

# ORATORY PREPARATORY SCHOOL

## COURSE DESCRIPTIONS

This document contains the courses in the Oratory Prep academic curriculum for the use of students, parents, and staff. Presented in two sections, it offers a concise illustration of the academic structure of the school. By clicking on the hyperlink below, you can access each section directly or you can scroll down to see each section.

The first section, [COURSES BY GRADE AND DEPARTMENT](#), presents the offerings available to students from grades 7 through 12 from each department. Each section lists the core requirements for all students and any electives that might be available to students at that grade level.

The second section, [COURSE DESCRIPTIONS](#), gives a brief narrative of every offering which also includes prerequisites.

Please note that the determination of whether a course is to be offered will be made by the Head of School, the Associate Head of School and Dean of Academics, depending on such factors as sufficient enrollment, and that unforeseen circumstances may require changes in the offerings.

We hope that students, parents, and staff will find this booklet useful in their planning.

Robert Costello, Head of School  
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**I. COURSES BY GRADE AND DEPARTMENT**

S=Semester Course (2.5 credits) Q=Quarter Course (1.25 credits) FY=Full Year (5 credits)

**Middle School Courses**

<b>Department</b>	<b>Grade 7</b>	<b>Grade 8</b>
<b>Religion</b>	Religion 7	Religion 8
<b>English</b>	English 7	English 7
<b>Social Studies</b>	Geography (1 year) and American Republic (1 year)	
<b>Mathematics</b>	Pre-Algebra	Algebra I
	Algebra I Hon	Algebra I Hon
		Geometry Hon
<b>Science</b>	Physical and Life Science (1 year) and Earth Science (1 year)	
<b>Physical Education</b>	Phys Ed 7 (S)	Phys Ed 8 (S)
	Social Health (Q)	Personal Health (Q)
	Computer Skills (Q)	Music 8 (Q)
<b>Electives</b>	Spanish 7/Latin 7	Spanish 8/Latin 8
	Band	Band

## High School Courses

Graduation Requirement	Grade 9	Grade 10	Grade 11		Grade 12	
4 years	Religion 9	Religion 10	Religion 11		Religion 12	
4 years	English 9	English 10	English 11		English 12	
	English 9 Hon	English 10 Hon	English 11 H		English 12 H	
			English Lang and Lit AP		English Comp and Lit AP	
3 years	World History	US History I	US History II			
	World History H	US History I H	US History II H			
			US History II AP			
4 years	Algebra I	Geometry	Algebra II	Calculus H	Precalculus	Statistics
	Algebra I H	Geometry H	Algebra II H	Calculus AB AP	Precalculus H	Statistics AP
	Geometry	Algebra II	Precalculus	Calculus BC AP	Calculus	Multivariable Calculus
	Geometry H	Algebra II H	Precalculus H		Calculus H	
	Algebra II H	Precalculus			Calculus AB AP	
		Precalculus H			Calculus BC AP	
		Calculus H				
3 years	Biology I	Chemistry I	Anatomy and Physiology H	Environmental Science	Anatomy and Physiology H	Environmental Science
	Biology I H	Chemistry I H	Biology II H (S)	Environmental Science AP	Biology II H (S)	Environmental Science AP
			Chemistry II AP	Physics H (S)	Biology AP	Physics AP
			Physics		Physics	Physics H (S)

Graduation Requirement	Grade 9	Grade 10	Grade 11		Grade 12	
3 years	Italian I or Italian II	Italian II or Italian III	Italian III	Latin Lit H	Italian IV	Spanish IV/IV H
	Latin I or Latin II	Latin II or Latin III/III H	Italian IV	Spanish III/III H	Latin Lit H	Spanish V H
	Spanish I or Spanish II/II H	Spanish II/II H or Spanish III/III H	Latin III/III Hon	Spanish IV/IV H		
4 years	Phys Ed 9 (S)	Phys Ed 10 (S)	Phys Ed 11 (S)		Phys Ed 12 (full year)	
	Hlth Issues 9 (Q)	Drivers Ed (Q)	First Aid (Q)			
	Freshman Seminar (Q)	Research Paper (Q)	College Research (Q)			
	Art 9 (Q)	Business I (S)	Advanced Digital Photography (S)	Ceramics (S)	Advanced Digital Photography (S)	Economics AP
	Music 9 (Q)	American Law (S)	Advanced Graphic Art (S)	Creative Writing (S)	Advanced Graphic Art (S)	Film I (S)
	Public Speaking (Q)	Art Studio (S)	American Law (S)	Digital Photography (S)	Applied Art (S)	Film II (S)
	Study Skills (Q)	Engineering I H	Applied Art (S)	Drawing and Painting (S)	Art Studio (S)	Graphic Art (S)
	Band (S or FY)	Band (S or FY)	Art Studio (S)	Engineering I H	Asian Art (S)	Graphic Novel (S)
		Intro to Economics (S)	Asian Art (S)	Engineering II H	Band	Guitar (S)
		Digital Photography (S)	Band	Graphic Art (S)	Business I (S)	Intro to Economics (S)
		Creative Writing (S)	Business I (S)	Graphic Novel (S)	Business II (S)	Intro to Philosophy
		Intro to Programming (S)	Business II (S)	Guitar (S)	Ceramics (S)	Intro to Programming (S)
		Graphic Art (S)	Ceramics (S)	Intro to Economics (S)	Creative Writing (S)	Journalism
		Guitar (S)	Creative Writing (S)	Intro to Programming (S)	Computer Science AP	Marketing
		Principles of Leadership (S)		Marketing	Digital Photography (S)	Principles of Leadership (S)
				Principles of Leadership (S)	Drawing and Painting (S)	Sociology
					Engineering I H	
	1 full year of electives	1 full year of electives			Engineering II H	

## **II. COURSE DESCRIPTIONS**

### **RELIGION DEPARTMENT**

#### **RELIGION 7: THE SACRAMENTS AND REVELATION**

Our study this year will focus on developing an understanding of our Catholic faith through a study of the influence of Jesus in our history, worship, and most of all, in our daily lives. Lecture, discussion, group and individual projects, and presentations will all be incorporated into the course. The reading of Scripture, class prayer, pertinent films and opportunities for the Sacraments will also be made available throughout the year.

#### **RELIGION 8: CHURCH HISTORY AND INTRODUCTION TO MORALITY**

Religion 8 is designed to present the Church, from her beginnings at the Pentecost event through her history, encompassing her teachings and Tradition. It presents the mission of the Church, entrusted to her by Jesus, as the responsibility of all baptized Catholics.

#### **RELIGION 9: REVELATION AND THE CHURCH (OLD TESTAMENT) AND INTRODUCTION TO CATHOLIC SOCIAL TEACHING**

This course is designed to introduce or review some of the basic theological, moral, historical, and scriptural elements of Catholic Christianity to the freshmen. Revelation, inspiration, and Salvation History are central concepts covered, it will then develop in the student an appreciation for the Hebrew roots of Christian life and faith through a study of the Old Testament. Through their study of the Old Testament they will come to encounter the living Word of God. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. Students will also gain an general understanding of Catholic Social Teaching and its roots in Sacred Scripture.

#### **RELIGION 10: MISSION OF CHRIST AND CHRISTIAN SCRIPTURES (NEW TESTAMENT) AND SOCIAL JUSTICE -*Christ's mission continuing in the Church***

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be. The purpose of this course is to help the students understand that in and through the Scriptures and the Church they encounter the living Jesus Christ. The students will come to know the Church as the living Body of Christ today. This course is designed to reinforce and build upon the scripture work and continue Catholic Social Teaching that was begun in freshman year.

#### **RELIGION 11: FOUNDATIONS OF THEOLOGY AND CATHOLIC SOCIAL THOUGHT**

Historical and systematic study of theology beginning with a strong foundation in Reason including Philosophy: its relation to its sources, methods of theology, and chief theological systems. Various philosophers and one or two prominent theologians will be studied in depth. The second part of this course is an introduction to the social documents of the Catholic Church in the modern era. This course presents a synthesis of the methodology, the anthropology, and the principles used by the Church in its moral reflection on the various social problems of our day.

#### **RELIGION 12: THE CHURCH, MAJOR WORLD RELIGIONS AND GLOBAL CATHOLICISM**

A study of the Church's understanding of its relation to other religions; the theological self-understanding of four major world religions (Judaism, Islam, Buddhism, and Hinduism) presented through their texts, histories, and forms of life; and the theological doctrines of these major world religions in dialog with Catholic Christian faith. After learning about world religions, students will explore how Catholic Christianity is lived and expressed in the non-western cultures of Africa, Asia, Latin America and Oceania. It focuses on Christianity's impact on their particular culture and social issues.

## LANGUAGE ARTS DEPARTMENT

### **ENGLISH 7**

Seventh Grade English class reinforces and further develops students' language arts skills. One aim of the class is to introduce students to the core concepts and elements of literature; this is done through the analysis and appreciation of various writings, including the novel, short story, poetry, myths, and nonfiction selections. In addition, the course aims to develop the student as a writer. This is done by guiding the student through various forms of writing, including narrative, descriptive, persuasive, and expository. Vocabulary and language skills are practiced to develop students' ability to communicate effectively.

### **ENGLISH 8**

A continuation and refinement of basic skills are part of the core study in eighth grade. Required readings from supplemental novels as well as the core literature text, offer a complete picture of young adolescent literature. PSAT vocabulary study, basic research, mastery of mechanics, grammar, and usage, and expository writing skills complement the literary offerings.

### **ENGLISH 9**

The English 9 course emphasizes the development of English skills and the study of a variety of authors through a genre-based approach. Students will be able to understand elements that enhance appreciation of short stories, non-fiction, drama, poetry, and novels. Students will also improve grammar, vocabulary, and literary analysis through writing in descriptive, narrative, expository, and creative modes.

### **ENGLISH 9 HONORS**

The English 9 Honors course will be studied through a genre-based approach. Students will be able to understand elements that enhance appreciation of short stories, non-fiction, drama, poetry, and novels. Students will also study grammar and vocabulary, and have extensive opportunity to respond to literature through writing in descriptive, narrative, expository, and creative modes. Students in English 9 Honors will progress at a faster pace and be responsible for more reading than English 9 students.

**Prerequisite: 88% in Grade 8 English with teacher recommendation and Oratory Placement Test score.**

### **ENGLISH 10 (AMERICAN LITERATURE)**

English 10 surveys the American literary scene from Colonization to the Twentieth Century. It provides students with knowledge of the interrelationship between the historical time period and the background of the author and the literature which was produced. The important cultural movements of the 19<sup>th</sup> and 20<sup>th</sup> century will be studied to allow the students a greater understanding of the literature. Daily applications to grammar, usage, and mechanics help to build strong reading, writing, and speaking skills. Vocabulary enrichment provides a background for PSAT applications, and writing practices model the SAT I writing assessment.

### **ENGLISH 10 HONORS (AMERICAN LITERATURE HONORS)**

English 10 Honors surveys the American literary scene from Colonization to the Twentieth Century. It provides students with an understanding of the various literary movements throughout American history and the correlation of each era to its contemporary historical events. Literary critical research is intrinsic to the writing requirements of the course. In addition to focusing on literature, students will also strengthen their analytical writing skills and invest in their vocabulary ownership. Emphasis will also be placed on preparation for the SAT I writing assessment test. This course is designed to prepare students who plan to enroll in the English 11 AP course and the English 12 AP course.

**Prerequisite: 88% or higher in English 9 Honors or 93% or higher in English 9 with teacher recommendation.**

### **ENGLISH 11 (BRITISH LITERATURE)**

English 11 seeks to acquaint the student with a representative study of the literature of British Isles from the Anglo-Saxon Period to the Twentieth Century. Several modern and contemporary, supplemental reading selections are required as well as composition assignments which build upon skills necessary for SAT performance. Vocabulary study, public speaking, term paper preparation, and the analyzation of literature are among the skills to be learned during the course of the year.

### **ENGLISH 11 HONORS (BRITISH LITERATURE HONORS)**

English 11 Honors seeks to acquaint the student with a representative study of the literature of British Isles from the Anglo-Saxon Period to the Twentieth Century. Several modern and contemporary, supplemental reading selections are required as well as composition assignments which build upon skills necessary for SAT performance. Vocabulary study, public speaking, term paper preparation, and the analyzation of literature are among the skills to be learned during the course of the year. An emphasis on grammar, usage, and mechanics prepare students to continue on the honors track or consider the AP program in grade 12.

**Prerequisite: 88% or higher in 10 English Honors or 93% or higher in English 10 with teacher recommendation.**

### **ENGLISH 11 AP: ENGLISH LANGUAGE AND COMPOSITION**

Advanced Placement English Language and Composition uses a British literature survey course to achieve the requirements of the Advanced Placement curriculum as they apply to language, composition, and literature. Analysis of literature, weekly vocabulary enrichment, and practice with grammar, usage, and mechanics will build a stronger foundation for students to write narrative, expository, analytical, and argumentative assignments. Research techniques are intrinsic to core course requirements. With a mastery of critical reading and composition skills, students should fare well on the Spring AP examination which may earn them college credit. The AP exam is a course requirement taken in lieu of the final examination.

The focus of AP English 11 is twofold: 1.) To continue the development of English skills through the study of British Literature spanning a variety of genres (drama, poetry, novels, nonfiction) and time periods. 2.) To prepare for the AP English Language and Composition exam by reading a variety of prose texts, analyzing language and visual media, and writing in several forms about a broad range of topics.

**Prerequisite: 93% or higher in English 10 Honors with teacher recommendation and performance on a proficiency exam.**

### **ENGLISH 12 (WORLD LITERATURE)**

This course exposes students to a wide range of modern and contemporary literature in a variety of genres. Students are presented a chronology of world issues, themes, and literary movements, drawing parallels to modern problems and historical events. Writing, vocabulary, speaking, and analytical skills are developed through critical thinking and analysis.

### **ENGLISH 12 HONORS (WORLD LITERATURE HONORS)**

This course is similar to World Literature, but additional and more challenging readings are required. Vocabulary enrichment and language usage skills enhance the writings that accompany the readings. Students will present a research paper on a literary aspect of their choice, as approved by the instructor.

**Prerequisite: 88% or higher in English 11 Honors or 93% or higher in English 11 with teacher recommendation.**

## **ENGLISH 12 AP: ENGLISH LITERATURE AND COMPOSITION**

Advanced Placement Literature and Composition uses a World Literature survey course to achieve the requirements of the Advanced Placement curriculum as they apply to the study of poetry, prose, and composition. Seventeenth century through twentieth century poetry is heavily concentrated, with emphasis on structure, analysis, and merits. Prose will be examined as to genre, literary technique, tone, and diction. Writing assignments based on the prompts from retired AP exams will be used as authentic preparation for these students, all of whom are required to take the Spring AP examination.

**Prerequisites: 93% or higher in English 11 Honors or 88% or higher in English Language AP with teacher recommendation and performance on a proficiency exam.**

## **JOURNALISM**

Journalism introduces students to the exciting world of the print media. Reporting, writing, editing, photography, layout, and design of school publications will constitute the majority of this class. Various topics including the law, ethics and practice of journalism will also be covered during the course of the year.

## **CREATIVE WRITING (1S)**

Students in this course will generate original pieces of writing, study models of good writing, and experiment with poetry and prose. Students will develop a sense of speaker and audience. They will provide positive support for their fellow writers and learn to revise their work using concrete, sensory details and appropriate choice of diction, syntax, purpose, and audience. Topics covered will include song, short story, poetry, and screenplay among others.

## **GRAPHIC NOVEL (1S)**

This course will explore the medium of graphic novels via reading, writing and illustration. The initial focus of our reading and composition will be to identify and analyze the major formal elements and defining characteristics of graphic novels. We will develop a common vocabulary and baseline understanding from which we will read, analyze and write. Although distinguished by their geographic settings, all the novels will focus on conflict, emotional connections, love lost and love found. Answers to human issues are complex, confounding and often unresolved. The graphic novel projects will focus on elements of composition that are shared with screenwriting such as storyboarding, dialogue, characterization, editing, "camera angles" and publication.

## **COLLEGE RESEARCH (1Q)**

This required course is designed specifically to introduce and prepare 11th graders for the college admission search. We will tackle all aspects of the college process including, "What does 'right fit' mean for me?" Students will investigate colleges, prepare a resume, explore paragraph and essay topics, prepare for interviews and college visits, and, in general, leave the course prepared and knowledgeable for the road ahead.

**Note: College Research is a Pass/Fail course for 11<sup>th</sup> graders.**

## **PUBLIC SPEAKING (1Q)**

Public speaking is a quarter long course for freshman students. Students enrolled in this course will be provided with an opportunity to significantly improve their public speaking skills by writing, practicing, and delivering speeches and presentations in a safe environment in front of their peers. Students will focus on different types of speeches and concentrate on improving upon key elements of public speaking including: voice and tone, word choice and organization, body language, and grasping and maintaining audience attention. Both instructor and peers will provide personalized feedback.

## **STUDY SKILLS (1Q)**

Study Skills is a quarter long course designed to prepare high school students with the tools and skills necessary to meet the academic challenges and rigor of our Oratory Prep high school curriculum. Students will be introduced to a number of essential skills to enable them to achieve appropriate balance and success during their Oratory years, and beyond. Some of the topics that will be covered in this quarter course include: goal setting, time management strategies, organization of papers, note taking methods, planning projects and homework, organization of study space and materials, communicating with teachers, test taking strategies/preparation, and adapting to learning styles.

## **PRINCIPLES OF LEADERSHIP (1S)**

*Note:* This course is designed for students who are currently in engaged in leadership roles at Oratory, or for those who wish to pursue future leadership opportunities in school and in the community.

In Principles of Leadership, students will explore various ways to develop individual and group leadership skills to impact their own lives, the school, and their communities. Areas of focus include: short and long term goal setting, problem solving, motivation, the value of clear and effective communication, servant leadership, and various strategies to pursue and implement change. Students will engage in activities that will allow them to take on direct leadership roles at OP.

## **FRESHMAN SEMINAR (1Q)**

In this course, students will work to develop two skills that will be paramount to their continued growth as students: critical thinking and writing. Students will examine the nature of critical thinking and the benefits of utilizing higher order thinking practices. They will analyze and evaluate characters and themes from our base novel, *The Lord of the Flies*. They will practice the writing process, including organizing, outlining, pre-writing, editing, and peer evaluation. They will develop and defend arguments, both verbally and in writing. In short, students should emerge from this quarterly course as better writers and better thinkers.

## ARTS DEPARTMENT

### **ART 9 (1Q)**

Students in ART 9 Students will work with a variety of professional artists' materials and techniques. Attention is focused on translating realism and abstraction via drawing, designing and collage into both fine and applied art areas. Content utilizes many of the following media: traditional and colored pencils, ink, charcoals, watercolor and/or acrylic painting. Students will explore ceramics: discovering both hand building and pottery wheel techniques. Color theory, design/composition and specific areas of art history will be explored in conjunction with each project.

### **ART STUDIO (1S)**

This course is a foundations class for students considering careers in art. It focuses on the elements of design, aesthetic awareness, problem solving and developing observation and technical skills in drawing, painting, and ceramics. Students will be able to explore philosophies and artwork by master artists throughout history as well as from various cultures. They will discover how to integrate and apply modern technology as well as be able to make artistic connections to today's society. Students will experience a variety of art materials and media which will help them in the selection of a concentration if they choose so. This course serves as a prerequisite to all other art courses.

### **ART STUDIO II (1S)**

This course is the continuation of Art Studio I, for highly motivated students considering careers in the arts. It focuses on the elements of design, aesthetic awareness, problem solving and developing observation and technical skills in drawing, painting, and ceramics, in depth, so students can cultivate and develop their own artistic styles and interests. Students will continue to discover philosophies and artwork by master artists and other cultures. While learning how to integrate and apply modern technology, collaborate with peers, make artistic connections in today's society, students will begin to discover art options for college and future art career opportunities. Students will experience a variety of art materials and media which will help them in the selection of a concentration if they choose. Students are required to create a digital portfolio of the work that is created throughout the semester.

### **APPLIED ART (1S)**

The foundation of this course is the exploration of International and American crafts. Students will learn about the application of design and aesthetics to craft objects for everyday use such as wall hangings, tee shirts, scarves and wallets. Students will examine the creative process as well as apply the Principles of Art, the Elements of Design and color theory. Students will discover ancient techniques such as Batik, Tie Dye, Shibori and Indigo dyeing as well and contemporary methods of printmaking and collage.

### **ASIAN ART: Discovering the art of China, Japan & Korea (1S)**

This course is an exploration of traditional art techniques from East Asia. Students will create art inspired by East Asian history and cultures. Students will become skilled at Sumi-e ink wash painting, multi media collage and ceramics made on and off the pottery wheel. All artwork will be inspired by East Asian aesthetics and philosophies such as: Wabi Sabi, Chinoiserie, Japonisme, The 4 Gentleman, and Kintsugi. Students will be able to create, understand, interpret and apply the meaning of East Asian art through their experience with learned concepts.

### **CERAMICS (1S)**

In this course, students will explore the foundations of clay: pottery wheel, hand building, slab roller and extruder techniques. Students will learn and become skilled at using various tools and equipment while exploring different clay bodies such as low fire white, terracotta, raku, high fire white, black, red and mid-range porcelain as well as a variety of glazing techniques. Students will have the opportunity to design and craft tiles, mugs, large vases, bowls, sculptural pieces and more.

## **DIGITAL PHOTOGRAPHY (1S)**

This course focuses on understanding the basic operations and functions of a digital camera and the manipulation of its settings to achieve a specific result. Students will learn about photographic elements of art and principles of design, composition and lighting. They will explore the history of photography and important innovators in the field. Students will produce a blog for their photography work and written reflections.

## **ADVANCED DIGITAL PHOTOGRAPHY (1S)**

This is an advanced course in digital photography. Students will explore artistic and technical aspects of photography. The course will include creative concept development, advanced digital techniques with the use of Adobe Photoshop and digital camera operations. Class time will enable students to work on independent and cooperative explorations. Students will prepare a digital portfolio of work to exhibit at the completion of the course. They will also produce a blog for their photography work and written reflections.

**Digital Photography I is a prerequisite.**

## **DRAWING AND PAINTING (1S)**

Drawing skills from direct observation of the still-life, landscape, figure and will be emphasized along with further understanding of design principles, color theory, critical thinking and problem solving. These concepts will be introduced and illustrated through the exposure and analysis of movements associated in art history. A variety of drawing and painting techniques and media will be explored, including pencil, ink, charcoal, pastel, acrylics and watercolors.

## **GRAPHIC ART I (1S)**

This course is designed to explore creative art-making through the use of computers. Students will be introduced to Adobe Photoshop and Illustrator. Students will explore artistic and technical aspects of graphic design. Digital art will be created in both raster and vector formats and digital photography applications will be introduced. Students will work independently and cooperatively on both commercial and fine art projects. They will also produce a blog for their digital art work and written reflections.

## **ADVANCED GRAPHIC ART (1S)**

This is an advanced course in graphic art and design. Students will explore the artistic and technical aspects of creative concept development, advanced digital techniques with the use of Adobe Photoshop and Illustrator. Class time will enable students to work on independent and cooperative explorations. Students will prepare a digital portfolio of work to exhibit at the completion of the course. They will also produce a blog for their digital art work and written reflections.

## **MUSIC 8 (1Q)**

### **Music History**

This course covers a wide range of topics in music history, ranging from the Baroque Era to the Contemporary Period and everything in between. Using the textbook *Music: An Appreciation* by Roger Kaimen, students will learn about the composers of each era, their music, and the different characteristics that defined the different eras. Some of the composers we will be studying include: Bach, Handel, Haydn, Mozart, Beethoven, Schumann, Wagner, Stravinsky and more.

## **MUSIC 9 (1Q)**

### **Music Myth and Controversy**

Music is rife with controversy, myth and legend. In this course, students will explore the different myths and controversial moments that helped shape music and music history. Topics such as the Mozart Effect, mysterious composer deaths, musical codes and messages, etc. will be covered.

## **GUITAR ENSEMBLE (S)**

In this course students will learn how to play the guitar, including single notes and chords, as well as reading standard notation, tablature, and chord symbols. Students will use this knowledge to learn to play a wide variety of styles of music including pop/rock, folk, jazz, country, and more. Guitar Ensemble is open to both beginners and more experienced guitar players. *Note: The School has a limited number of guitars available for students to use in this class. Students may also bring their own guitars. Please contact Mr. Van Hoven regarding the availability of school guitars or with questions about purchasing one.*

## **FILM I – FILM ANALYSIS**

This course provides students with an introduction to film, and the ability to understand what any given film means, and how it conveys that meaning cinematically. Students will examine film techniques, historical background, and decision-making of accomplished directors, enabling them to analyze film critically. Research, reading, and multiple modes of writing are required to succeed in the course. This course serves as the prerequisite for Film II.

## **FILM II – FILMMAKING**

Students will be introduced to technologies and techniques of filmmaking: writing, directing, cinematography, sound recording, image editing, and post-production. Mac computers and industry specific software such as Final Cut Pro will be covered as well as other professional equipment used in filmmaking. Students will make several short films and/or simple exercises in the digital format, culmination in a final product to be shown in the Oratory Prep Short Film Festival.

**Prerequisite: 88 or higher in Film I**

## WORLD LANGUAGE DEPARTMENT

### **LATIN 7**

The Latin course in grade 7 is the first part of a two-year program focusing on a sharpening of language skills through Latin. The course also treats the language as it can be understood in its historical and cultural setting. The National Latin Exam is used to help decide cultural, historical, and mythological topics.

### **LATIN 8**

This course is designed to help the student develop knowledge of fundamental grammar, basic forms, and vocabulary through the reading and writing of elementary material. Reading material focuses on Roman legends, mythology and daily life in the ancient world. Study of Roman culture is also emphasized. The National Latin Exam is used to help decide cultural, historical, and mythological topics.

### **LATIN I**

This course is designed to help students develop knowledge of fundamental grammar, basic forms, and vocabulary through the reading and writing of elementary material. Reading material focuses on Roman legends, mythology, and daily life in the ancient world. Study of Roman culture is also emphasized. The National Latin Exam is used to help decide cultural, historical, and mythological topics.

### **LATIN II**

In this course, a continuation of Latin I, the student further develops skills in reading and understanding Latin. A thorough review of the vocabulary and grammar of Latin I occupies the first few weeks. New and more complex grammatical structures are introduced, and vocabulary development continues through translations of more difficult material focusing on daily life in the ancient world and on other cultural topics, including Roman legends and mythology.

### **LATIN III**

Latin III continues the work undertaken in Latin I and II. The First Quarter consists of a thorough grammar review. In the Second Quarter, transition to the reading of Latin authors is undertaken by reading adapted Latin passages about the Labors of Hercules. In the Second Semester, we commence on our journey to Gaul and Britain by reading un-adapted passages from Caesar's *Gallic Wars*.

### **LATIN LITERATURE: CATULLUS AND HORACE HONORS**

This full year course will explore topics in Latin Lyric Poetry as found in selected poems of Catullus and Horace. Students will master principles of Latin grammar and syntax with particular emphasis on special uses found in Catullus and Horace. The personal, historical, social, cultural and political context of these poetic works will be covered by lectures and readings. Additionally, students will become familiar with Catullan and Horatian vocabulary words and able to read Latin at sight. Course objectives will be met through translation exercises, quizzes, tests, and papers.

### **LATIN LITERATURE: CAESAR AND VIRGIL HONORS**

This full year course will consist of readings from the current AP syllabus. The first selected passages will be from Book 5 of Caesar's *Gallic Wars*. This initial 24 class day Unit will consist of both the reading of Caesar and of an intensive review of Latin grammar. The rest of the year will be spent reading and analyzing all the Virgil passages selected for the AP syllabus. For many students, this will be their introduction to Latin poetry, meter, and rhetorical figures. Book 4 of the *Aeneid* will be read in English in its entirety and closely analyzed.

## **SPANISH I / Spanish in grades 7 and 8**

This course stresses the fundamental aspects of the Spanish language. The student builds a basic vocabulary and knowledge of the grammatical structures. He begins to communicate by means of the four basic language skills in their natural order (listening, speaking, reading, and writing) which are intermeshed with the mannerism, culture and history of the Spanish-speaking countries.

## **SPANISH II**

This course completes the study of the essentials needed for communication in the language which were presented and drilled in Spanish I. The student is expected to become more proficient in the four basic language skills while increasing his knowledge of the history and civilization of Spanish-speaking peoples.

## **SPANISH II HONORS**

This honors course has been developed for the student who has demonstrated a mastery of the sound-system of Spanish in level I and is able to easily handle the basic structures of the language in both speech and writing. It is intended to aid the student in making the transition from the controlled material used in level I to an appreciation of authentic materials.

**Prerequisite: 93% or higher in Spanish I with a score of 93% or higher on the qualifying assessment.**

## **SPANISH III**

This course reviews the essentials needed for communication in the language which were presented and drilled in Spanish I and II. The student is expected to become more proficient in the four basic language skills while continuing to develop an awareness of and appreciation for the culture, history and civilization of the Spanish speaking countries.

## **SPANISH III HONORS**

This course continues to improve the student's fluency in the conversation skills and enhances his active vocabulary while introducing him to authentic literary works of Spain and Latin America. It also assists the student in his understanding of the principal literary forms and stylistic techniques of Hispanic literature, their development through the centuries, and their contribution to Hispanic culture and expression. In addition, the student begins to develop a literary style of his own and prepare for the Advanced Placement Course in Spanish Language which is offered in Spanish V.

**Prerequisites: 88% or higher in Spanish II Honors with teacher recommendation or 93% or higher in Spanish II with teacher recommendation.**

## **SPANISH IV**

This course continues to improve the student's fluency in the conversation skills and enhances his active vocabulary while introducing him to authentic literary works of Spain and Latin America. They will continue to perfect grammar introduced in Spanish III and will be introduced to more advanced verb tenses and grammatical structures. Students in this course will be asked to speak in Spanish throughout the class period, actively participate in discussions, and write organized well-constructed compositions based on specific themes around short stories and comparing their culture with that of Spanish-speaking countries.

## **SPANISH IV HONORS**

This course is designed for those students who have demonstrated a high level of proficiency in the four basic language skills and who wish to perfect their knowledge of the language. It revolves around the use of Spanish for active communication in order to continue to improve the students' oral and written proficiency in the language while providing them with a survey of both Spanish and Hispanic American literature. The students are expected to speak Spanish throughout the class period, actively participate in discussions, and write organized, well-constructed compositions and essays based on specific themes centered on the literature studied. Only the more difficult grammatical structures are reviewed and drilled as they are encountered in the literary works.

**Prerequisite: 88% or higher in Spanish III Honors with teacher recommendation or 93% or higher in Spanish III with teacher recommendation.**

## **SPANISH V H**

This course is designed for those students who have demonstrated not only a facility for the Spanish language in Spanish IV Honors, but also an interest in continuing their study of Spanish beyond high school. The course continues to enhance the students' skills in listening, speaking, reading, and writing while exploring Hispanic culture and literature. A variety of learning activities is utilized. These include but are not limited to the use of Spanish by both the teacher and students throughout the entire class period; listening activities based on Hispanic newscasts, video clips, audio clips, and films; the reading of authentic newspaper and magazine articles in addition to excerpts from Hispanic literature; oral presentations and recorded conversations in Spanish; and informal writing assignments and formal essays.

**Prerequisite: 88% or higher in Spanish IV Honors with teacher recommendation or 93% or higher in Spanish IV with teacher recommendation.**

## **ITALIAN I**

This course stresses the fundamental aspects of the Italian language. The student builds a basic vocabulary and knowledge of grammatical structures using historical contexts like Ancient Rome, Medieval Times, and the Renaissance. The student begins to communicate by means of the four basic language skills in their natural order (listening, speaking, reading, and writing) in addition to nonverbal communication which is intermeshed with the mannerisms and culture of Italy.

## **ITALIAN II**

Italian II revisits the major grammatical concepts of Italian I and allows students to build a strong foundation in past tense verb structures. Additionally, students will be tasked to conduct reading and writing assignments in Italian that vary in terms of length and difficulty. Students will be expected to demonstrate their increased proficiency in the four basic language skills (listening, speaking, reading, and writing) and to choose cultural topics of interest throughout the year to research and develop in writing.

## **ITALIAN III**

Italian III allows students to develop the skills required to voice their thoughts with detailed and expressive language. Students will begin to delve into grammatical structures of varying time frames while simultaneously developing a familiarity with contextualized vocabulary. Students will be expected to demonstrate their increased proficiency in the four basic language skills (listening, speaking, reading, and writing) and to choose cultural topics of throughout the year to research and develop via oral discussions and debates.

## **ITALIAN IV**

Italian IV stresses culture and interpersonal communication. Therefore students will be exposed to authentic materials including book selections, short stories, newspaper and magazine articles, websites and visual media (commercials, video footage, film selections, etc.). The tasks paired with course materials will challenge students to refine their interpretive and presentational abilities as they take part in formal discussions, written reflections and creative projects. Students will be appropriately supported to demonstrate their knowledge and understanding of the themes highlighted. The cultural foci of Italian IV are driven by student interests in 21st century global topics of debate like politics, economics, technology and more.

## **PHYSICAL EDUCATION AND HEALTH DEPARTMENT**

### **SOCIAL HEALTH (1Q)**

The course for the seventh grade emphasizes the importance of instruction of basic health and wellness. There are also many other creative activities used to develop a better sense of social wellbeing. The course will introduce the importance of social interactions, while also learning ways to live and active and healthy lifestyle.

### **PERSONAL HEALTH (1Q)**

The eighth grade course emphasizes the importance of understanding consequences for their own decision making. There are also many other creative activities used to establish a foundation of good life choices. The course will introduce the importance of learning how start taking responsibility for one's health.

### **HEALTH ISSUES (1Q)**

This course is designed to help students understand themselves as they grow physically, socially, and emotionally in the society in which they belong, by considering such topics of nutrition, drug use and abuse of alcohol and tobacco.

### **PHYSICAL EDUCATION 9 (1S)**

Physical education in the ninth grade emphasizes coordination, conditioning, and physical fitness. There is also strong emphasis on team sports and competition, with the aim toward improvement in individual skills and techniques within each activity.

### **DRIVER EDUCATION (1Q)**

The ultimate objective of this elective course is to provide educational experiences which will give students the skills, the knowledge, and above all, the proper attitude necessary for the efficient and safe operation of an automobile. By course end, students should be prepared to take the written New Jersey state examination at a Motor Vehicles agency. This course is reserved for tenth grade students.

### **PHYSICAL EDUCATION 10 (1S)**

The Course for the tenth grade emphasizes participation in team sports. Much emphasis is also placed on lifetime and carry-over activities so that upon graduation, each student will have acquired the habit and desire for physical activity and should seek to continue one or more activities for life.

### **FIRST AID (1Q)**

American Red Cross first aid, CPR, and AED programs are designed to give you the confidence to respond in an emergency situation with skills that can save a life.

Included in this elective course is additional training in blood borne pathogens, oxygen administration and injury prevention which is added to CPR and first aid training to prepare you to prevent and respond to life-threatening emergencies.

### **PHYSICAL EDUCATION 11 (1S)**

The course for the eleventh grade emphasizes participation in team sports. Much emphasis is also placed on lifetime and carry-over activities so that upon graduation, each student will have acquired the habit and desire for physical activity and should seek to continue one or more activities for life.

## **PHYSICAL EDUCATION 12: HEALTH & FITNESS (FY)**

The 12<sup>th</sup> grade health and fitness class will focus on giving the student the necessary tools to live an active, healthy lifestyle as they progress into young adulthood. The course is comprised of three continuous rotations in the areas of nutrition, resistance training, and physical fitness through sport related activities.

The Health and Fitness classroom creates a positive learning environment, a place where every student has the opportunity to be successful. This class stresses not only the physical aspects of a student's lifestyle, but the cognitive and social aspects as well. The importance of teamwork, cooperation, and sportsmanship is promoted through various team and lifetime fitness activities. Students will also learn the importance of nutrition and how it impacts overall health and wellness and athletic performance.

## MATHEMATICS DEPARTMENT

### **PRE-ALGEBRA**

This course prepares the student for Algebra 1 and Geometry by the study of fundamental ideas of integers, decimals, exponents, fractions, proportions and percents. These ideas are used to develop the concepts and practice of algebraic equations, inequalities and coordinate plane and the graphing formulas. Through emphasis on algebraic patterns, the student is introduced to geometry and measurement concerning the topics related to angles, lines, triangles, quadrilaterals and circles. There is also an introduction to probability and statistics.

**Pre-requisite: Above 50% in Oratory Prep Placement Examination**

### **ALGEBRA I**

Topics include the field axioms and other properties, number sets, linear equations, linear inequalities, absolute value, linear graphing, developing and solving systems of equations, operations with polynomials, simplifying rational and radical expressions, solving rational and radical equations, and solving quadratic equations, including a study of the quadratic formula. Throughout the course, various applications are introduced with emphasis on logic.

### **ALGEBRA I HONORS**

Topics include the field of axioms and other properties, number sets, linear equations, linear inequalities, absolute value, linear graphing, developing and solving systems of equations, operations with polynomials, simplifying rational and radical expressions, solving rational and radical equations, and solving quadratic equations, including a study of the quadratic formula. Students are also introduced to exponentials and right triangles.

**Prerequisite: 88% or higher in Pre-Algebra with teacher recommendation.**

### **GEOMETRY**

This course is designed to aid the student in the development of logical reasoning and creative thinking through the use of proofs and algebraic applications. This geometric system includes the basic element of point, line, plane, perpendicular lines, parallel lines and planes, congruent and similar polygons, right triangles, Pythagorean Theorem, circles, and perimeter and area of familiar polygons.

### **GEOMETRY HONORS**

This course is a thorough study of Euclidean Geometry with emphasis on developing logical reasoning and proofs. Topics include: perpendicular and parallel lines and planes, congruent and similar polygons, right triangles with an emphasis on the Pythagorean Theorem, circles, perimeter, area, and volume. The course also includes introductory topics in trigonometry: definitions of the trigonometric functions, laws of sines and cosines and right triangle trigonometry. The course will be interspersed with coordinate geometry for most topics. These topics will be covered at a depth and pace that will present a challenge for students with superior ability in mathematics.

**Prerequisite: 88% in Algebra I H or 93% or higher in Algebra I with teacher recommendation.**

### **ALGEBRA II**

This course is a study of intermediate algebra for the average student. An emphasis is placed on the study of equations and inequalities, including linear, rational, radical, and quadratic forms. Throughout the course there is an application to word problems and use of the graphical calculator. Additional topics include functions and their graphs, complex numbers, and introductions to logarithms and conic sections.

## **ALGEBRA II HONORS**

This course gives the superior mathematics student an opportunity to begin the process of entering Advanced Placement Mathematics. An emphasis is placed on applications to develop the student's ability to translate physical situations into mathematical sentences. The student studies polynomial, rational, general algebraic, exponential, and logarithmic and trigonometric functions using traditional methods with the aid of technology. The students will also be introduced to probability and statistics.

**Prerequisite: 88% or higher in Algebra I Honors or Geometry Honors or 93% or higher in Algebra I or Geometry with teacher recommendation.**

## **PRE-CALCULUS**

This course provides a background in function theory necessary for the study of the Calculus. This course includes basic graphing techniques, transformations, combinations, and properties of functions. The course will put an emphasis on polynomial, radical, rational, logarithmic and trigonometric functions and graphs.

**Prerequisite: Completion of Algebra II**

## **PRE-CALCULUS HONORS**

This course is designed to prepare a student for an honors level calculus course. This course differs from the regular pre-calculus course in both scope and depth. Students will be required to not only solve discrete math problems, but to identify key components, analyze behavior of functions, and apply higher-level concepts to real-world scenarios. The course will put a greater emphasis on polynomial, exponential, trigonometric, and conic functions.

**Prerequisite: 80% or higher in Algebra II Honors or a 93% or higher in Algebra II with teacher recommendation**

## **CALCULUS**

This course is designed to expose students to the differential and integral calculus and to develop strong foundational knowledge, which future college mathematics courses will build on. Topics of study include functions, limits, continuity, differentiation, and integration, along with their applications. A student who is successful in this course will be well prepared for a first semester college calculus course.

**Prerequisite: 85% or higher in Pre-calculus Honors or 90% or higher in Pre-calculus**

## **CALCULUS HONORS**

This course is designed for the above-average mathematics student who would like a thorough introduction to limits, continuity, derivatives, integrals, and other topics in calculus. Applications include calculations of areas, optimization of problems, related rates, falling body problems, and topics in design.

**Prerequisite: 88% or higher in Algebra II Honors or 90% in Pre-calculus Honors with teacher recommendation**

## **AP CALCULUS AB**

This advanced placement course provides an in-depth study of limits, derivatives, continuity, the definite and indefinite integral, and applications necessary to prepare for the College Board's Advanced Placement Examination in Calculus AB. This course is designed for the superior mathematics student who wishes to garner college credit in calculus.

**Prerequisite: 90% in Calculus Honors with teacher recommendation**

## **AP CALCULUS BC**

This advanced placement course provides an in-depth study of advanced integration techniques, sequences and series, polar coordinates, parametric equations and holistic applications of calculus necessary to prepare for the College Board's Advanced Placement Examination. It also includes a comprehensive overview of the AB course. This course is designed for the superior mathematics student who wishes to garner college credit in calculus.

**Prerequisites: 95% or higher in Calculus Honors or 90% or higher in Calculus AB with teacher recommendation.**

## **STATISTICS**

The primary concern of this course will be to describe information gathered through observation in an understandable and usable manner. The students will study data collection including descriptive and inferential statistics, types of sampling, distributions, quantitative and qualitative variables, data organization and summarizing including graphs and histograms, range, deviation, variance and distributions, describing data in terms of two variables including regression and graphical analysis, introduction to probability with statistics including discrete probability distributions, and the study of confidence levels and error analysis. Students will use computers and calculators throughout the course in correlation with their projects, assessments and assignments.

## **AP STATISTICS**

This advanced placement course provides the student with an in-depth study of the Statistics curriculum, including but not limited to descriptive and inferential statistics, types of sampling, distributions, quantitative and qualitative variables, data organization and summarizing including graphs and histograms, range, deviation, variance and distributions, describing data in terms of two variables including regression and graphical analysis, introduction to probability with statistics including discrete probability distributions, and the study of confidence levels and error analysis. The instructor will emphasize the use of computer software and calculators throughout the course.

This course is designed for the serious mathematics student who wishes to receive college credit in statistics.

**Prerequisites: Senior students must earn the grades in the courses listed below. If the student has not taken the courses below, they are not eligible to take this course. If a student has taken more than one of the courses, the grade in the most recent course taken will be used.**

**Algebra 2 Honors: 95% or higher, Pre-Calculus Honors: 95% or higher, Calculus Honors: 88% or higher.**

## **LINEAR ALGEBRA/MULTIVARIABLE CALCULUS**

This intense course is designed to challenge advanced students and bridge the gap between high school and college mathematics. In the first part of the course, students will be exposed to proof based mathematics in the setting of Linear Algebra. Topics of study include Vectors, Vector Spaces, Linear Transformations, and Matrices. In the second part of this course, students will explore Multivariable Calculus, with topics including Vector Functions, Partial Derivatives, Multiple Integrals, and Vector Calculus. In addition to computation, students will learn to produce written logical arguments as problem solutions.

**Prerequisites: 90% or higher in either AP Calculus AB or AP Calculus BC and teacher recommendation**

## SCIENCE DEPARTMENT

### **Science 7 and 8: EARTH SCIENCE**

This course exposes both 7th and 8th Grade students to the various areas of Earth Science, with an emphasis on developing the problem solving and critical thinking skills required for a smooth integration into more advanced study of science on the high school level. Topics will include space science and astronomy, geology, mineralogy, biogeochemical cycles, energy, ecology and the use of natural resources. Academic study is integrated with hands-on laboratory experience.

### **Science 7 and 8: PHYSICAL AND LIFE SCIENCE**

Physical and Life Science is a survey course relating primarily to the nature of the physical and biological world and the interactions of energy, forces and matter, as well as their relationship to living organisms. It is designed to give the student basic information in the areas of chemistry, physics, biology and ecology. The emphasis is on the composition, structure and reactions involving matter, energy relationships in the physical world, and the connections among these areas and living organisms. Academic study is integrated with hands-on laboratory experience.

### **BIOLOGY I (lab)**

Biology I is an introduction to life sciences. Topics covered may include cell structures and functions, genetics, taxonomy, botany, zoology, human physiology, and ecology. The emphasis is on the nature of life and its connection with the world in which we live. Both lecture and hands-on activities (labs) are included in this study.

### **BIOLOGY I HONORS (lab)**

Biology I Honors gives students the opportunity to explore, question and analyze the many intricacies of life. The purpose of this course is to provide a detailed introduction to the major themes and concepts in biology. Students will investigate biology at four fundamental levels: molecular, cellular, organism and population biology. Experiments will emphasize the scientific methods, culminating in an independent research project that will challenge students to think creatively, make critical evaluations of their work, and provide them with a model for interpreting the world around them. Students will also develop the fundamental skills of problem-solving, concise writing, critical reading and public presentation.

**Prerequisite: 88% or higher in Science 8 with teacher recommendation.**

### **BIOLOGY II HONORS (1S) (lab)**

This course is an in-depth college level course that studies living systems and their interactions. Topics cover cell structure, genetics, energy processes, evolutionary mechanisms and ecological interactions. Attention is given to laboratories that emphasize these topics, and develop critical thinking and analytical skills.

**Prerequisites: A minimum grade of 88 in Biology I H or 93 in Biology I and recommendation of the Biology teacher. This course serves as a prerequisite for AP Biology.**

### **BIOLOGY AP (lab)**

This fast-paced and rigorous AP course is designed to be the equivalent of a two semester introductory college biology course. The curriculum follows the requirements set by The College Board in order to develop a conceptual framework for modern biology and appreciation of science as a process. Eight required labs cover topics that are relevant to the AP exam material. A summer assignments will be given in advance of the course start date. All students will be required to take the AP exam in the spring in lieu of a final examination.

**Prerequisite: 93% or higher in Biology II Honors with teacher recommendation.**

### **CHEMISTRY I (lab)**

This course exposes the students to most of the major topics in general chemistry. Emphasis is placed on understanding concepts, solving chemical problems, identifying chemical principles in daily life, and reinforcing concepts with appropriate lab work and utilizing technology in the lab.

### **CHEMISTRY I HONORS (lab)**

This course exposes the students to all the major topics in general chemistry at a more detailed level than Honors Chemistry. Emphasis is placed on understanding Course concepts, solving chemical problems, identifying chemical principles in daily life, performing experiments which reinforce concepts and utilizing appropriate technology in the lab. Independent review work is recommended in preparation for the SAT II Chemistry.

**Prerequisites: 88% or higher in Algebra I Honors or Geometry Honors or 93% in Algebra I or Geometry with teacher recommendation.**

### **CHEMISTRY II AP (lab)**

This course presents the fundamentals of general chemistry with an emphasis on problem solving and some lab work. Topics which will be presented in depth include gases, bonding, states of matter, solutions, acids and bases, equilibrium, electrochemistry and redox reactions. Upon successful completion of this course, the student will have been exposed to all material necessary for the AP exam in chemistry, which is required of all students enrolled in this course.

**Prerequisites: 93% or higher in Chemistry I Honors with teacher recommendation.**

### **PHYSICS (lab)**

This full-year course will provide the full breadth of a physics survey course. This includes topics in mechanics, heat and matter, electricity, and general relativity. The emphasis will be on mastery of the physics concepts, with an emphasis problem solving. The course makes use of computer based labs to reinforce class topics.

### **PHYSICS HONORS (1S) (lab)**

This elective course will provide the full breadth of a physics survey course. The emphasis will be on mechanics, including kinematics, Newton's Laws of Motion, work and energy, and equilibrium. The physics of rotating bodies and fluids will also be discussed. This course will combine a comprehension of the underlying physical principles with an in- depth, mathematically-oriented approach to problem solving. Furthermore, this course aims to outfit the student with an organized methodology to problem solving, and with an analytical eye toward data collection and analysis utilizing a formal scientific approach. There is extensive use of laboratory experimentation, including the writing of formal lab reports.

**Prerequisites: 88% or higher in Chemistry Honors; in addition 93% or higher in Algebra II with teacher recommendation. This course serves as a prerequisite to Physics AP**

### **AP PHYSICS (lab)**

This elective course will provide the full breadth of an Advanced Placement physics course. This includes topics in, heat and matter, waves and light, and electricity and magnetism, and quantum physics. This course will combine a comprehension of the underlying physical principles with an in depth, mathematically-oriented approach to problem solving. It is algebra-based and does not use calculus. Furthermore, this course aims to outfit the student with an organized methodology to problem solving, and with an analytical eye toward data collection and analysis utilizing a formal scientific approach. There is extensive use of laboratory experimentation, including the writing of formal lab reports. It is expected that students taking this course register for and take the Advanced Placement "B" exam offered by Educational Testing Service.

**Prerequisites: A minimum grade of 93% or higher in Physics Honors with teacher recommendation.**

## **ENVIRONMENTAL SCIENCE (lab)**

The goal of the Environmental Science course is to expose students to past and present central environmental problems that result from the interrelationships of the natural world and human society. These problems range from population growth to the toxicity and pervasiveness of heavy metals in urban environments. The topics in this course involve biological, physical, and chemical concepts while expanding on material from prior courses in science. Emphasis is placed on developing the ability to research and utilize scientific resources in order to write comprehensive quarterly research papers and develop well-reasoned and well supported theses regarding key environmental issues. This course explores the concepts described above through a series of debates, projects, discussions, labs, and papers.

## **AP ENVIRONMENTAL SCIENCE (lab)**

This full year course, aims to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Students will study geology, biology, and chemistry and earth science topics in order to relate that information to environmental problems, and predict outcomes of local and global decisions regarding environmental science.

**Prerequisite: A minimum grade 93% in Biology I Honors and Chemistry I Honors OR a minimum grade of 95% in Environmental Science.**

## **ANATOMY AND PHYSIOLOGY HONORS (lab)**

This full year course focuses on the anatomy and physiology of the human body. Students will explore each of the human organ systems which will involve the memorization of anatomical terminology, identification of anatomical landmarks, and the application of this information to clinical case studies. Students will participate in dissections throughout the year in addition other laboratory exercises to fully understand the material.

**Prerequisite: A minimum grade of 93 in Biology I or an 88% in Biology I Honors.**

## **ENGINEERING I HONORS**

This full year elective course is designed to create a broad-based foundation of engineering topics and concepts. These core concepts include principles of engineering design, the engineering profession, modeling and prototyping, study of materials used in engineering as well as the divisions of the engineering field. Students will have a hands on approach to the engineering process and be able to use technology applicable to this field.

**Prerequisite: Either an 85 in Algebra I Honors, Geometry Honors, or Algebra 2 Honors or a 90 in Algebra or Geometry.**

## **ENGINEERING II HONORS**

Engineering II Honors is an honors-level course which builds on the fundamental concepts of engineering from Engineering I. The course is designed to build on the concepts covered in Engineering I and give students experience in a variety of new and integral engineering topics such as thermodynamics, circuits, solid mechanics, fluid mechanics, data analysis, biomechanics, and technical design. The concepts will be covered through direct instruction, real-world tests and data analysis, and projects. Concepts will be relayed first from the context of pure science and then from a real-world context incorporating a balance of science and economics.

**Prerequisite: An 88% in Engineering I Honors.**

## SOCIAL STUDIES DEPARTMENT

### **Grade 7 AND 8: AMERICAN REPUBLIC**

This course requires students to examine key ideas and concepts of American History. It traces early cultures in America through the events of the civil war and reconstruction. Students will examine and evaluate the paths early Americans chose that shaped a nation and emphasis will be placed on understanding reform movements, conflicts, resolutions, cultural norms and traditions that created the 21st century America we all live in.

### **Grade 7 AND 8: WORLD GEOGRAPHY**

World Geography requires students to be exposed to, and understand the core concepts of geographical patterns and to participate in the analysis of the cultural, social, political, and physical factors that have influenced several different countries. This course also requires students to compare and contrast the traditions and backgrounds of cultures worldwide.

### **WORLD HISTORY**

This course will examine the political, social, economic, and geographic history of various regions and cultures from ancient times through the French Revolution. Students will recognize and analyze the contributions of several societies and people, and determine how these factors have molded our ever-changing global world. A heavy emphasis will be placed on the examination of primary documents, current events, research methodologies, and the utilization of technology.

### **WORLD HISTORY HONORS**

This course will examine the political, social, economic, and geographic history of various regions and cultures through the French Revolution. Students will recognize and analyze the contributions of many societies and people, and determine how these factors have molded our ever-changing global world. A heavy emphasis will be placed on the examination of primary documents, current events, research methodologies, current events, and the utilization of technology. In this course, students will be required to demonstrate their critical thinking and analytical skills, and will be asked to formulate their opinions and ideas through a number of oral and written means.

**Prerequisite: 88% or higher in Social Studies 8 with teacher recommendation.**

### **US HISTORY I**

This course examines United States history from the Age of Discovery through the Progressive Era. The main focus of the course will be the understanding of the roots and development of American society and government. Students will analyze several major economic, social, and political movements that shaped the United States into a major world power. Significant concepts from other social sciences such as: geography, economics, sociology, and political science will be introduced and utilized.

### **US HISTORY I HONORS**

This course examines United States history from the Age of Discovery through the Progressive Era. The main focus of the course will be the understanding of the roots and development of American society and government. Students will analyze several major economic, social, and political movements that shaped the United States into a major world power. Significant concepts from other social sciences such as: geography, economics, sociology, and political science will be introduced and utilized. This course requires students to demonstrate their critical thinking and analytical skills. An increased emphasis will be placed on document based analysis, research, and formulating and constructing original opinions and presentations.

**Prerequisite: 88% or higher in World History Honors or 93% or higher in World History with teacher recommendation.**

## **US HISTORY II**

This course examines American history from the late nineteenth century until the present. It views the transformation of the United States from a rural, parochial society to a modern, industrialized world power. The nature and causes of this transformation, as well as the problems it has caused, is the subject matter of this course.

## **US HISTORY II AP**

This is a college level course in American History from the late nineteenth century to the present. We will examine three major themes in the development of the United States over the last 125 years, namely the impact of industrialization and modernization, the growth of the nation as a world power, and the reform impulse and the rise of the social welfare state. These interrelated concerns will be the main focus, but of course a number of other themes will be discussed as well. This course requires critical, analytical thinking and reading, as well as clear and incisive writing and speaking, and these skills will be honed throughout the year.

**Prerequisite: 93% or higher in U.S. History I Honors with teacher recommendation.**

## **US HISTORY II HONORS**

This is an Honors level course in American History from the late nineteenth century to the present. We will examine three major themes in the development of the United States over the last 125 years, namely the impact of industrialization and modernization, the growth of the nation as a world power, and the reform impulse and the rise of the social welfare state. These interrelated concerns will be the main focus, but of course a number of other themes will be discussed as well.

This course requires critical, analytical thinking and reading, as well as clear and incisive writing and speaking, and these skills will be honed throughout the year.

**Prerequisite: 88% or higher in US History I Honors or 93% or higher in US History I with teacher recommendation.**

## **ECONOMICS AP**

This elective course introduces students to the basic concepts of macroeconomics. Students will be exposed to several economic terms and concepts including: scarcity, supply and demand, inflation, unemployment, economic growth and marginal and aggregate analysis. Students will also need to utilize their mathematical knowledge to complete several interactive assignments. Students will prepare for the Advanced Placement Exams in Macroeconomics.

**Prerequisite: 93% or higher in U.S. History II Honors or 93% or higher in U.S. History II with teacher recommendation. Students must ALSO have an 88% or higher in the previous year's mathematics course.**

## **SOCIOLOGY**

The elective course will examine the guiding principles of sociology in order to ascertain an understanding of the world and its diverse array of people. We will investigate the major themes of culture, society, and socialization. These interrelated themes breed subsequent topics to be studied such as groups, deviance, sexuality, class, gender, and race. In all, the course will provide students with an opportunity to witness themselves through a sociological perspective.

## **AMERICAN GOVERNMENT (1S)**

This semester long course provides students with an introduction to the origins of our nation's government and the development of our political beliefs and traditions. Students will examine such topics as: the structure and function of our national and state governments, the civil and criminal law systems, the role of political parties, interests groups and the media in shaping public policy, and the role of the Supreme Court in the development of the rights of individual citizens.

## **INTRODUCTION TO ECONOMICS (1S)**

Students in this semester long course will be introduced to the basic concepts of macro and microeconomics. Students will be exposed to several economic terms and concepts including: personal investment, money management, taxes, budgets, supply and demand, marketing, and accounting. After taking this course, students should be able to apply these concepts to ordinary situations, and better understand the large-scale economic issues present in our country and our world.

## **INTRODUCTION TO PHILOSOPHY**

This course is a survey of several major areas of Western analytic philosophy: metaphysics and epistemology, ethics, and philosophy of language. Students explore such concepts as the nature of the world and how we have access to knowledge of the world; moral behavior and the nature of good and evil; the relationship between minds and bodies; the relationship between our thoughts and the external world; arguments for and against the existence of God; and how we should employ logical analysis and empirical observations to evaluate arguments. For each topic, students will consider positions of historical thinkers such as Plato, Descartes, Hegel, and Hume. Students will reflect upon philosophical issues through debate and discussions to develop the analytical skills necessary for effectively argument evaluation and independent thought.

## **BUSINESS I (1S)**

Students will be able to develop an understanding of how business affects their everyday lives. They will learn about the economic system and its role in business, how private enterprise works, how businesses are organized, and what role the government plays in business. Students will also learn key concepts that pertain to their individual financial futures.

## **BUSINESS II (1S)**

Students will be able to take their previous business knowledge from Business 1 and apply to advance topics in given areas. We will review certain areas such as entrepreneurship and business organization and explore the new topic of management of both the business itself and employees. Students will also be able to discover potential business majors and career options once they graduate in the business field. We will also revisit investing and take it to the next level by competing in the stock market game and by reading the book The Automatic Millionaire.

## **MARKETING**

This year-long course introduces students to the fundamentals of marketing. It will include instructional methods designed to provide an understanding of marketing principles, entrepreneurship in our economy, and marketing benefits to our society and us as individual consumers. Other topics include: marketing strategy, customer behavior, segmentation, market research, product management, pricing, and promotion. Economics, digital marketing and research, case studies, sales, and career development will be of major emphasis throughout the year.

## **AMERICAN LAW (1S)**

This semester long course will expose students to the many facets of practical law, and in turn, they will recognize their own rights and responsibilities as citizens. Students will use their critical thinking and writing skills to analyze specific court cases, precedents, and legal scenarios. Topics to be covered include: an introduction to the legal system, criminal law, civil law, torts, consumer and housing law, family law, individual rights and responsibilities, and most importantly, Constitutional law.

## **TECHNOLOGY DEPARTMENT**

### **COMPUTER SKILLS (1Q)**

This course will assist 7th grade students to learn the ins and outs of operating systems and office suites, so that they can effectively utilize the technology available. Topics to be covered will include: organizing and managing files using folders; searching the World Wide Web effectively; using the features of a word processing application such as bullets and numbering, graphics and citations to better create papers; utilizing a spreadsheet program to collect, organize, graph and analyze numeric data; creating imaginative, eye-catching and effective presentations using their presentation software. Students will perform hands-on activities that will expand their productivity with and knowledge of their laptops and the tools it provides.

### **COMPUTER PROGRAMMING (1S)**

This class is designed to introduce the concept of programming languages by examining programming using the Java language. The focus is on programming as problem solving. Because the best way to learn to program is by writing programming code, the primary emphasis of this class will be on coding. Students will be introduced to object oriented programming concepts such as reusability, methods, fields, and constructors. Decision making and repetition structures will also be covered.

### **COMPUTER SCIENCE A AP**

AP Computer Science A course is a full year introductory course in computer science. Design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course.

**Prerequisite: 88% or higher in Computer Programming and/or teacher recommendation.**