cannon Lab
- Mousetrap Cars
- *Prerequisite: Biology, Chemistry, Geometry*
- *Recommended: Current enrollment in Algebra II and good mathematical skills*

Honors Physics: Mechanics (Y)

Honors Physics: Mechanics will cover the same topics as Physics I course (motion, Newton’s laws of motion, energy), but it will cover the material in greater depth, both conceptually and mathematically, and go on to cover additional topics like simple harmonic motion and rotational dynamics. Some of the labs that will be conducted during the year include solving acceleration due to gravity, projectile motion (cannon) lab, and two-dimensional conservation of momentum.

Honors Physics: Mechanics is an aggressive, in-depth course, and is intended for highly motivated students who have demonstrated an enthusiasm for science, particularly in the areas of motion and energy. The expectations and workload placed on the students are much higher than in Physics: Mechanics. From homework assignments to laboratory experiments, students in Honors Physics: Mechanics are expected to solve more complex questions and problems. This higher expectation of work quality and depth of ideas will directly challenge students’ conceptual understanding and mathematical skills. Students contemplating careers in the physical sciences, medicine, engineering, and other related fields of study are encouraged to take Honors Physics: Mechanics.

- Cannon Lab
- Mousetrap Cars
- *Prerequisite: Biology, Chemistry, Geometry, Algebra II*
- *Recommended: Current enrollment in Precalculus and strong mathematical skills*
- *Admission: By departmental permission*
- *Application Required*

Senior Honors Biology (Y)

Living things are biological; they are also physical and chemical. Several of these disciplines come together in this senior-level course for highly motivated students who demonstrate both aptitude and interest in biological science. The course requires a willingness to consider questions bearing on the philosophy and history of biological science and a desire to discover recent developments in the fields of gene regulation and molecular biology. The course can be roughly divided into three major areas of study: general biochemistry (structure and function of organic molecules and molecular genetics), plant and animal physiology, and molecular biology, all of which are closely related. During the year, students work as a team to complete a poster project that reflects review of published research on an overarching theme that they have chosen. Previous examples of themes include: stem cell therapies, why we dream, and brain disorders. During the third trimester, control of gene expression is emphasized. This is studied, in part, by following the embryonic development of zebra fish embryos. With some additional outside work, students may be prepared to take the AP exam in May.

- Enzyme kinetics
- Agarose electrophoresis of DNA fragments
- Isolation of DNA from cheek cells
- *Prerequisite: Biology, Chemistry*
- *Admission: By departmental permission*
- *Application Required*

Senior Honors Physics (F)

Senior Honors Physics studies some specialized areas of physics and engineering, heat transfer, thermodynamics and fluid mechanics. The course begins with learning about the transfer of heat energy and laws of thermodynamics. From simple calorie calculations to working with a Carnot heat engine, the balance of heat and work is the focus of the study. Finally, the course concludes with the study of fluids. Using Archimedes’ principles and Bernoulli’s equations, students learn how boats float and airplanes fly.

The very nature of the course limits hands-on experimentations. Therefore, the course is more theoretical in its structure and mathematical models and word problems are used to characterize the studied phenomenon. Senior Honors Physics is intended for the highly motivated student who has strong mathematical skills.

- Heat transfer fin design
- Ship design project
- *Prerequisite: Physics, Honors Physics*
- *Recommended: Current enrollment in Precalculus and strong mathematical skills*

Organic Chemistry (F)

Organic Chemistry is the study of carbon-based reactions. Seems simple, but these mind-tingling reactions have an elegance and beauty rare in any other branch of Chemistry. Much of the math and equations from Chemistry/Honors Chemistry give way to functional groups, mechanisms and a plethora of new reaction sequences. The course has an emphasis on learning introductory nomenclature, reaction systems, and the laboratory. If you like playing with chemicals theoretically and experimentally, "ORGO" may be the second helping of Chemistry that you need.

- Distillation of Cinnaldehyde
- Radial Chromatography
- *Prerequisites: Biology and Chemistry*
- *Admission: By departmental permission*

Anatomy and Physiology (F, W, S)

Anatomy, the study of structure, and physiology, the study of function, are intimately related aspects of how an organism fulfills its life processes. Review of cell structure and function and analysis of tissues and how they interact to facilitate organ function is done with a consistent emphasis on the human body. Several organ systems are discussed including muscular, skeletal, digestive, cardiovascular, nervous, and immune. In addition, the developmental aspects of selected structural features are studied. Laboratory sessions complementing classroom discussions of tissues and organs will occur during the first two trimesters. In the third (spring) trimester, an appreciation of three-dimensional anatomical architecture is gained through dissection of preserved mammalian organs.

This course is divided into trimester components individually described below. Seniors have priority.

Anatomy and Physiology I (F)

After a general review of biological/chemical principles, A&P I introduces the anatomical terminology as it pertains to humans. Significant coverage of tissue structure and function will dominate this course, culminating with student research and presentations of selected tissues and diseases that alter them. To conclude the trimester, organ systems will be defined by a complete physiological and histological study of skin as an organ.

- Microscopic study of tissues
- Analysis of touch and thermal receptors
- *This course is required for A&P II and A&P III.*

Anatomy and Physiology II (W)

A&P II picks up where A&P I ended and strongly emphasizes the study of several organ systems in the human body. Laboratory exercises will support discussions of the skeletal, muscle, nervous, and cardiovascular systems.

- Analysis of rabbit muscle contraction
- Regeneration in flatworm
- *Prerequisites: Anatomy and Physiology I*

Anatomy and Physiology III (S)

Designed to complement and extend the knowledge gained during the previous trimesters, A&P III will principally involve anatomical discovery of preserved mammalian structures/organs. An extensive exploration of cat anatomy including musculature, nervous, cardiovascular, and digestive systems is the ultimate goal with lab practicals and written reports as the primary means of assessment.

- Feline dissection
- *Prerequisites: Anatomy and Physiology I*

Disease: An Historical Perspective — Plagues Pestilence and Pathogens (F)

This discussion-based course will explore the history of disease and medicine from antiquity to the early 20th century. The overarching theme is the biological and cultural impact of disease (especially epidemics) on society. We will also examine the interactions and interrelationships of disease, healers, and patients in historical context. Topics covered include: disease causing organisms, the history of pandemics and epidemics, societal understanding or misunderstanding of the cause of disease, and the role of healers in society. Students will do a presentation of a specific epidemic/pandemic of historical importance and also research a topic of their choice which will culminate in a paper and presentation.

Disease: A Modern Perspective — Microbes Immunity and the Magic Bullet (W)

This discussion-based course is designed to explore disease in today's world. An understanding of pathogens, primarily viruses and bacteria, basic cell structure, and the immune response will provide the foundation for questions such as: How has our understanding of the human genome affected our approach to disease? With all our modern advances, why do we still experience epidemics or pandemics? Will we ever find "The Cure" for Cancer? How do we deal with end-of-life issues? How has our life style contributed to a dramatic increase in diseases such as Obesity and Type II Diabetes? Current health and disease issues play a major role in the course and may influence the direction of the class. Students will be responsible for leading a bioethics discussion and also research a topic of their choice which will culminate in a paper and presentation.

Physics: Light, Optics, and Waves (with honors option) (W)

Physics: Light, Optics, and Waves studies light and waves. The course begins by learning about particle-like properties of light through the study of reflection, refraction, and geometric optics. Next, the course turns its focus to waves and how energy is transferred through various mediums, including water waves and sound. Finally, the course returns to light and studies the wave-like properties of light. Some of the labs that will be conducted during the course include geometric lens lab and Young's experiment.

Honors Option: At the beginning of the course students will be presented with criteria to earn honors designation for Physics: Light, Optics, and Waves. Students seeking the honors option should be prepared to work at a higher level and meet an increased work load through higher-level assignments and evaluated pieces, as well as through faculty guided study to present and master advanced topics. Honors candidates will be required to achieve a deeper understanding of the topics presented in the course.

- Young's experiment
- Geometric Optics
- *Prerequisite: Biology, Chemistry, Geometry*
- *Recommended: Current enrollment in Algebra II*

Engineering & Design: Design It, Build It, Break It, Fix It, Improve It (S)

Engineering and Design is a course for the tinkerer and hands-on problem solver. For this trimester, the entire course load is project-based. On average, the student will be required to complete one project per week. Each project is designed to present unique engineering challenges that will help the student to explore various physics principles like stability, stress/strain, flexibility, and mechanical advantage. Finally, students will have the opportunity to build a robot using Lego Dacta systems and various mechanical surplus parts.

- Rocket-Powered Cars
- Trebuchet Project
- LEGO Mindstorm Projects
- *Recommended: Physics or Honors Physics*

Evolutionary Development (S)

This spring elective emphasizes the mechanisms of evolution researched and documented by leading naturalists and modern molecular biologists. Initially, we will consider several examples of evolutionary changes witnessed in various organisms, and the associated genetic and biochemical explanations will form the basis of discussion. The arguments supporting natural selection, the unequivocal facts of the fossil record and the ease at which genomes are compared include some of the points that will influence our discussion. An example of student work in this portion of the course is writing a research paper on a documented evolutionary process or one that is occurring in the animal kingdom.

Fundamentals of evolution have relationships to embryonic development. Hence, this explains why the second half of this course covers vertebrate embryology, with attention given to fish and birds as model organisms that have developmental patterns seen in mammals. Indeed, the embryological development of zebrafish will be witnessed, and experiments with these transparent embryos will be a highlight of the course. As this section of the course handles embryos, the bioethical dilemmas of embryonic stem cells and their potential for gene therapy and cancer cures will be emphasized. Some concepts introduced in ninth-grade biology such as homeobox genes will be revisited as we discuss the inductive properties of tissues to form adult structures.

Covering some of the essential concepts that dictate the broad field of biology, this evolution course will uncover a variety of specific molecular processes responsible for what is observed in the whole organism.

- Zebrafish Study
- *Prerequisites: Biology and Chemistry*

TECHNOLOGY

THE PHILOSOPHY

Technology needs to be made available to Derryfield students in two ways. Students need access to the tools of the workplace for research, writing, calculation, presentation, etc. They also need access to technology as a subject of study in itself. The department strives to make technology available in both ways.

THE OBJECTIVES

The objectives of the computer curriculum are as follows:

- to make sure all students have basic computer services available, including email, World Wide Web access, word processing, spreadsheet software, and presentation software;
- to provide specialized software for classes as needed;
- to otherwise facilitate the use of technology in all areas of study;
- to allow any student to pursue topics in computer science according to individual interest and ability.

THE PROGRAM

Computer Aided Drafting and Design (CADD) (Grades 10–12) (F)

This elective introduces the student to drawing and drafting on the computer. Both architectural and engineering drawings are addressed: technical drawings dealing with front, side, and top views, as well as floor plans and elevated views of rooms are covered. As a final project, each student will design and furnish a home.

HTML: Web Design and Protocols (Grades 10–12) (W)

This technology elective introduces students to basic web design and work with HTML code. Students will learn how to create basic webpages, upload pages to a server, as well as work with Java Scripts, Java Applets, and Animated GIFS. This course will prepare students for more advanced work in web design and dynamic sites.

Introduction to Robotics (Grades 10–12) (S)

This course introduces the student to basic principles of physics, electronics, and general science through activities with robotics. Students work in groups to build simple robotic devices emphasizing problem-solving skills and group dynamics.

Computer Lab Assistant (Grades 10–12) (I.S.) (F, W, S)

This computer elective offers the student a chance to learn about the operation of the Computer Center and to assist in running one of the Center's areas of responsibility, such as network management. The student may be asked to supervise the Center, assist in a class, learn and evaluate new software, and assist the Department Head in some administrative duties. This elective also offers the student time to pursue individual areas of interest.

- *Admission: By departmental permission*

Computer Independent Study (Grades 10–12) (I.S.) (F, W, S)

This computer elective offers the student a chance to pursue areas of computer science that are ideal for that student's individual needs. This is where students would most likely learn a computer programming language. Languages studied can include C, C++, Java, and Perl. The student must submit a written proposal to the department head outlining the intended course of study. Enrollment in this course requires a certain amount of self-reliance. The teacher will strive to help the student as needed, but the student will nevertheless be expected to show an ability to solve problems independently.

- *Admission: By departmental permission*

VISUAL & PERFORMING ARTS

THE PHILOSOPHY

Self-discovery through artistic expression is fundamental to a liberal arts education. Active participation in the arts promotes positive intellectual, emotional, spiritual, and aesthetic development. A challenging, yet caring, environment allows students to develop their talent and skills to their fullest potential; builds confidence, self-esteem, and discipline; and encourages appreciation for the artistic contributions of others around them.

THE OBJECTIVES

The department seeks to:

- introduce students to the world of the visual and performing arts;
- encourage self-expression through participation in classroom and extracurricular activities in the visual and performing arts;
- promote a positive self-image;
- promote the ability to listen and perceive, not just to hear and see.

Visual Arts: to include the creation of art toward the realization of self-expression through drawing, painting, sculpture, printmaking, and design, as well as the study of art history in order to understand, interpret, and appreciate the value of creativity and expression.

Music: to include performance opportunities, the development of technical facility, and musicianship in disciplined rehearsal, and an understanding of the history and broad perspectives of musical expression.

Drama: to include opportunities for active participation in acting, directing, production, management, and technical aspects (lights, sound, set design, costuming, makeup, and choreography).

THE PROGRAM

VISUAL ARTS

Studio Art (F, W, S)

An introduction to the visual arts and to many of the basic skills and concepts used in more advanced and specialized art courses. Familiarization with the elements of design (color, form, texture, line, space, etc.) is stressed. Some of the media used are scratchboard, graphite, colored pencil, pen and ink, cray-pas, and pastels.

- *Class size is limited to twelve students.*

Painting (F, W, S)

This course deals specifically with the theories, problems, and relationships of color. The elements of design and the unique characteristics of colors are explored and included in representational work. The primary media used are watercolor and acrylic paints.

- *Class size is limited to twelve students.*

Advanced Studio Art I (Y)

This course is designed for students wishing to pursue advanced work in art. The curriculum is based on individually directed goals and requires a high level of student investment. Each term, we focus on one of the fundamentals of art-making: Drawing (F), Sculpture (W), Painting (S). Outside readings, sketchbook assignments, and visits to view artwork at regional galleries are required. In-studio efforts beyond the scheduled class time are required to meet the expectations of this class. Juniors who wish to develop a portfolio for college applications will find this class especially useful.

- *Prerequisite: Studio Art, a drawing class, and a sculpture class*
- *Admission: Permission of the instructor*

Advanced Studio Art II (F, W, S)

Students who have excelled in Advanced Studio Art I may continue developing their personal vocabulary and expand their portfolio term by term. Paralleling the Advanced Studio Art I curriculum (Drawing (F), Sculpture (W), Painting (S)), students will take part in classroom exercises, discussions, and critiques, but they will be entirely responsible for developing project concepts and setting long-term goals.

- *Prerequisite: Advanced Studio Art I*

Photography (F, W)

This course serves as an introduction to black and white photography using a 35mm camera. Students learn the aesthetics of photography, how to develop film, and how to make and color prints. Students must have 100% access to a 35mm camera—fully automatic is fine.

- *Class size is limited to six students. Seniors have first priority.*

Printmaking (S)

An introduction to the fundamental printmaking methods of relief and intaglio. Engraving, which utilizes a printing press, and linoleum block techniques are explored in depth. Students also experiment with monoprints and with incorporating color into their prints. Both traditional and contemporary views are studied.

- *Class size is limited to eight students.*

There are two drawing courses: either or both may be taken; they need not be taken in sequence.

Drawing: Refining Skills (F)

Here is an opportunity for concentrated study in the all-important visual arts areas of drawing. Through in-depth study of a variety of subject matter (still life, landscapes, organic and inorganic forms) and with a variety of media (pencil, pen and ink, marker), the student will develop and refine his/her drawing skills and “artist’s eye.”

- *Class size is limited to twelve students.*

Drawing for Perspective (S)

Drawing is the foundation for all visual art. This course encompasses the study of the human figure, including portrait drawing, and other drawings incorporating perspective, values, texture, proportion, and elements of design. A necessary course for all serious art students.

- *Class size is limited to twelve students.*

The Art of Puppet Making (W)

This is a hands-on studio class with a performance and script-writing component. The class will explore the history of puppetry and will explore the variety of forms puppets take, from the simple finger puppets of the preschooler to elaborate life-size marionettes.

Class projects will involve the invention of a series of experimental puppets. Students will write brief vignettes that express their “character’s” personality traits and explore staging which will support the illusion their puppet style requires. Reading and discussions will draw from contemporary ideas in theatre, visual arts, performance art, literature, and music.

The course will be multidisciplinary in its approach, incorporating plot and script development, acting (verbal) skills, artistic creativity, and engineering skills within a cooperative learning environment. The assignments will work toward the goal of a performance for the school during a creative assembly.

Writing and Illustrating Children’s Books (W)

(Offered on alternate years. Next offered in Winter 2009–10)

This is a design class that combines creative writing and plot development with artistic illustration of the story line. Assignments include the study of exceptional children’s books, and the relationship between illustration and text are examined. This class takes students from the early stages of brainstorming and “thumbnail” sketching to a professional product. Both the written text and its visual illustration will be critically examined and developed. Students leave this course with a children’s book mock-up suitable for inclusion in a portfolio.

A field trip to visit the studio of a professional children’s book illustrator is part of the course work. The English Department’s creative writing faculty will provide advice and critical support for this interdisciplinary course.

Ceramics (F)

This course will cover the expressive and creative aspects of clay. Students will learn the fundamentals of hand building—from coiled vessels to slab-built sculptures. Mold-making and slip-casting techniques will be explored. The basics of wheel-thrown forms will be introduced and students will develop a proficiency in working with clay.

Assignments will explore sculptural form, surface marking, and color aspects of ceramic art. Readings and discussions will examine the history of ceramic art. We will enhance the classroom learning with a visit to Boston's Museum of Fine Art.

Sculpture: Portraits & Figures in Plaster (F)

In this studio art class the students will do portraits of each other in clay. They will then build a plaster mold and create a plaster bust of their classmate from the clay original. We will also do a one-fourth scale plaster figure study. Students will be exposed to additive, reductive, casting, and modeling techniques. The class will become familiar with many of the tools, aesthetics, and vocabulary terms of sculpture.

Sculpture: Carving and Model Making (W)

In this studio art class students will learn to carve plaster, design with clay, and create models that are later made into larger-scale works. They will build foam- and wood-constructed pieces and become familiar with how sculptors work from small-scale models. This class will explore many of the tools, aesthetics, and vocabulary terms of sculpture.

Sculpture: Outdoors and Monumental (S)

Outdoors and Monumental is an opportunity to create full-scale art for the Derryfield Sculpture Garden. You will make models and explore possibilities in clay, plywood, cement, plaster, wood, or even natural materials such as sticks, rocks, and straw. Your best ideas will be realized life-size or bigger and be presented outdoors.

Introduction to Architecture (S)

This class will give students an opportunity to experience some of the challenges faced by architects. They will study modern architectural theory and building design concepts, and then apply these ideas to a real-life setting.

The students will map and evaluate a site in the field. In the studio, they will make a three-dimensional contour model and design a building for the site.

The course work will primarily address concept development rather than the engineering/drafting aspects of architecture. Emphasis will be placed on creative project presentations, which will include several perspective drawings, floor plans, and a three-dimensional model of the building and site.

Independent Studies in Art (I.S.) (F, W, S)

This course is available to motivated students who have taken all related classes offered and who wish to explore a specific interest in depth. Students are required to submit a written proposal of the project goals for pre-approval, and are expected to prepare a concluding written evaluation of their studies. Some successful independent studies projects include advanced architectural design, jewelry making, photojournalism, set design, and mural painting.

- Admission: By departmental permission
- Application Required

Gallery Management (S)

Students in this class will be responsible for all aspects of putting on a sculpture exhibit in the Derryfield Sculpture Garden. They will begin in the fall developing a theme for the show, putting out a call to artists for slide submissions of proposals, and exploring funding/grant options. In the winter months, students will interview and select a professional curator for the show. During the fall and winter, this class will meet once a week during Activities period.

In the spring, the students will meet four days a week to correspond with the artists and curator, organize submissions for review and walk the garden selecting sites for work. They will create and publish a catalogue, postcard, advertising and educational maps for the show, help set up the work, organize an opening for the artists, and arrange for reviews, interviews, and publicity.

Students selected for this class will write extensively, develop organizational, interpersonal skills, and get real-life management experience. We will work with a wide variety of professional consultants from museum and gallery directors to landscaping and lighting personnel, and from publications printers to arts reviewers. The yearlong experience will count as a single spring elective credit.

MUSIC

The Derryfield Concert Choir (Grades 9–12) (Y)

This choral ensemble, which rehearses daily, performs two major concerts annually and sings for various school and civic events. All Concert Choir members learn the basic techniques of choral singing: breathing, intonation, diction, phrasing, blend, tone, and articulation. Repertoire is chosen from all periods and differing styles. While there is not regular homework, students have responsibilities for work outside of rehearsal that enriches their understanding of music in general and choral music in particular. This work is a factor in their grade for the course.

Selected members of the group will also audition for All-State Chorus and other regional select choruses. All may audition for Derryfield's select chorus, Encore.

Upper School Instrumental Ensemble (Grades 9–12) (Y)

This course is open to anyone with two or more years of experience on their instrument, or with approval of the instructor. Musical genres ranging from classical to jazz will be studied and performed, determined by the instrumentation of the class. Both large and small group playing will be emphasized. Individual attention will be given to students in preparation for festivals such as All-State, Jazz All-State, and All-Eastern. We will prepare music for two concerts, one in December and one in May. Other performances will be announced as scheduled.

Introduction to Piano (Grades 9–12) (F)

This is a beginning piano class in which students will receive group and individual instruction on the keyboard. Students will be taught music notation and correct playing technique. Fundamentals of melody, harmony, articulation, phrasing, and musical structure will be introduced. This course is recommended for students who have had less than one year of piano lessons. It is highly recommended for inexperienced keyboard players who plan to take Music Theory.

Music Theory I (Grades 9–12) (W)

Music Theory is the study of the language and structure of music. For the experienced musician who wishes to understand music on a deeper level, this course will cover the fundamentals of written music: notation, scales, keys, modes, intervals, chords, and transposition. This course is highly recommended for the college-bound music student.

Music Theory II (Grades 9–12) (S)

A continuation of Music Theory I, this course will cover the structural elements of music: form, melodic organization, and harmonic progressions. Part-writing and composition will be included.

- Prerequisite: Music Theory I or instructor's approval

Music History: A Survey of Western Music from the Medieval to the Present (S)

Art forms are uniquely related within time periods and can be better analyzed and understood within the context of the social and historical climate of the day. In this course, the distinctive characteristics that define musical eras will be studied and analyzed. Through listening and the study of scores, students will gain an appreciation of masterpieces from each era. Music will be seen in relationship to art, architecture, literature, and history.

- *This course fulfills either VAPA or history departmental graduation requirements.*

DRAMA

Improvisation Leading to Performance (Grades 9–12) (F)

This course looks at the art of improvisation in the theatre with an emphasis on confidence building and acting technique. Theatre games, creative scene scenarios, role-playing, as well as soliloquy and monologue training, are just some of the methods explored. Students design and create characters that change and evolve during the term as they interact with one another on the stage without the use of scripts. The total impact of the course is designed to achieve a better understanding of natural stage presence through experience and creativity.

Public Speaking: The Art of Persuasion (Grades 9–12) (F, W)

Designed for those seeking to improve their abilities in speaking before formal and informal audiences, the course focuses on the basics of voice and body control (breathing, intonation, volume, articulation, gesture, posture). In this writing-intensive course, students will learn various forms of public speaking: original oratory, extemporaneous, humorous, dramatic, and oral interpretive. Students will experience writing original speeches and examine different styles of famous historical speeches.

- *This course fulfills either VAPA or English departmental graduation requirements in Grades 11–12. In Grades 9–10, this course fulfills the VAPA departmental grade requirement.*

The Composition of Film: Magic of Movies (Grades 9–12) (F, S)

Watching a movie is like watching an illusion, an unreal image that appears to be real, yet film affects us on many levels. We will look at techniques that filmmakers use to tell their stories—camera angles, lighting, music and sound, plot, costumes, and special effects—in an attempt to better understand how movies express basic human behavior and ideas. As a final project, students create movies of their own to demonstrate their knowledge of the art of film.

- *This course fulfills either VAPA or English departmental graduation requirements in Grades 11–12. In Grades 9–10, this course fulfills the VAPA departmental grade requirement.*

Theatre Technical Arts (Grades 9–12) (W)

This class will introduce students to the technical, “behind the scenes” skills necessary for the success of every performance. Students will study lighting design, sound design, set design and construction, and stage management. Students who show interest and aptitude will be asked to utilize their new skills in future Derryfield productions and assemblies.

Shakespeare for Performance (Grades 11–12) (S)

The primary goal of this course is to show that academic study of Shakespeare illuminates performance, and that bringing the characters to life on stage clarifies the meaning on the page. Initial focus will be on what can be derived from the page—elements such as character and theme, supplemented by considering the material as

something to be acted out. Gradually the ratio will be reversed, until preparation for performance takes up most of the class time. Writing about the plays and characters will involve both literary and acting slants. An assembly performance is likely to be part of the class. This class is designed for students interested in acting, and/or taking some risks and expanding horizons.

- *Open to juniors and seniors only, this course fulfills either VAPA or English departmental graduation requirements.*

Modern Theatre: Analysis and Performance (Grades 11–12) (S)

(Offered on alternate years. Next offered in Spring 2010)

Today’s theatre is continually presenting new insights into our contemporary world as well as creating literary and dramatic techniques by which to express them. Using some of the most stimulating materials in contemporary theatre, this fast-paced course will challenge students to sharpen their analytical skills and then to experiment with creative ways to express their own interpretations. Developing confidence in the student’s own voice through intellectual and performance risk-taking is a major component of the class. Although primarily a literature class, students should be prepared to do scene work on a weekly basis.

- *Open to juniors and seniors only, this course fulfills either VAPA or English departmental graduation requirements.*

WORLD LANGUAGE

THE PHILOSOPHY

The purpose of the World Language Department is to teach students the necessary skills to communicate and to interact effectively in an increasingly smaller world. The study of language develops the student’s ability to compare and connect his or her own way of life to the global community. Learning languages enables students to use their skills beyond the classroom within our diverse community. The World Language Department believes that the study of another language at the secondary school level is a vital part of a student’s education.

THE OBJECTIVES

With the National Standards of Communication, Cultures, Connections, Comparisons, and Communities as our foundation, the World Language Department provides students with the skills to:

- communicate with confidence utilizing the four essential language skills (listening, speaking, reading, and writing);
- think logically as they learn the structure of the language;
- be comfortable taking risks in the language;
- enrich their vocabulary;
- enhance their understanding of the culture, language, and literature;
- prepare them for college-level material;
- enable them to adapt within a foreign environment using skills learned.

THE PROGRAM

Chinese I (Y)

This course is an introduction to modern Mandarin conversation and written Chinese, which primarily includes two parts: Chinese pronunciation (pinyin) and Chinese characters. Students will be involved in a systematic study of pinyin, Chinese characters, and the basic elements of grammar and sentence structure. Students practice the four basic language skills through frequent oral drills and a series of communicative activities. In addition, students will be introduced to the history and customs of Chinese culture.

Chinese II (Y)

Building upon the materials and skills developed in Chinese I, this course continues to develop the language skills of listening, speaking, reading, and writing. This course emphasizes the acquisition of oral proficiency and functional literacy in modern Mandarin conversation. The skills of reading and writing will be developed through reading comprehension, increasing the vocabulary of Chinese characters, and combining the characters in short paragraphs. There is some discussion on understanding Chinese culture as well.

French II (Y)

This course solidifies and expands French I. All basic structures of the language are studied, with emphasis on verbs, pronouns, and vocabulary. Reading and writing become more extensive. Students are increasingly expected to use only French. Exposure to the culture of French-speaking countries continues and reading selections are introduced.

French III (Y)

The Level III text of the series, *Bon Voyage*, will enhance the students' continued progression in the study of French. Besides an intensive review of grammar, emphasis is placed on acquiring a broader vocabulary that includes idiomatic expressions. Vocabulary derives not only from the grammar text, but also from selected readings at the intermediate level. Students work on developing their applied use of grammar and verb tenses in writing, and there is a strong emphasis on developing oral skills through class discussion of the reading and other topics. The class will be conducted primarily in French with a strong emphasis on communication.

French IV (Y)

Students enrolling in the course must have a good command of spoken and written French. Here begins a more systematic and detailed study of French literature. Readings include works by Camus, Sartre, Sagan, Ionesco, and Vercors. Composition and conversational skills are developed through creative and analytical writing, role-play, class discussion, and reviews of selected French film classics. Throughout the year, a thorough review of grammar is included.

- *Admission: By departmental permission*

ADVANCED FRENCH STUDY

Students enrolled in the Advanced Placement (AP) Language program are capable of an excellent command of oral and written French, as suggested by their previous performance in French studies. Students are eligible to begin AP after French III or IV, based on the recommendation of their current instructor. The sequence of studies is intentionally flexible, but the understanding is that the AP course will culminate in the AP exam.

Advanced Placement French Language (Y)

The course seeks to develop language skills (reading, writing, listening, and speaking) that can be applied to various activities and disciplines. Course content will reflect intellectual interests shared by the students and teacher in arts, current events, literature, and the media. Extensive training in the organization and writing of compositions as a means of expression is an important element in the course. Although the AP exam in May is optional, preparation for the exam remains an essential element of the class. Students are expected to use French for active communication with the following objectives, as outlined in the AP course description booklet distributed by the College Board:

- ability to understand spoken French in various conversational situations;
- development of a French vocabulary that is ample for reading

newspaper and magazine articles, selected literary texts, and other writings without dependence on a dictionary;

- ability to express oneself in French, both in speaking and in writing, accurately and resourcefully and with reasonable fluency. Preparation for the exam also requires a facility in spontaneous expression as well as written proficiency.
- *Admission: By departmental permission*
- *Application Required*

Latin I (Y)

Latin I provides an introduction to the fundamentals of the Latin language, with an emphasis on grammar, morphology, and proper pronunciation. Class activities include practice in reading out loud, Latin composition, and Latin-to-English translation, as well as ongoing discussions about various aspects of Ancient Roman culture and history. The course provides a foundation for language learning, including improved facility in English composition and oral expression.

Latin II (Y)

This course reviews and reinforces Latin fundamentals through readings of increasing complexity and through regular written composition. Texts explore various aspects of Roman history, culture, and mythology.

Latin III (Y)

In Latin III, students are introduced to Latin literature through a variety of Classical authors including Cicero, Caesar, Livy, and Ovid. Readings of Latin texts are supplemented by continued practice in grammar and composition.

Latin IV (Y)

Students enrolling in this course must have a good command of Latin grammar and translation. This course will continue the exploration of original Latin texts, with a focus on Latin poets including Horace, Catullus, and Vergil.

ADVANCED LATIN STUDIES

Students enrolled in either the Advanced Placement (AP) Literature or Vergil program are capable of an excellent command of the Latin language, as suggested by their previous performance in Latin studies. Students are eligible to begin AP after Latin III or IV, based on the recommendation of their current instructor. The sequence of studies is intentionally flexible, but the understanding is that each AP course will culminate in the AP exam.

Advanced Placement Latin: Vergil (Y)

This course follows the prescribed College Board curriculum, and consists of passages from six of the twelve books of Vergil's *Aeneid*. The course's first objective will be to translate the 1800+ lines of this work. Beyond that, students in the course will seek to understand the importance of this great work, how it for generations defined the identity of Romans, and served to legitimate their vast empire.

- *Prerequisites: Successful completion of Latin III, an interest in poetry and poetic expression, and permission of the department*
- *Application Required*

Advanced Placement Latin: Literature (Y)

This course follows the prescribed College Board curriculum, exploring in depth two of Rome's greatest writers, Cicero and Catullus. In addition to carefully translating numerous difficult texts, students will focus on what these authors had to say about justice, rhetoric, class, gender, and sexual morality during Rome's transition from Republic to Empire.

- *Prerequisites: Successful completion of Latin III, an interest in poetry and poetic expression, and permission of the department*

- *Application Required*

Ancient Greek (Y)

This course is an introduction to the language of Ancient Greece. Students will learn the alphabet and basic grammar, and will read simple stories on Greek family life, mythology, and the history of Periclean Athens.

- *Ancient Greek will be offered alternate years only if numbers allow. Open to juniors and seniors only. Requires permission of the Department Chair in consultation with the Division Head.*

Spanish I (Y)

The objectives of this course are to familiarize the student with the basic communicative skills and patterns of Spanish. Vocabulary and grammar are presented and reinforced in thematic units. Students learn about events in the Hispanic world, including Spain, Hispanic American countries and the USA's Hispanic communities, through the use of the textbook and its resources and the internet. Students present projects, brief scenes, and dialogs in Spanish to the class. Further enrichment is provided by a colorful text, films, and music.

Spanish II (Y)

With the same objectives and format as Spanish I, this course offers practice in more complicated structures and speech patterns. Thematic vocabulary is expanded, and more idiomatic expressions are introduced. Fashion, sports, movies, and music are some of the topics about which students are challenged to express themselves. Oral presentations to the class are expected on a routine basis.

Spanish III (Y)

The Level III text of the series, *Buen Viaje*, will enhance the students' continued progression in the study of Spanish. This intermediate-level course focuses on developing students' communication skills. Students review and expand their knowledge of grammatical structures and speech patterns. There is an increased emphasis on speaking and writing, and culture is integrated throughout the curriculum. Vocabulary derives not only from the grammar text, but also from selected readings at the intermediate level. The class will be conducted primarily in Spanish with a strong emphasis on communication. Oral presentations to the class are expected on a routine basis.

Spanish IV (Y)

Students continue to hone their communication skills through readings in Hispanic literature and in the media, class discussions, oral presentations, and special emphasis on writing skills. All work in class is aimed at expanding the students' vocabulary and grasp of advanced grammatical structures. Readings include works by Allende, Borges, Matute, Esquivel, and García Márquez. The class is also designed as a continued immersion in the Spanish language and culture. There will be a service learning component to this class involving members of the local Hispanic community.

- *Admission: By departmental permission*

ADVANCED SPANISH STUDIES

Students enrolled in either the Advanced Placement (AP) Language or Literature program are capable of an excellent command of oral and written Spanish, as suggested by their previous performance in Spanish studies. Students are eligible to begin AP after Spanish III or IV, based on the recommendation of their current instructor. The sequence of studies is intentionally flexible, but the understanding

is that each AP course will culminate in the AP exam.

Advanced Placement Spanish Language (Y)

This course is designed for advanced students interested in attaining fluency in Spanish. Course work combines reading in fiction and non-fiction from a variety of contemporary Latin American and Spanish sources, essays based on critical analysis and discussion of readings, and intensive review of language structures. The primary basis is on oral proficiency through class discussions, dialogues, and presentations. Although the AP Language Exam in May is optional, preparation for the exam remains an essential element of the class. Students are expected to use Spanish for active communication with the following objectives, as outlined in the AP course description booklet distributed by the College Board:

- ability to understand spoken Spanish in various conversational situations;
- development of a Spanish vocabulary that is ample for reading newspaper and magazine articles, selected literary texts, and other writings without dependence on a dictionary;
- ability to express oneself in Spanish—both in speaking and in writing—accurately and resourcefully and with reasonable fluency. Preparation for the exam also requires a facility in spontaneous expression as well as written proficiency.
- *Admission: By departmental permission*
- *Application Required*

Advanced Placement Spanish Literature (Y)

This course is an intensive, yearlong survey of the masters of Hispanic literature from the medieval period to the present. It assumes a broad range of vocabulary, a high level of proficiency in written and spoken Spanish, and an interest in world literature. Close readings of poetry, plays, short stories, and novels give rise to class discussions and to written criticism designed to expose students to major themes joining the past to the present in Spanish literature. The readings are from the designated AP list and include such notable authors as Cervantes, García Lorca, García Márquez, Matute, and Unamuno; poetry selections are works by de la Vega, Machado, and Neruda among others. Although the AP Literature Exam in May is optional, preparation for the exam remains an essential element of the class.

- *Admission: By departmental permission*
- *Application Required*