

English

American Literature 1 Honors(Yr) ENGA1312 5.00

Core 9th Grade Honors Course

Prerequisite: Reading Comprehension and Writing Examination / Recommendation
American Literature 1 is a literary exploration of the theme, The American Identity. Course works are studied in conjunction with the United States History 1 curriculum within their historical context with attention to their literary components. While the short story and novel are the primary resources, plays, essays and poems are covered as well. These texts and their use are designed to develop students' listening, speaking, reading, critical thinking, writing and research skills.

American Literature 2 Honors(Yr) ENGA2312 5.00

Core 10th Grade Honors Course

Prerequisite: American Literature 1 Honors or Reading Comprehension and Writing Examination / Recommendation

This is the second of a two-year study of American literature that explores the theme, The American Character in Conflict. The main goal of the course is to develop students' understanding of the influences upon and varied expressions of the American character in the changing currents of the 20th century through their study of literature. Works include short stories, novels, plays, essays and poems designed to help students develop their listening, speaking, reading, thinking, writing and research skills.

World Literature 1 Honors(Yr) ENGA3312 5.00

Core 11th Grade Honors Course

Prerequisite: Honors American Literature Honors 2 or Reading Comprehension and Writing Examination / Recommendation

This course is designed to give students an understanding of the central literary pieces from the Ancient World through the Renaissance. Particular attention is paid to the social, economic, cultural and political forces that contributed to the creation of those texts. Although the emphasis is on Western Literature, students also are exposed to selections and samples of literature from around the globe. Students continue to develop their critical reading skills and hone their writing skills with particular attention to formal essay writing and academic writing.

World Literature 2 Honors(Yr) ENGA4312 5.00

Core 12th Grade Honors Course

Prerequisite: World Literature 1 Honors or Reading Comprehension and Writing Examination / Recommendation

This course is a comprehensive, critical analysis of the major literary movements from the High Renaissance to the Modern Age. Connecting literary works to their historical contexts from a global perspective, students develop interpretations of literature in light of our contemporary society, as well as archetypal themes that transcend time. Critical theories are examined and students are expected to write an extensive humanities thesis based on the theories learned.

AP English Literature(Yr) ENGA4311 5.00

Elective 12th Grade AP Course

Prerequisite: World Literature 1 Honors (Placement Assignment, Teacher Recommendation)

AP English is a college-level course designed to prepare students for writing in college as well as taking the required AP English Literature Exam in May. The reading selections and writing assignments are rich and challenging; the pace of the class is intense.

Students concentrate on analyzing literature by doing “close readings” and on developing other skills necessary for the exam. In addition, there are projects and presentations to demonstrate an understanding of critical theories of literature.

Two-day Electives

Academic Skills Enrichment(S) ENGZ5311 1.25

Elective

This course is designed for freshman students to help them develop more complex reading and writing strategies in the face of increasingly difficult, college-level text. Work on reading strategies will include annotating text, developing prior knowledge, outlining, summarizing, paraphrasing, differentiating fact and opinion, recognizing the organizational structures of information and forming logical opinions/conclusions about text. In addition, students will learn to successfully compose written academic assignments with an emphasis on organizing ideas and writing well-formulated theses with well-developed support.

American Short Stories (S) ENGZ5312 1.25

Elective

American Short Stories is a comprehensive course designed to critically examine short stories. This class aims to reinforce Language Arts terminology that students encounter in core English classes and expose students to traditional and non-traditional literary forms.

Art of Essay Writing (S) ENGZ5313 1.25

Elective

This course, revolving around the elements of academic writing, allows students to perceive writing as a process and helps them gain mastery over the steps of this process. The Art of Essay Writing provides students with the knowledge and skills they need to successfully compose high school written assignments, as they learn to focus, organize, and develop ideas. Special attention is placed on the pre-writing phase, and, more specifically, on the importance of brainstorming, organizing ideas, and writing well-formulated theses and coherent outlines. Students also learn how to conduct research, include citations, and apply the MLA style to their research papers. Ultimately, this course is designed to prepare students to write college-level essays and provide them with a strong base for technical and business writing.

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Beat Generation (S) ENGZ5314 1.25

Elective

The students will learn about Beat Poetry and literature, as well as discover the social and cultural impact of the movement in the 1950's and beyond. Students will read a variety of works from short story authors and poets, including Jack Kerouac (*On the Road* and *Dharma Bums*) and Woody Allen (*Side Effects*).

Best Sellers (S) ENGZ5315 1.25

Elective

This course is devoted to popular works which have made the Best Sellers list. Student will read and discuss a variety of Best Sellers books.

Creative Expression (S) ENGZ5316 1.25

Elective

This creative writing course focuses on the development of the student's individual voice within the context of writing fiction, poetry and drama. Students study various writing techniques, spend class time brainstorming, and work on creative writing projects. Students write their own pieces, share them with classmates, and revise their work and conference with the teacher.

Creative Writing - Poetry (S) ENGZ5317 1.25

Elective

The focus of this elective is the development of the student's individual voice within the context of poetry. Students study various creative writing techniques encompassing the effective use of figurative language, including metaphor, personification, symbolism and imagery, and the effective use of musical devices and various poetic styles and forms such as sonnet, villanelle, free verse and imagism. Revision, portfolio development and publishing are emphasized.

Fantasy Literature 1 (S) (Not offered in 2010-2011) ENGZ5318 1.25

Elective

This project-driven course focuses on the genre of fantasy literature. Students learn the characteristics of the genre and read at least two fantasy novels and several short stories. For a required project, students design a fantasy world, complete with a map, gazetteer, mythology, history, and then write short stories set in this milieu. Students spend class time discussing and responding to literature, working on projects, writing stories, sharing drafts with classmates and conferencing with the teacher on an individual basis.

Fantasy Literature 2 (S) (Not offered in 2010-2011) ENGZ5319 1.25

Elective

In this class, students read and write in the genre of fantasy literature. Focus is on the early practitioners of fantasy lit, including Robert E. Howard, H.P. Lovecraft, and Fritz Leiber. In addition, students read short examples of the more obscure sub-genres of fantasy, such as comic fantasy and dark fantasy. Students are expected to complete the assigned readings, write original short stories and create a critical essay about a fantasy novel of their choice.

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Fiction Writing (S) ENGZ6311 1.25

Elective

Fiction Writing focuses on the development of the student's individual voice within the context of fiction. Students study various fiction writing techniques including creation of character, plot and setting; the use of point of view; effective use of dialogue; and use of descriptive imagery, metaphor and symbolism. Students read samples of stories from published writers as models, but the majority of the class time is devoted to writing, conferencing and revising original stories for publication.

Film and Literature 1 (S) ENGZ6312 1.25

Elective

This course offers an opportunity to study selected stories, plays and novels and their film adaptations. Critical analyses of the films, and an examination of the challenges of adapting the written word to film, enable students to appreciate the effect of film on modern society and life. Students comprehend how converting text to celluloid has made great literary works more accessible to the general public. Furthermore, this course introduces students to literary works that are not covered in traditional English classes.

Film and Literature 2 (S) ENGZ6313 1.25

Elective

Film & Literature 2 examines how dysfunctional characters are created in film and how they impact a reader's perception of theme in a movie. The student learns to evaluate characters and to analyze the director's interpretation of them. Works studied include *The Color Purple*, *The English Patient*, and *Angels in America*.

Flash Fiction Honors (S) ENGZ6314 1.25

Elective

This course explores the genre of very short stories, one to three pages, through the reading of several stories by authors from around the world and then the writing of a "short story." Student stories are compiled and "published" in a small booklet.

Gothic Literature (S) ENGZ6315 1.25

Elective

In Gothic Literature students analyze classic poems, tales and novels in the Gothic tradition with an aim to understanding the conventions, techniques and traditional themes of the genre. Students analyze how these works show the tenuous boundaries of the self and examine how early Gothic works have influenced modern Gothic novels and films.

Greek Drama (S) ENGZ6316 1.25

Elective

This course explores the beginnings of drama. Students study classical Greek culture and philosophy as they read the works of Sophocles, Euripides, and Aristophanes. Close reading, literary analysis and the development of projects form the core of the course.

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Improvisation (S) ENGZ6317 1.25

Elective

In this course, students acquire knowledge and skills that contribute to an aesthetic awareness of theater. The purpose of this course is to engage students in random improvisations and longer, planned presentations. The initial activities in the class are intended to build participants' skills with warm-ups, modeling, and improvisations to provide practice in the basics of acting. Students will refine their basic improvisation skills of characterization and mime, practice storytelling, build confidence and rely on teamwork to pull off more challenging improvisation games. The skills learned later inform the use of planned improvisations in the study of a piece of literature and in the writing and presentation of character dialogues.

Intro to Stage Make-up (S) ENGZ9311 1.25

Elective

This course studies the aesthetics, materials and procedures of stage makeup involving: corrective and aging techniques, the creation of animals and monsters, and the construction of beards and moustaches.

Students will learn the basics starting with drawing a face plot to techniques and materials required to create a transformation into a character.

Journalism (S) ENGZ6318 1.25

Elective

Journalism introduces students to the exciting world of print media. Students learn about the history of mass media and its effect on society, but more importantly, they learn practical journalism: how to gather information, interview effectively and write professional, straight news stories. The course includes a study and discussion of journalism, including such issues as ethics, sexism, racism, objectivity, management, teamwork, advertising and design. Students develop an understanding of the concept of news as well as basic news identification and news values. This course is designed for students to expand their interest in print communications and is perfect (but not necessary) for students who wish to work on the high school newspaper and yearbook.

Literary Circle – Short Stuff! (S) ENGZ6319 1.25

Elective

Like to read but get lost in lengthy books? This elective features very short works of fiction and non-fiction that make for great group discussions. Students read short stories, poetry, articles from *The New Yorker* and *The Village Voice*, vignettes – all recently published works, many written by young authors. Students are assigned writings for homework, come to class ready to share personal perspectives, and chronicle these ideas in a journal for the final 10 minutes of each class. Occasionally, a one-page response paper is assigned. The final project involves the student's own assessment of their journals and a 3-5 page paper identifying common themes carried through journal entries.

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Macbeth (S) ENGZ7311 1.25

Elective

Students read and discuss Shakespeare's 'Scottish play' *Macbeth*, considering the question of fate and destiny. Historic research, written assignments and watching video interpretations are included in this course.

Minorities Literature & Film (S) ENGZ7313 1.25

Elective: One Semester

Description: This class will give students an understanding of the role of minorities in film, beginning in the American Hollywood era of cinema. Students will explore how minorities fought for equality on and off the screen through the study of famous film characters, actors and directors. The class will focus on African-American, Latino and female characters, and students will have the opportunity to give their input as to other areas of focus.

Nature and Life (S) ENGZ7314 1.25

Elective

Learn about nature and literature. Discover the journeys through nature and emotional journeys by reading various books such as: *A Walk in the Woods*, *Into the Wild*, and *The Art of Zen and Motorcycle Maintenance*. Students will read a variety of works from the following authors: Jack Kerouac, Woody Allen, and Robert Pirsig.

Newswriting Beginning (S) ENGZ7316 1.25

Elective

This course teaches students the basic techniques of writing for publication. Emphasis is on writing as the direct result of careful planning, interviewing, in-depth investigation, competent reporting and objective editorial analysis. Attention is also given to the issues of journalistic responsibility, ethics, libel, copyright law and restrictions on the student press.

Newswriting Advanced (S) ENGZ7315 1.25

Elective

The course focuses on the basics and development of sophisticated journalistic technique. Students learn the requirements and the proper organization of feature stories, sports stories and editorials through detailed exercises that are followed by reporters' assignments. Students are expected to produce material suitable for publication in the school newspaper.

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Popular Culture and Mass Media (S) ENGZ7317 1.25

Elective

In this course, students learn about the power of mass media in our modern culture. Students examine popular culture icons and current fads and trends. In addition, students analyze American brands including cultural, mass and niche brands. The contents of commercials, magazines, T.V. shows and video games are examined as to their influence on modern thinking, assumptions and lives as well as to the stereotypes they create or foster. Students evaluate a given mass media outlet for stereotyping and its influence on current activities.

Science Fiction Literature (S) ENGZ7318 1.25

Elective

In its most basic definition, science fiction writing deals with the question, “What if?” Through reading short stories and novels and watching films of this genre, students begin to consider a variety of possibilities – looking at the expected and the unexpected, predicting outcomes, and anticipating changes to the world and society with which they are familiar. Students discuss reality, perception, cause and effect, and chaos theory in relation to readings and films.

Shakespeare: *Romeo and Juliet* (S) ENGZ7319 1.25

Elective

This trimester course is an in-depth study of one of William Shakespeare's plays, *The Tragedy of Romeo and Juliet* or *Macbeth*. Students review a cinematic version of the play: *Zeffarelli's Romeo and Juliet* or *The Royal Shakespeare Company's Macbeth* and determine the final portrayal of the main characters. In this course, students are exposed to the elements and the history of Elizabethan Theater. Students read the play, view a film version of the play, analyze characters, plot, and discover Shakespearean influences in modern culture.

Shakespeare: *Henry V* (S) ENGZ8311 1.25

Elective

This course is an in-depth study of William Shakespeare's play, *The Life of Henry V*. Students learn about the elements of drama and the history of the *Elizabethan Theater*. Students use this knowledge as they read the play, view different film versions of the play, analyze characters, plot and themes and discover Shakespearean influences on modern culture.

Shakespeare: *The Taming of the Shrew* (S) ENGZ8312 1.25

Elective

This course is an in-depth study of William Shakespeare's play, *The Taming of the Shrew*. Students read the play, view several different film interpretations, analyze character, plot and themes, and discover Shakespearean influences in modern culture.

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Short Novel (S) ENGZ8313 1.25

Elective

This course involves the reading, analysis, discussion and critiquing of fiction. Using the vehicle of the short novel, students will build a comprehensive vocabulary of literary terminology while developing the ability to intelligently dissect fiction as to its elements, themes and structure. In addition to traditional essays, students will write creative responses to the novels studied.

Toni Morrison (S) ENGZ8314 1.25

Elective: One Semester

Description: This course explores the themes in Morrison's major works of fiction that resonate for the African-American community, as well as for the larger U.S. and global communities. These themes include the search for self and the complex intersections of race, ethnicity, gender, and socio-economic class. Relationships among individuals, families, and community also will be explored. Toni Morrison was the eighth woman and the first African-American to receive the Nobel Prize in 1993. Her primary goal, as she puts it, is to stretch readers' imaginations.

Whale of a Tale: Nautical Fiction (S) ENGZ8315 1.25

Elective

Since the beginning of literature (*Enuma Elish*, *Noah Story*, *The Odyssey*), humankind has been fascinated by the sea. Many of the great writes of the English language have written sea stories. This will be an introduction of the original fantasy/science fiction genre with works of Home, Poe, London, Conrad, Crane, Dana up to more current works, such as Forester and O'Brian.

William Butler Yeats (S) ENGZ8316 1.25

Elective

William Butler Yeats, the poet beloved by the Irish, by romantics, by those with an ear for music and a heart for feeling, is the center of this course. Students participate in an in-depth study of the man as well as his poetry and short plays. Students analyze Yeats' role in the Irish Renaissance, his romantic "myth" of Maude Gonne, and his visionary ideas about history which reflect the soul of the twentieth century. The course combines close reading, literary analysis and interpretation, and research culminating in a project on one aspect of Yeats' work.

Women and Literature (S) ENGZ8317 1.25

Elective

This course explores the images of women in various literary works by both female and male authors. Through the analysis of poetry, essays, short stories, novels, memoirs and plays, students examine the various portrayals of women in literature, such as women as mothers, wives, temptresses, heroines and victims. Students discuss themes, characters, structure, imagery and point of view of female roles.

Women's Studies: Senior Seminar (S) ENGZ83181.25

Elective

Prerequisite: Seniors only or Juniors

The course takes an interdisciplinary approach. That is, students read literature by women, writings about women and the history that creates the two. Students read excerpts from many sources to help develop their awareness of the historical, political and cultural influences on women's lives and their creations. Authors studied include Sappho, Margery Kempe, Mary Wollstonecraft, Charlotte Perkins Gilman, Kate Chopin, Margaret Sanger, Virginia Woolf and Simone de Beauvoir.

Yearbook: Copy and Design (S) ENGZ8319 1.25

Elective

Students in this course determine the purpose of the yearbook and create a book that all students may appreciate using YearTech Online program, digital cameras and Adobe Photoshop. They learn to write effective articles and captions for the yearbook, professional business letters and interesting advertisements. Students identify deadlines and tasks that must be completed by each deadline, and invent and implement clever ways of fundraising.

Math

Algebra 1 Honors(Yr) MTHA1312 5.00

Prerequisite: Successful Completion of Grade 8 Mathematics and Placement Test/Recommendation

This is a full year course. The four basic mathematic operations are applied to integers, monomials and polynomials. These are used to find solutions to linear equations and inequalities in one or two variables as well as verbal problems. The coordinate plane and systems of two linear equations will be emphasized. Students are required to maintain a notebook and complete daily assignments. Students are required to take the N.J. Algebra I End of Course Assessment. This course is taught at a more rigorous level than the Algebra 1 course.

Algebra 2 Honors(Yr) MTHA2312 5.00

Prerequisite: B or better in Geometry or Algebra 1

This rigorous course exceeds the standards set by New York, New Jersey and the National Council of Teachers of Mathematics, and builds on the foundation set in Algebra I. In addition to all of the content covered in Algebra 1, this course also includes, but is not limited to, the study of quadratics, algebraic fractions, trigonometry, probability theory and statistics.

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Advanced Algebra with Trigonometry(Yr) MTHA3312 5.00

Replaces Analysis 1

Prerequisite: Successful Completion of Algebra 1 and Algebra 2

This is a full-year course designed to provide a strong foundation in pre-calculus concepts. The three areas of concentration in this course are advanced algebraic manipulation, plane geometry including transformational geometry, and the extensive study of advanced functions.

Geometry Honors(Yr) MTHA2322 5.00

Prerequisite: B or better in Algebra I

This is a full year honors level course, which presents a logical study of the Geometry of Euclid. Emphasis is placed on such unifying concepts as sets, equivalence relations and congruence relations. Additional study and analyses include: similarity, symmetry and thorough analysis of properties of circles and polygons. The coordinate plane is used as an extension of previously covered concepts. Homework, a notebook and technology are integral parts of the course.

Geometry Honors with Trig(Yr) MTHA2122 5.00

Prerequisite: Placement Test

This full-year course is designed for incoming freshmen who have placed out of Algebra 1 Honors. Coverage of geometry includes: congruent and similar figures, the Pythagorean Theorem, angles, and parallel and perpendicular lines. Included are proofs of theorems and constructions using straight-edge and compass. Each student will have 24 weeks of instruction in the Classic Euclidean geometry and twelve weeks of trigonometry. This course is designed to meet the needs of the most able mathematics students.

AP Calculus AB(Yr) MTHA4311 5.00

Prerequisite: Pre Calculus, Placement Test, Teacher Recommendation

The Advanced Placement Calculus AB Course covers the equivalent amount of material in a one-semester college calculus course. The topics covered include the limits of functions, differential calculus, integrals and differential equations. Students enrolled must take the AP Calculus AB Exam in May.

Dual Enr AP Calculus AB (Yr) MTHA7312 5.00

Prerequisite: Pre Calculus, Placement Test, Teacher Recommendation

The course consists of a full high school academic year of work and is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically and verbally. Students will learn about limits, derivatives, integrals, differential equations approximation, applications and modeling and will use the TI-83 Plus graphing calculator to solve many types of calculus problems.

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Pre Calculus Honors(Yr) MTHA4312 5.00

Replaces Analysis II

Prerequisite: Successful Completion of Algebra 2 or Algebra 2 Trig

This is a full-year course, which builds upon the foundations for advanced mathematics provided by the previous courses. This course offers a rigorous treatment of logarithmic functions, trigonometric functions and their graphs, complex number theory, probability theory and statistics theory. The course also provides the student with a combined treatment of functions and transformational geometry. The pacing of this course is comparable to a college-level course.

AP Calculus BC(Yr) MTHA5311 5.00

Prerequisite: Pre Calculus, Placement Test, Teacher Recommendation

The Advanced Placement Calculus BC Course covers the equivalent amount of material in a two-semester college calculus course. The topics covered include the limits of functions, differential calculus, integrals, and integration by parts, differential equations, infinite series and parametric functions. Students enrolled must take the AP Calculus BC Exam in May.

Calculus Honors(Yr) MTHA5312 5.00

Prerequisite: Successful Completion of Algebra 2

This course deals with how relations between certain sets (functions) are affected by very small changes in one of their independent variables as they approach zero. The topics covered include limits of functions, differential calculus and integrals with applications to business, science and engineering.

Statistics Honors (Yr) MTHA6312 5.00

Prerequisite: Successful completion of Pre Calculus or Algebra 2 Trigonometry

This course covers probability, analysis, inference and the methods of how to devise a statistical study. Basically, students become proficient in collecting, analyzing and drawing inferences from data. In addition, students become proficient in using a TI 83 graphing calculator for statistical studies.

AP Statistics(Yr) MTHA6311 5.00

Prerequisite: Successful Completion of Pre Calculus or Algebra 2 Trigonometry

AP statistics covers probability, analysis, inference and the methods of how to devise a statistical study. Students become very proficient in collecting, analyzing and drawing inferences from data. Students become very proficient in using a TI 83 graphing calculator for statistical studies. Students enrolled must take the AP Statistics Exam in May.

AP Plus Mono-variable Calculus(Yr) MTHA7311 5.00

Prerequisite: AP Calculus AB

This course continues with the study of calculus at the college level. It is a continuation of the AP Calculus AB course, which is a prerequisite. Topics covered include integration by parts, infinite series, parametric functions and arc length.

Five-day Electives

AHSA Math(Yr) MTHQ4114 5.00

Elective

Prerequisite: Not Proficient score on the High School Proficiency Assessment

The Alternative High School Assessment (AHSA) is an alternative assessment program to the New Jersey High School Proficiency Assessment. This course is a special review math course for seniors only who did not pass the math section of the High School Proficiency Assessment. The content of the course is aligned to the New Jersey Core Curriculum Content Standards for mathematics. Students will focus on completing this state requirement for graduation through the Alternative High School Assessment. Bilingual support is offered to emerging language learners.

Two-day Electives

Problems from NUMBERS(S) MTHZ5313 1.25

Elective

Prerequisite: Algebra 1

This course is based primarily on lesson plans published by Texas Instrument on the website of the NUMB3RS television show. Students are introduced to a broad selection of mathematical topics and applications. None are pursued in great depth, but broad exposure is the intent.

SAT Math Review(S) MTHZ3124 1.25

Elective

Prerequisite: Algebra 1 Elective

This course is offered to improve performance on the SAT aptitude and achievement examinations in mathematics. Focus is on changes in the SAT including the addition of advanced algebraic concepts. The coursework involves work in numbers and operations, algebra, geometry/measurement and statistics/probability.

The Quadratic Formula(S) MTHZ5314 1.25

Elective

Prerequisite: Geometry

Understanding the Quadratic Formula in Algebra 2 is essential. This half-year course will look at when the formula produces real solutions and when it produces imaginary ones. Student will learn how to graph solutions and apply the Distance Formula and Midpoint Formula to various problems.

Lines and Slopes Everywhere(S) MTHZ5315 1.25

Elective

Understanding linear functions is very useful for every math course from Algebra 1 through Calculus. In this half year course we will review graphing by plotting, graphing by using the x and y intercepts, and solving word problems and systems of linear equations. Also, solving sets of linear equalities will be discussed.

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The Facts of Factoring(S) MTHZ5316 1.25

Elective

This half year-elective will explore factoring trinomials, more specifically, the difference of two squares; factoring by grouping; and completing the square with applications to circles and parabolas.

TI-83 Programming(S) MTHZ5310 1.25

Elective

Prerequisite: Algebra 1

This elective option allows students to explore advanced graphics. This course meets and exceeds the standards set by NY, NJ, and the National Council of Teachers of Mathematics, and builds on the foundation set in Algebra 1. Additional topics include, but are not limited to, the study of quadratics, algebraic fractions, trigonometry, probability theory and statistics.

Solving Unusual Math Problems(S) MTHZ5312 1.25

Elective

Prerequisite: Geometry

This course focuses on preparing students for the mathematics section of the SAT. Students learn how to solve geometry problems and other miscellaneous types of math problems such as those involving approximations, properties of integers and probability, all of which are covered on the SAT.

The Math Connections (Yr) MTHZ5311 2.50

Elective

Prerequisite: Approval of Instructor

DMAE students will sharpen their math skills by tutoring selected Janis E. Dismus Middle School students one day each week. The other class day each week will be used for preparation/research of lessons to assure quality lessons for the MS students. Students will be expected to tutor the MS students in 7th and 8th grade level math, including Algebra, and to help the students prepare for the NJ Ask Test. The HS students will also serve as role models and mentor the MS students they are assigned to tutor.

Science

Biology Honors(Yr) SCIA1312 5.00

Prerequisite: B or better in Grade 8 Science.

This course focuses on the study of life. Biology is a science that stresses inquiry and depends upon the basic relationships of the physical sciences as well as living things. This course is presented with these ideas in mind. While presentation of the course is a major part of this course, the development of critical thinking skills is considered of paramount importance. Also important are safe practices, the development of qualities inherent in the practice of science, such as curiosity, skepticism, open-mindedness and honesty when collecting and interpreting findings. All appropriate laboratory exercises are conducted during a weekly lab-class to strengthen student understanding of material covered.

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AP Biology(Yr) SCIA2311 5.00

Prerequisite: Biology, Placement Assignment, Teacher Recommendation.

This course may be elected by students in their senior year. The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. A prescribed curriculum that prepares students for testing encompasses seven major theses in biology that are all tied together by the unifying concept of evolution. Laboratory exercises and experiments are an integral part of the course and require that the students be able to formulate hypotheses and draw conclusions from their work. Extensive readings on a college level from texts and supplemental materials are undertaken to properly prepare the student for the culminating examination. Students are required to take the AP Exam in May.

Chemistry Honors(Yr) SCIA2312 5.00

Prerequisite: Completion of Biology (or Biology Honors) and Algebra I with grades of B or better.

This course helps students gain a fundamental understanding of physical and chemical changes, atoms, molecules, basic atomic structure, electron configuration, the Periodic Table, quantitative calculations, chemical reactions, acids, bases, solutions, behavior of gases, etc. The curriculum includes: projects, laboratory investigations, demonstrations and problem-solving activities.

Earth Science Honors(Yr) SCIA4322 5.00

Prerequisite: Open to 12th graders who have successfully completed Physics and Chemistry

This course is a full-year lab-based science course that exposes students to astronomy, geology and oceanography on a higher level of understandings. Astronomy provides a broad introduction to the solar system, including the planets, moons, asteroids, stars and stellar evolution, galaxies, quasars, black holes, and the Big Bang Theory. Geology is the study of rocks, minerals, plate tectonics, earthquakes, volcanism, geological formations and the forces that constantly reshape our planet. The study of oceanography is important to understand not only how the oceans operate, but also how the oceans interact with Earth's other systems.

Environmental Science Honors(Yr) SCIA4312 5.00

This science elective is open to all students who have an interest in the study of the world around them. There are no prerequisites and the duration is one full year. The course discusses the environment from an ecosystems approach, but focuses on the impact that human civilization has had on the natural world. Ozone depletion, water pollution, solar energy and recycling are a few of the topics that are discussed using reading selections from current magazines and newspapers.

DMAE Course Catalog

AP Environmental Science(Yr) SCIA4311 5.00

Prerequisite: Grade of “B” or higher in Biology and Chemistry, Placement Assignment, Teacher Recommendation.

This full-year AP science course is designed to be the equivalent of a one-semester college laboratory science course in Environmental Science. This course discusses the environment from an ecosystems approach, but focuses on the impact that human civilization has had on the natural world. Students are required to think and write independently and to perform a series of hands-on laboratory experiments. Extensive reading on a college level from texts and supplemental materials is undertaken to properly prepare students for the required AP examination. Students are required to take the AP Exam in May.

Physics Honors(Yr) SCIA3312 5.00

Prerequisite: B or better in last completed core science course.

In this course students study heat, kinetic theory, properties of gases, liquids and solids and the laws of thermodynamics. All students work on electrostatics, properties of direct current and magnetism. The curriculum includes projects, experiments, labs and problem solving exercises.

AP Physics(Yr) SCIA4321 5.00

Prerequisite: Physics, Placement Assignment, Teacher Recommendation.

This course provides the students with an opportunity either to have an accelerated college program or to meet a basic science requirement in college; in either case the student’s college program may be enriched. This course matches a full long college level survey course sequence that uses algebra and trigonometry. Topics covered are Newtonian Mechanics, electricity and magnetism, waves and optics, thermal physics and atomic and nuclear physics. This course requires a high level of commitment. The AP exam is conducted in May. Independent study is necessary to complete the course requirements. To accommodate this rigorous undertaking, students must start their preparation from the beginning of the summer. Students are required to take the AP Exam in May.

NJIT Physics Dual-Enrollment Honors(Yr) SCIA4332 5.00

Elective

Prerequisite: Physics (Placement Assignment, Teacher Recommendation) Co-requisite: Calculus

This full-year college-level course in Physics is designed to be the equivalent of a one-semester lab-based college course in Physics. Those students wishing to receive a transcript from NJIT at the completion of the course will be required to complete a registration form from NJIT and to pay the appropriate fees for tuition for a four (4) credit course. The tuition rate charged by NJIT is 1/3 the in-state tuition rate charged to regular college students. The course covers topics in physics such as Newtonian mechanics, gravitation, simple harmonic motion, energy, and rotational dynamics. There is a mandatory final examination given in May.

DMAE Course Catalog

Anatomy and Physiology Dual-Enrollment Honors(Yr) SCIA4342 5.00

Elective

Prerequisite: Biology, Chemistry, Physics (Placement Assignment, Teacher Recommendation)

This year-long elective, meeting five periods per week, is part of the Healthcare Occupations Partnership Program with Bergen Community College. Students accepted into the program have preference in admission to the course, but juniors and seniors are welcome if space is available. This course examines the human body from a systems approach and is a laboratory-based class. Animal dissections are an integral part of the course as well as didactic lectures. It is designed to prepare students for further study in the health care field and to earn college credits while still in high school. In order to earn college credits, all students must successfully complete the final examination as prescribed by the college. In addition, those students that are not part of the Healthcare Occupations Partnership Program are required to pay a fee to the college to receive a transcript.

Two-day Electives

Electricity and Magnetism (S) SCIZ5311 1.25

Elective

This course is primarily for 12th graders who are interested in further exploring the concepts of electricity and magnetism, but are not enrolled in AP Physics. This is beneficial for students in the Pre-Engineering, Biomedical, or Information System Academies, who may be required to take physics courses at the college level. This additional topic enhances the profile of the student when applying to college and can be beneficial in the preparation for the SAT II in physics. Students explore the natural phenomenon of electricity and magnetism, as well as its application in circuitry.

Forensic Science (S) SCIZ5312 1.25

Elective

This elective begins with training in deductive reasoning of crime scene evidence. The types of evidence available at a crime scene can be biological or physical. Tissue and bone samples, bodily fluids, fingerprints, footprints, and DNA are examples of some biological samples. Other forms of physical analysis are fibers and hair, soil analysis, tool marks, ballistic data and chemical content. The study of Forensic Anthropology uses science and math to determine the identity of a missing person. Students investigate famous crimes in history and review the forensic evidence to determine, using 21st century techniques, whether or not the original jury findings were correct.

Marine Biology (S) SCIZ5313 1.25

Elective

Marine Biology teaches the student about the complexity and diversity of life found in the oceans. Under the waves live the great pelagics of the deep like whales, tiger sharks, and Manta Rays. Students explore the diversity of a coral reef, the lethality of a blue octopus, the oddities of a horseshoe crab and the power of a wave.

DMAE Course Catalog

Meteorology (S) SCIZ5314 1.25

Elective

This course offers a general exposure to weather and the forces that produce it. Students study atmospheric physics, some dynamics, even some folklore, from fog and drizzle to tornadoes and hurricanes.

Microbiology (S) SCIZ5315 1.25

Elective

The course is designed to introduce students to the world of microbes. Attention is given to the great diversity of microorganisms, beneficial as well as pathogenic bacteria. Students explore how bacteria and viruses multiply causing disease in the process. Current issues in microbiology are also investigated such as emerging viruses, bio-terror, and the problems our healthcare system faces in light of these events.

Real World Physics Honors(Yr)(Yr) SCIZ5317 2.50

Elective

This course allows students who have taken or are currently enrolled in physics, AP Physics or NJIT physics to utilize their knowledge in real-world applications. Amusement park physics, biomechanics and building design provide opportunities for students to apply the academic concepts learned in other physics courses to actual situations that exist in the world in which they live.

Virology (S) SCIZ5318 1.25

Elective

In this class students examine how viruses replicate and infect their host. Students explore the scientific struggle to conquer, analyze and understand viruses and the diseases they cause. We will discover how scientists can utilize viral particles to treat other diseases while investigating epidemics caused by viruses such as HIV and influenza. It is our goal by the end of this class to have a better understanding of viruses, their mechanism of action, and how to protect ourselves from infections, while intriguing students to learn more about the viral world around us.

Zoology (S) SCIZ5319 1.25

Elective

The objective of this course is to give students an overview of the great diversity that exists within the animal kingdom. Focus is on evolutionary relationships among the different animal phyla and how each group has successfully adapted to a particular environment. To enhance understanding, students read, view videotapes, handle and examine live specimens, and perform dissections.

Social Studies

United States History 1 Honors(Yr) SSCA1312 5.00

Prerequisite: B or better in Grade 8 Social Studies and Teacher Recommendation.

This required course for ninth graders defines and explores the theme The American Experience. Course work focuses on the role of the individual in creating and maintaining a democratic society and the factors that have shaped, and continue to shape, our national identity. Current events are highlighted. Within a project-based curriculum, students enhance their use of purposeful questioning and critical thinking through a variety of active learning experiences.

United States History 2 Honors(Yr) SSCA2312 5.00

Prerequisite: B or better in United States History 1 and Teacher Recommendation.

This is the required course for tenth graders. Students continue to explore the theme The American Experience, that is, the factors that have shaped and continue to shape our national identity, with an emphasis on 20th century events. This course encourages students to apply their knowledge of U.S. history to contemporary topics and to expand their awareness and understanding of the domestic and international issues facing the United States today.

AP United States History(Yr) SSCA3311 5.00

Prerequisite: Recommendation of Honors United States History I Teacher and Honors United States History 2 Teacher and a B+ or better in United States History 1 and United States History 2

This course is a continuing comprehensive study of United States History from the Age of Exploration and Discovery to the Progressive Era. Students may earn college credit upon completion of the course with a passing grade on the Advanced Placement Examination. Students will be required to do four major projects. This course involves intensive and extensive reading and writing assignments.

World History Honors(Yr) SSCA3312 5.00

Prerequisite: B or better in United States History 2 and Teacher Recommendation

This junior year required core course provides students with a broad and thorough understanding of world history from the late Middle Ages to modern times. Students develop a history-oriented vocabulary, a solid knowledge of geography, a basic understanding of the political and economic systems and world religions, as well as a strong sense of global cultures and history. Students are also able to make connections and draw comparisons across various cultures. The students continue to develop skills needed to be historical thinkers, who can examine different points of view, handle and interpret documents, and synthesize information effectively in papers, projects and presentations.

AP Government(Yr) SSCA4311 5.00

Elective

Prerequisite: Placement Assignment, Teacher Recommendation

This yearlong college-level course prepares students to take two AP Exams: United States Government and Comparative Government. This course is designed to teach students to compare and contrast and critically analyze important concepts in both U.S. and comparative politics through an in-depth study of American government and politics and the study of six core countries from AP Comparative Government (Britain, Mexico, Nigeria, Iran, Russia and China) as well as Egypt, Haiti, Japan and India. This course is a college-level course and is rigorous and demanding with significant reading in-class and for homework. Additionally, students will continually analyze current domestic and international events throughout the school year to put what they are learning in context of the present and near future.

Dual Enrollment Sociology(Yr) SSCA4312 5.00

Elective

Sociology is the scientific study of the patterns and processes of human social relations. In this course, we will be introduced to some of the basic sociological methods and theoretical perspectives used to study social behavior. We will also examine some of the major subfields of sociology, including socialization, urbanization, and various social institutions, such as the family and religion. This course is an honors level course that is being offered as a dual enrollment course with Bergen Community College, meaning that the workload will be identical to that of a college class. The purpose of this course is to broaden our understanding of the social forces that govern our existence.

AP Economics(Yr) SSCA5311 5.00

Elective

Prerequisite: Teacher Recommendation

This course allows students to take college-level economics and exams and to earn college credit or placement while still in high school. The AP program offers two separate examinations in economics: one in microeconomics and one in macroeconomics. Each examination is intended for qualified students who wish to complete studies equivalent to at least one semester of college-level preparation in economics. Students take both examinations in May for a single fee. A separate grade is reported for each exam.

Five-day Electives

Sociology Honors(Yr) SSCQ4312 5.00

Elective

Prerequisite: World History; Grade 12

Sociology is the scientific study of the patterns and processes of human social relations, of how groups behave and interact with one another, and how involvement in groups goes on to affect individual behavior. In this course, students are introduced to some of the basic sociological methods and theoretical perspectives used to study social behavior. Students examine some of the major subfields of sociology, including socialization, criminology, urbanization, and various social institutions, such as the family, the economy, government and religion. The purpose of this course is to broaden our understanding of the social forces that govern our existence. This course is offered as a trial "AP course" with recognition from the American Sociological Association.

Two-day Electives

Modern Chinese Society (S) WLDZ1330 1.25

Elective

The Chinese language is one of the oldest languages on the planet, and it continues to be used by millions of people in China, Taiwan and around the world. In this course, students learn the basics of Mandarin Chinese using the pinyin Romanization system along with traditional Chinese characters. Basic vocabulary is introduced as well as simple sentence structure and grammar. The course focuses on reading, writing, speaking, and listening. The culture of Chinese society is also introduced through videos, songs and food.

The Mediterranean World: Ancient Greece (S) SSCZ5310 1.25

Elective

This course focuses on the rise of Greek civilization from Mycenaean times to the Hellenistic expansion under Alexander the Great. Major topics of examination are Homer, the emergence of the polis, the Persian and Peloponnesian wars, and the flowering of Greek culture at Athens during the 4th and 5th centuries.

The Mediterranean World: Ancient Rome (S) SSCZ5311 1.25

Elective

Ancient Rome focuses on the rise of Rome in Italy and its birth as a republic to its fall to the Goths in 476 AD. Major topics of examination are the consolidation of the Italian peninsula, Rome as a republic, Julius Caesar, the Pax Romana, the rise of Christianity, and the fall of the Roman state.

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Comparative Religions (S) SSCZ5312 1.25

Elective

Have you ever wondered about another student's religion and what he or she believes? In this class, students explore the world's major religions. They discuss religious histories and belief systems. Students also explore the similarities and differences among Buddhism, Christianity, Hinduism, Islam and Judaism.

Exploring America's National Parks (S) SSCZ5313 1.25

Elective

Students examine the history, the geology, the struggle for preservation, the scenery, the natural phenomena and the diversity of wildlife in America's national parks. Students gain an appreciation of the need for environmental preservation and conservation through an in-depth study of various parks within the United States.

The Faces of Mount Rushmore(S) SSCZ5314 1.25

Elective

Each of the men behind the four countenances carved into Mount Rushmore are examined as to the significance in, contributions to, and effects upon the history of the United States. Students will be required to write a paper nominating another American personality of historical significance for enshrinement on Mount Rushmore.

The Holocaust (S) SSCZ5315 1.25

Elective

Students consider one of the greatest tragedies of the 20th century in order to better understand how it occurred and how such tragedies can be prevented in the future. The main focus of the course is the persecution and mass murder of European Jews and various other groups between the years 1933-45. Students learn that the Holocaust was not an accident, but occurred when choices were made which allowed, legalized, and institutionalized hate, prejudice and murder. Students study the rise of Nazism, analyze its appeal and evaluate the responses of perpetrators, victims, bystanders, and rescuers. Finally, students compare and contrast the Holocaust with other genocides that have taken place in the past or are presently occurring.

John Grieco Scholarship Fund (S) SSCZ5316 1.25

Elective

Learn about the power of the non-profit right here on the DM/AE campus. The Dr. John Grieco Scholarship Fund will be holding fundraisers like the Dance-a-thon, Culture Cabaret, Blue Moon Community Night and a car wash. Students oversee the distribution and promotion of scholarship applications and create plans for the Grieco Outdoor Classroom.

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Diversity Day (S) SSCZ5317 1.25

Elective

What makes me different from you? Is it our age? Is it our race? Could it be that your family is rich and mine isn't? Or maybe it's that my dad works in a lumberyard and yours works in a fancy office? Or maybe it's that I live with my dad and you've never seen yours? Do you think my religion is weird? Why do so many people live in your house? If we're such good friends, how come I never realized how different we are? When people think about diversity, they usually just think about race. This class explores diversity in all its forms – racial, religious, social, economic, political and gender-related. Students examine examples of diversity in their community as well as the world-at-large. They examine the ways in which families, friends, and leaders respond to diversity and struggle with the inherent assets and liabilities that come with a diverse society. Students help to organize Diversity Day, the Multicultural Breakfast, the World Cultures Festival and the Culture Cabaret.

Western Political Philosophy (S) (Not offered in 2010-2011) SSCZ5319 1.25

Elective

Prerequisite: Recommended for juniors and seniors

This course focuses on political philosophers including Machiavelli, Hobbes, the American Founding Fathers, Adam Smith and Karl Marx. The course follows a seminar format. Roundtable discussions, research/project presentations (both group and individual), together with tests, are the basis of assessment in the course. There is significant reading of selected works of the above philosophers as well as analysis of those works. Participation in discussions and debates is essential, as is an interest in concepts such as individual liberty, the role of government, natural rights, etc.

World War II (S) (Not offered in 2010-2011) SSCZ6311 1.25

Elective

In this course, students learn about the primary causes of World War II with a focus on the European theater. There is also discussion of the Pacific Theater and Japan's military activities, including the invasion of China and Pearl Harbor. Students are assessed on tests, written work and class discussion based on readings and handouts.

Russian History (S) (Not offered in 2010-2011) SSCZ6312 1.25

Elective

This course introduces students to the most important figures of Russian history (tsars, emperors, musicians, painters, scientists and writers), showing their influence on the world in general and on American society in particular. Students participate in web research, Power Point presentations and in open discussions.

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Classical Philosophy (S) SSCZ63131.25

Elective

Classical Philosophy introduces students to several of the essential philosophical questions raised by the Greek and Roman philosophers of ancient times. Students read some of their writing to study and interpret the originality of the vocabulary they have passed on to us and that we use to conduct the many different activities of our modern lives. Topics covered include natural philosophy, metaphysics, epistemology, the soul, free will, moral philosophy, political philosophy and religious belief.

Diversity: A Study of Conflict (S) 2010-2011) SSCZ6314 1.25

Elective

This Diversity class focuses on international conflicts. If you've always wanted to understand the conflict between Palestinians and Jews in Israel, Catholics and Protestants in Northern Ireland, Apartheid in South Africa, tensions between North and South Korea, India and Pakistan, Tibet and China, this is the class for you.

History of the Caribbean: Land of the Pirates (S) SSCZ6315 1.25

Elective

This course focuses on the different islands of the Caribbean, such as Haiti, Jamaica, Dominican Republic, Puerto Rico and the Bahamas. Students spend time learning about the culture, language, economy, music, climate/weather and population of each country. Emphasis is on the history of the Caribbean as a whole.

Japan from Shogun to Sony(S) SSCZ6316 1.25

Elective

Prerequisite: United States History 2

This course examines the military might of the Eastern Hemisphere in general and, specifically, the war-and-peace saga of Japan. The use and the proliferation of atomic, nuclear and other weapons of mass destruction, and the fight for resources of Africa and Asia through the use of biological agents, and the politics of drought and famine are the areas researched by students. Students are required to have completed United States History 2. Strong independent research skills are essential. Field experiences are fundamental to the success of this course, and students are exposed to guest speakers from the surrounding collegiate community.

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Minorities in Film (S) SSCZ6317 1.25

Elective

This course encourages students to develop critical thinking skills and their own interpretations through the viewing of movies. The study of plot, characterization, theme, conflict and story takes place in discussion and through expository writing. Films chosen depict people classified as “minorities” by society based on race, sex, color, creed, age, orientation and ability. Students are challenged to examine the stereotypes, myths and phobias presented in these films. Students will examine, discuss and view a movie a month. The class also attends a showing of a movie at NYU’s Film School in New York City where they will view movies such as *Race: D.W. Griffith’s The Birth of a Nation (1915)* and *Stanley Kramer’s Guess Who’s Coming to Dinner (1967)*; *Class: Herbert Biberman’s Salt of the Earth (1954)* and *John Ford’s The Grapes of Wrath (1940)*; *Creed: Steven Spielberg’s Schindler’s List (1993)* and *John Duigan’s Romero (1989)*; *Ability: Ralph Nelson’s Charley (1968)* and *Peter Bogadanovich’s Mask (1985)*; *Sexism: Martin Ritt’s Norma Rae (1978)*; *Orientation: Jonathan Demme’s Philadelphia (1993)*,.

Politics and the American Presidency (S) SSCZ6318 1.25

Elective

Every four years, citizens of our country make one of the biggest political decisions they can make: who should be the next president. The President of the United States is the only political representative chosen by the entire country. As such, he or she is a symbol of the unity – and at times divisions – among us. This elective gives students an inside look at how a president is chosen, how campaigns are won and lost, what’s important to know about voters and regions in America, and why they’re kissing all those babies. This class provides a basic foundation in political science. In the end, the student has an in-depth look at the strange, sometimes seedy, but always fascinating thing that is American political life.

The Cold War (S) SSCZ6319 1.25

Elective

Students study the history of the Cold War from the Bolshevik Revolution in Russia to the end of the Cold War in the early 1990’s. The course focuses not only on history, but also on political science, as students examine how this war was waged by both sides and the consequences of the war for the United States, the Soviet Union, and the rest of the world. The Cold War’s impact on the lives of citizens in the United States and the Soviet Union is explored. Elements of popular culture from this era are studied in order to understand these effects.

The Supreme Court and the Constitution(S) SSCZ7311 1.25

Elective

In this course students interpret the meaning of the United States Constitution. Students analyze cases and their impact on society through reading, discussion and critical writing. Particular emphasis is placed on legal issues involving First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments to the United States Constitution. Students are required to write briefs of landmark Supreme Court cases. Discussions, projects and activities guide students as they analyze and evaluate Supreme Court decisions.

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Latino in the U S (S) SSCZ7312 1.25

Elective

The United States is the 4th largest Spanish-speaking country in the world today. This course provides a brief history of the U.S. through the experience, struggles and accomplishments of Latinos. Students examine various issues that include but are not limited to immigration, education, employment, housing, English-only laws, racism and discrimination. Students research and explore the accomplishments of the many historical and current political and civic leaders that have made significant contributions to the Latino community and the United States.

Martin and Malcolm and America (S) SSCZ7313 1.25

Elective

This full-year course compares and contrasts the lives, legacies, ideologies, audiences and impact of Martin Luther King, Jr. and Malcolm X. Students are required to have completed at least one semester of United States History 2. Strong research skills are essential, and students must be computer literate. Field experiences are fundamental to the success of this course, and students are exposed to guest lecturers from the surrounding collegiate community.

Model Congress (S) SSCZ7314 1.25

Elective

Do you like to argue your point of view? Are you an independent thinker? Can you explore new ideas? Do you like to express your viewpoint? Would you like to attend a student leadership conference? Do you have political aspirations? If so, this course is for you! Model Congress is a trimester elective course designed to prepare students to attend a regional leadership conference. Students will prepare research and create legislation (bills) on current issues of domestic and national concerns. Participants create and run a legislative body modeled after the United States Congress, where they will debate contemporary issues.

The African Presence in Early Asia(S) SSCZ7315 1.25

Elective

This interdisciplinary course examines the early civilizations and kingdoms of Africa and Asia and the trans-geographical nature of culture and technology. The contributions of these civilizations to science, mathematics, governance, art, trade, military know-how and to the whole spectrum of human ingenuity are to be explored.

The Modern Era(S) SSCZ7316 1.25

Elective

After a brief review of the world prior to modern times, this course focuses on the emergence of the modern world. Main themes include: revolution, industrialization, nationalism, World Wars I and II, Age of Terrorism, contemporary events and political issues.

World Geography(S) SSCZ7317 1.25

Elective

This course introduces the students to the five fundamental themes of geography: 1) location, 2) place, 3) human environment interaction, 4) movement and 5) region. It provides a framework for the geographic knowledge and skills necessary to apply and relate geography on a practical basis. Maps and globes are utilized to process geographical information. A spatial view of the world with its cultural and physical characteristics of places and regions is developed, depicting patterns on the earth's surface, such as climate, forces, erosion, flooding, human migrating, urbanization, transportation and international trade. How people live and how they use the earth to satisfy basic needs are emphasized. Contemporary geographic issues are explored as well as the contrasting ways of life from one place/region to another. Geography of the past will be critically viewed in order to make geographic decisions of the future.

The Nineteen Sixties (S) SSCZ7318 1.25

Elective

Students in this elective course examine the tremendous social, political and cultural changes that took place in America and the world during the 1960's. Students particularly focus on certain clearly defined themes that dramatically shaped life during the 1960's and beyond.

Cultures in Crisis(S) (Not offered in 2010-2011) 1.25

Elective

Contemporary cultures face unique political, social and economic challenges as they struggle to find their place in a modern world. A variety of regions, cultures and conflicts are explored, with an emphasis on the modern American Indian experience, post-apartheid South Africa, and the Israeli/Palestinian conflict. Students also have the benefit of establishing connections with high school-age students in each of these cultures to enhance their understanding of the topics under study.

World Language

French 1 Honors(Yr) WLDA1322 5.00

French 1 is a beginner's course designed to challenge students to use language in meaningful contexts and real-life situations. It incorporates classroom instruction, student-centered activities and technology-based cooperative projects. While developing communication skills in the target language, students gain knowledge and understanding of the French culture, and connect to other disciplines and information. Students develop strategies that enable them to continue the process of language learning and to understand better their own culture and its relationship with other cultures. This is a five-credit, full-year course.

French 2 Honors(Yr) WLDA2322 5.00

Prerequisite: French 1

Incorporating and reinforcing the elements of language taught in French 1, this course is designed to expand students' abilities in the target language to more complex situations and settings. Even though the emphasis is placed on communication, students continue to develop the four skills of listening, speaking, reading and writing, as well as extend their knowledge of the French culture. Relevant and developmentally appropriate topics that are intrinsically interesting, cognitively engaging and culturally connected are introduced in meaningful contexts to challenge students to use language to broaden their understanding of themselves and their world, and to stress the interrelationship between language and culture. The goal is ultimately to provide students with the skills they need to function in Francophone countries and communicate with native speakers. This is a five-credit, full-year course.

French 3 Honors(Yr) WLDA3322 5.00

Prerequisite: French 2

Incorporating the elements of language taught in French 1 and 2, this course is designed to expand students' abilities in the target language to more complex situations and settings. Even though the emphasis is placed on communication, students are introduced to literary pieces designed to expand their reading and writing skills. The goal is ultimately to provide students with the skills they need to interact with native speakers. This is a five-credit, full-year course.

French 4 Honors(Yr) WLDA4322 5.00

Prerequisite: B or better in French 3

This course is designed to develop students' communication skills and cultural knowledge of the French language. Students analyze various elements of French civilization while projects allow students to use language in a variety of situations with ever-increasing linguistic and cultural accuracy. Through the study of grammar and reading selections, students increase their control over the language structures while gaining proficiency in listening speaking, reading and writing. The ultimate goal is to provide students with the skills they need to interact in an appropriate manner with native speakers.

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French 5 Honors(Yr) (Not offered in 2010-2011) WLDA5322 5.00

Prerequisite: French 4

The intent of this course is to deepen the students' cultural knowledge of France and raise the level of spoken French, making them conversant about France as a modern nation. Students are able to entertain a conversation with their French peers and be fluent at interviews or student debates. Students review the history and geography of France before delving more deeply into the politics and societal make up, the economic situation, global problems, such as AIDS, global warming and pollution, the music (both classical and modern), the art world, the media and the sports and leisure of the country. This is a five-credit, full-year course.

Spanish 1 Honors(Yr) WLDA1312 5.00

This course is designed to prepare students to function linguistically and culturally as novice speakers of Spanish. The curriculum challenges students to use language in meaningful context in order to broaden their understanding of the Spanish language. Rather than focusing on mastery of grammar and vocabulary as the primary objectives of secondary language study, the course requires students to communicate about relevant topics that are intrinsically interesting, cognitively engaging and culturally connected. This is a five-credit, full-year course.

Spanish 2 Honors(Yr) WLDA2312 5.00

Prerequisite: Spanish 1

Spanish 1 incorporates and reinforces the elements of language taught in Spanish 1. The goal of the course is to expand students' ability to communicate in Spanish in more complex situations and settings. In addition to verbal communication skills, students also work to develop the skills of reading and writing, as well as develop their understanding of Spanish culture. This is a five-credit, full-year course.

Spanish 3 Honors(Yr) WLDA3312 5.00

Prerequisite: Spanish 2

The goal of this course is to provide students with the skills they need to function in Spanish-speaking countries and to communicate with native speakers. Relevant and developmentally appropriate topics that are intrinsically interesting, cognitively engaging and culturally connected are introduced in meaningful contexts to challenge students to use language to broaden their understanding of themselves and their world and to recognize the interrelationship between language and culture. Authentic readings relevant to teenagers are introduced and discussed in the target language. This is a five-credit, full-year course.

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Spanish 4 Honors(Yr) WLDA4312 5.00

Prerequisite: B or Better in Spanish 3, Native Speaker and Placement Test

This course is designed to substantially increase the active and passive vocabulary of the student. Readings relevant to the age and interest of the group are introduced. Current events and connections with World Literature provide opportunities to develop critical reading skills as well as analytical skills using the new language. Students continue to refine their communication and grammatical skills.

Spanish 5 with Certification Honors(Yr) WLDA5312 5.00

Prerequisite: Spanish 4

Spanish 5 is a course especially designed to qualify students to obtain certification in proficiency of the Spanish language. Students have to pass three different tests prepared by the Salamanca University, organized by the Cervantes Institute, and certified by the Office of Education and Science of the Spanish government. The certificates that students receive after passing the tests are: Certificado Inicial de Español (C.I.E.), Diploma Básico de Español (D.B.E.), and Diploma Superior de Español (D.S.E.). Besides the three tests that students must take in this course, they have to be able to read, understand, speak, and write (in the target language) about a variety of short stories written in Spanish. This is a five-credit, full-year course.

AP Spanish(Yr) WLDA5311 5.00

Prerequisite: Spanish 5 with a B or higher, Heritage II with a B or higher, three years of Spanish with a B or higher, Placement Test, Teacher Recommendation

The Advanced Placement Spanish Language Program is intended for those who have chosen to develop their proficiency in the Spanish language. Students should have a basic knowledge of the language and culture of the Spanish-speaking peoples and should have attained a reasonable proficiency in listening comprehension, speaking, reading and writing. This AP course covers the equivalent of a third year college course in advanced Spanish composition and conversation. The course is given completely in Spanish and emphasizes the use of Spanish for active communication. In this course students achieve a very high ability in reading, writing, speaking and listening. Students read, discuss and write about Spanish literature in various genres. Students must take the Advanced Placement Spanish Exam in May.

Dual Enr Spanish 3 (Yr) WLDA6312 5.00

The goal of this course is to provide students with the skills they need to function in Spanish-speaking countries and to communicate with native speakers. Relevant and developmentally appropriate topics that are intrinsically interesting, cognitively engaging and culturally connected are introduced in meaningful contexts to challenge students to use language to broaden their understanding of themselves and their world and to recognize the interrelationship between language and culture. Authentic readings relevant to teenagers are introduced and discussed in the target language. This is a five-credit, full-year course. This course is an honors level course that is being offered as a dual enrollment course with Bergen Community College, meaning that the workload will be identical to that of a college class.

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Spanish 1 Heritage Honors(Yr) WLDA1332 5.00

This course offers the student who understands, speaks and uses Spanish at home, and/or in some social activities, the opportunity to explore, conceptualize and apply the Spanish language and its inherent culture in his/her life. The literature component answers two organizing questions: “What makes me who I am?” and “What happens when two cultures collide?” All the activities, readings, writing, projects, audios, videos and other lexical and grammatical resources are directed to teach how to communicate efficiently. The learner is viewed as a transmitter-receiver who produces clear messages and decodes efficiently.

Spanish 2 Heritage Honors(Yr) WLDA2332 5.00

Prerequisite: Spanish 1 Heritage

This course is designed for the student who understands, speaks and uses Spanish at home. The course work centers on the history and literature of Central America and the Caribbean. Students focus on the relationship of Latin American history and literature to the history and literature of the United States in the 20th century. Audios, videos, readings, writings and projects have the goal of allowing students to communicate more efficiently and effectively.

Spanish 3 Heritage Honors(Yr) WLDA3332 5.00

Prerequisite: Spanish 2 Heritage

This course facilitates the learning of the native language as an integral, pertinent and stimulating experience both intellectually and affectively by developing critical thinking skills, promoting the development of multiple intelligences, encouraging group work and enriching the vocabulary. At the same time, the course emphasizes ethic, aesthetic and civil values. The thematic units are coordinated with the general theme of World Literature 1 and 2 and World Studies from the English and Social Studies departments.

Two-day Electives

Introduction to Japanese (S) (Not offered in 2010-2011) WLDZ1310 1.25

Elective

The purpose of this course is to provide students with knowledge that can be put to immediate use in conversational situations to obtain the information they need and communicate with native speakers. Although some grammatical patterns are presented, the stress is not simply on grammatical accuracy, but rather on acquiring actual linguistic patterns needed in Japanese communication. Although this course is an introduction to the Japanese language, it provides students with a solid foundation for the study of Japanese at a higher level. Through this course, students are introduced to the Japanese forms of writing: the two kana syllabaries and some of the basic characters (J_y_ Kanji). Students have the opportunity to work on pronunciation, accent, and intonation.

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Beginning Russian (S) WLDZ1320 1.25

Elective

This course is designed to develop basic reading, writing, speaking and listening skills in the Russian language. Students learn to communicate in the target language on the novice level. Essential grammar skills are developed and vocabulary related to self-introduction, numbers, colors, seasons, time, travel, food, restaurants, home, and family is taught.

Japanese 1 (S) WLDZ2310 1.25

Elective

Prerequisite: Introduction to Japanese

Japanese I continues the development of functional proficiency in listening, speaking, reading and writing Japanese. Following a communicative approach, this course enables students to use Japanese in real-life situations for different communicative purposes. A stronger emphasis is placed on writing and reading as students review the two syllabaries. Students are introduced to Kanji characters.

Conversational Russian (S) WLDZ2320 1.25

Elective

This course is designed as a continuation of Beginning Russian. Only those students who have successfully completed Beginning Russian can sign up. The course goal is to deepen the major skills, such as listening comprehension, reading and communication. The students will engage in a variety of real-life situations. They will have the opportunity to meet Russian friends and to go on a field trip to Russian stores and a Russian restaurant.

DMAE En Español I (Yr) WLDZ5311 2.50

Elective

DMAE En Español is the elective class that produces a newspaper written completely in Spanish. Students in the elective have given EPSD the privilege of becoming the pioneer in this event in Bergen County. The primary target of the newspaper in Spanish is the Hispanic community in the city of Englewood, particularly those who do not speak English and who are not familiar with using the Internet. The newspaper serves to inform DMAE students' family members who are not able to be informed about the events, educational as well as recreational, that occur on our campus throughout the school year.

Every Day French (S) WLDZ5312 1.25

Elective

Every day French is focused on French slang and expressions used on a daily basis. It is designed for students currently taking French III or IV. The goal of the course is to improve listening comprehension and communication skills.

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French Art (S) WLDZ5313 1.25

Elective

This course offers a project-based study of the history of French painting, from the pre-historic times through the 19th century. Students will learn the differences not only among major French art movements and artists, but also will acquire the basic skills to interpret the paintings. As a final project, the students will be taken to the MMA, where they will be able to practice what they have learned.

Spanish Grammar Games (S) (Not offered in 2010-2011) WLDZ5314 1.25

Elective

This elective is a review of Spanish 1 grammar. Students review the gender of nouns, plural forms of nouns, definite and indefinite articles, regular and irregular verbs in the present tense, ser vs. estar, reflexives, the verb: “Hay,” etc.

Spanish Poetry (S) (Not offered in 2010-2011) WLDZ5315 1.25

Elective

This course is designed to introduce both American as well as native-Spanish speakers to the world of Spanish poetry. Students learn variations in rhyme and syllables, figurative language, accentuation, intonation, dramatization and imagery. Students are able to determine what genre of poetry they are reading. This course stresses vocabulary development as well as poetry analysis. Students analyze the poetry of many of the great Hispanic poets, such as Jose Marti, Gustavo Becquer, Tomas de Iriarte, Fray Luis de Leon, Sor Juana de la Cruz, and Pablo Neruda.

Spanish Speaking Countries: Art and Culture (S) (Not offered in 2010-2011) WLDZ5316
1.25

Elective

The course is taught in a bilingual mode: Spanish and English. This full-year elective is designed to teach different aspects of the Spanish-speaking country's culture, including South America, Central America and the Caribbean Islands, and Spain.

Spanish Plays Honors (S) WLDZ5317 1.25

Elective

Prerequisite: Native Spanish speakers or Spanish 4(or above)

This course is comprised of the reading of Spanish plays. In this course students will discover the art of performing plays. There will be visits to “El Repertorio Español” to see professional actors perform the plays read in class.

D.E.L.E. Test Preparation(S) WLDZ5318 1.25

Elective

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Spanish Tutoring Center (S) (Not offered in 2010-2011) WLDZ5319 1.25

Elective

Spanish Tutoring Center reinforces the basic skills in the development of functional proficiency in listening, speaking, reading and writing Spanish. Following a communicative approach, this course enables students to use Spanish in real-life situations for different communicative purposes. A strong emphasis is placed on reading and speaking the target language as students interact in a variety of real situations using appropriate verbal and non-verbal communication strategies.

Aikido Beginner(S) WLDZ5321 1.25

Elective

Students will be introduced to the philosophy behind the martial art. They will explore, through the practice of Aikido, how to avoid aggression, release tension, and increase the ability to deal with life's problems by developing self-control and calmness. Students will work on the basic techniques of aikido.

Aikido Intermediate(S) WLDZ5322 1.25

Elective

Prerequisite: Aikido Beginner

Students will continue to explore how aikido serves conflict situations. Students will be introduced to more advanced aikido techniques and develop their abilities of falling (ukemi) and following (uke).

Conversational Spanish(S) WLDZ5323 1.25

Elective

This conversational Spanish course provides a great way for beginners to learn Spanish, while enabling intermediate and advanced Spanish learners to enhance Spanish Conversation skills. You will acquire new vocabulary and learn how to use it in conversation.

Vamos Adelante (Yr) WLDZ5324 2.50

Elective

Prerequisite: Native speaker in junior year that has not taken any Spanish class in high school and recommended by the teacher.

This course will prepare students to demonstrate their level of Spanish proficiency in the four skills, grammar, writing, reading, and speaking, in which students have not received academics instruction.

Physical Education and Health

Physical Education 9(Yr) PEDA1114 3.75

This freshman three-quarter course includes an introduction to basic motor skills and participation in individual and team sports, including cross country, speedball, soccer, flag football, basketball, volleyball, floor hockey, weight training, softball, physical fitness and conditioning.

Health Education 9(Q) PEDA1124 1.25

Health Education is provided daily for one quarter giving attention to drugs, disease prevention, nutrition and physical changes that occur within the body during stages of puberty.

Physical Education 10(Yr) PEDA2114 3.75

This sophomore three-quarter course is designed to offer students opportunities to develop interest and skill in a variety of physical activities. The individual activities aim to develop basic skills, knowledge of rules and to stimulate an interest in leisure time activities. Team activities aim to develop fundamental team skills and techniques.

Health Education 10/Driver Education(Q) PEDA2124 1.25

Driver Education is provided for one quarter. This course gives students an understanding of automobile indicators, controls and safety equipment. Students discuss driver strategies and emergency situations. Instruction also addresses current laws regarding driving under the influence of alcohol and illegal substances. The New Jersey Written Driver Examination is administered at the conclusion of the course.

Physical Education 11(Yr) PEDA3114 3.75

This junior three-quarter course places an emphasis on refining skills, improving the knowledge and developing mental attitudes of the game through body movement. Students are provided opportunities to assess their fitness levels, to enjoy a productive stay in high school and to attain a more meaningful existence after high school with leisure time values.

First Aid and Safety/Health Education 11(Q) PEDA3124 1.25

First Aid and Safety Education are provided daily for one quarter. Students gain an understanding of the immediate and temporary care given to an injured or ill person. Basic rules of self-help are provided to students, emphasizing crucial procedures for what should and should not be done in an emergency.

Physical Education 12(Yr) PEDA4114 3.75

The senior three-quarter course offers students a variety of activities. The classes are divided into three areas: lifetime sports, team sports and physical fitness. Lifetime sports incorporate a wide range of activities that students can use throughout the life span. Instructional units include fundamental skills, written tests, tournament play and motivating students to participate on their own. Team sports emphasize refining skills, strategy and rules of the game. Teamwork, cooperation and sportsmanship are highlighted. Physical fitness consists of individual fitness programs and individual evaluations. Students gain an understanding of fitness conditioning and its carry over value.

Health Education 12/Family Life(Q) PEDA4124 1.25

All students participate in Family Life Education for one quarter. This program includes concepts of independent living, inter-personal relationships, healthy lifestyles and other aspects of decision making. Other areas covered are dating, prevention of acquaintance rape and sexual values. In addition, units on reproduction, birth control, childbirth, child abuse prevention and parenting are presented.

Special Programs/Courses

Freshman Seminar(S) MSCA1310 0.00

Required Elective Grade 9: One Semester; Non-credited Course

During the first trimester, freshmen meet with a guidance counselor on a weekly basis for one period to enhance and improve understanding of the Academy experience. The process encourages open dialogue regarding student responsibilities, opportunities and pertinent issues. Counselors help students to consider themselves as individuals and as members of various communities and enable them to make good decisions about how to function in those capacities. The focus is to set a tone for ethical behavior in high school and beyond.

Ethics (S) MSCA1330 1.25

Required Elective Grade 9: One Semester

The 9th grade Ethics course is designed with a clear goal in mind: to ask students to consider themselves as individuals and as members of various communities and to enable them to make good decisions about how to function in those capacities. Through opportunities for journal writing, research, discussion, reflection and collaborative projects, students gain an understanding of ethical behavior to put into practice in our school community. Some key questions that are examined in the course are “What if everyone did it?” “What if I was on the receiving end?” and “What kind of person do I want to be?” Human rights, business ethics, bioethics and plagiarism/cheating are some of the topics covered in the course.

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Foundations (Yr) MSCA1340 1.25

Elective

Foundations is an enrichment course that is designed as an embedded sequential academic skills program for 9th graders. It is intended for non-elective, multi-subject, multi-ability level classrooms. This course empowers students by instilling in them the academic and social skills needed to successfully complete high school and college, and become responsible participants and leaders in our global society.

Gateway Seminar (S) MSCA3310 1.25

Required Elective Grade 11: One Semester

During junior year, all students must attend, complete and pass this course as preparation for senior year and their Senior Experience/Internship. Students develop skills in workplace oral and written communication, resume writing and interviewing relative to their internship and the college process.

Senior Experience (Yr) MSCA4310 9.00

Elective: Full Year

Prerequisite: Grade 12

Senior Experience extends the principle of hands-on learning beyond school walls. Its goal is to establish an interactive learning partnership with the professional community so that students may increase - in depth and scope - their knowledge, skills and abilities in a selected area of study. In senior year, each Academy student has the opportunity to select an internship in his/her own particular area of interest. The student's Senior Experience is guided by an on-site mentor who is expected to take an active interest in the student's growth and development by guiding the student's learning process. Because this is a structured learning experience, a learning plan is developed collaboratively by student and mentor at the beginning of the internship to outline the scope of the internship, including goals and responsibilities.

Senior Seminar (Q) MSCA4311 1.25

Elective

Prerequisite: Juniors and Seniors Preparing for Career Experiences and College

This course is designed to help students prepare for the college application process. Students develop skills regarding correspondence, resume writing and interviewing relative to work experiences and the college process.

Mentoring Young Minds Honors (Yr) MSCZ5310 2.50

Elective

Academy students meet twice a week with students from the middle school. The purpose of the program is to enhance the reading and comprehension skills of the middle school students. Each high school student is assigned to three middle school students. In addition to improving reading skills, another goal is to acclimate the middle school students to the high school environment. High school students serve not only as mentors, but also as future friends and role models. Mentors select and work with middle school students on a wide variety of reading topics from short stories to current events articles.

Art Electives

Two-day Electives

Drawing 1(S) ARTZ1310 1.25

Elective

Students become familiar with using a variety of drawing materials and learn how to apply elements such as line, value, texture, pattern and composition to their artwork. This class is excellent for beginners to learn the basics and experiment with different drawing techniques. Students develop a portfolio of their artwork to show their progression and development.

Drawing 2(S) ARTZ1320 1.25

Elective

Prerequisite: Drawing I

Students learn about color theory and create drawings using colored pencils, chalk and oil pastels. Students are encouraged to try working in different styles including realism, abstraction, impressionism and expressionism. Various artists and techniques are examined to introduce art history and critique to the class. Students begin to discuss their artwork and develop a vocabulary of art terms and techniques. Drawing I is a required prerequisite.

Drawing 3(S) ARTZ1330 1.25

Elective

Prerequisite: Drawing 2

Projects become more conceptually challenging and student driven as they decide which drawing materials they want to work with and what size their final drawings will be. Projects encompass materials and techniques learned in both Drawing I and II and students focus on their strengths and interests. Students participate in group critiques of sketches and final artwork. Emphasis is placed on developing a working dialogue of art terms and being comfortable analyzing and interpreting artwork. Drawing I and Drawing II are required prerequisites.

Painting 1(S) ARTZ2310 1.25

Elective

Students use watercolors to explore color theory and basic painting techniques. Topics include color mixing, line, texture, pattern and composition. Students apply the different techniques demonstrated in class to their own original artwork. This class is excellent for beginners to learn the basics and experiment with different drawing techniques. Students develop a portfolio of their artwork to show their progression and development.

Painting 2(S) ARTZ2320 1.25

Elective

Prerequisite: Painting 1

Students use acrylics to apply skills and knowledge of painting and color theory while projects progressively become more conceptually challenging. A focus is on sketching and planning the space before the painting begins. Various artists and techniques are examined to introduce art history and critique to the class. Painting I is a required prerequisite along with knowledge of color theory.

Painting 3(S) ARTZ2330 1.25

Elective

Prerequisite: Painting 2

Projects focus on specific styles through art history and students explore various techniques to apply paint. Students research an artist of their choice and emulate a painting by the artist they select. They also paint an original picture in the style of the artist they chose. Students participate in group critiques with a focus on using domain specific vocabulary to analyze and interpret art. Painting I and Painting II are required prerequisites along with knowledge of color theory and composition.

Pen and Ink(S) ARTZ4370 1.25

Elective

Students practice and apply a variety of pen and ink techniques like hatching, cross hatching, scribble, stippling and wash. Projects are designed to introduce students to concepts like value, composition, line quality and texture. Students create unique works of art while gaining inspiration from the variety of artists and styles that are introduced throughout the trimester.

Portrait Art(S) ARTZ3310 1.25

Elective

What constitutes a portrait? Does it have to look like the person you are drawing or painting? Can it be symbolic or abstract? Does it have to be human? Students create a variety of portraits that stretch the boundaries of their imagination. Projects are 2D and 3D and explore a variety of materials like collage, printmaking, sculpture and clay.

Print Making(S) ARTZ3320 1.25

Elective

Students explore techniques like mono print, linoleum block print, scratch foam and stamping. Students are introduced to a wide variety of printmaking tools and materials while focusing on line, texture composition and positive and negative space. A variety of themes and concepts will be introduced and applied to the different techniques while studying prints by a variety of artists.

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String Art(S) ARTZ3330 1.25

Elective

Students create a variety of 2 dimensional and 3 dimensional artworks with a focus on the use of string like yarn, thread, embroidery floss, twine and ribbon. Techniques include weaving, papier-mâché, embroidery, sewing and much, much more. Students are encouraged to find innovative applications for the materials with an emphasis on craftsmanship and skill development.

Art Exploration(S) ARTZ4310 1.25

Elective

Students are introduced to a variety of media including collage, clay, printmaking and sculpture. Concepts learned include color theory, composition, and 3D design. This is a chance for students to experiment and explore art making processes that stretch far beyond drawing and painting. They will produce unique artworks while learning new techniques and methods along the way.

Editorial Illustration(S) ARTZ4320 1.25

Elective

Students create artworks that accompany a selection of written works like poetry, folk tales, children's books and newspaper or magazine articles. A major focus is on brainstorming, sketching, capturing a big idea and making a visual connection with the reader. Get a taste of what it's like to be a professional Illustrator; following art direction, working with printing specifications and at times having tight deadlines. Illustrations are worked in a variety of artistic styles that are studied throughout the trimester. Materials include but are not limited to drawing, painting, scratchboard and collage.

Junior/Senior Portfolio(S) ARTZ4340 1.25

Elective

This class is reserved for students planning to attend art school. An art portfolio is developed based on the specific requirements of the colleges the student is applying to. Art supplies are provided however the student is required to work on their portfolio outside of school as well. Learn how to present and discuss your artwork in an interview, write an artist's statement and build a portfolio of your best work so you can be confident and successful at achieving your dreams.

Power Of Concept(S) ARTZ4350 1.25

Elective

Students explore the importance of the BIG IDEA behind a work of art. Projects focus on brainstorming and concept development with an emphasis on skill and technique. Projects range from drawing to book making and everything in between. Students will understand the importance of communicating a clear idea, connecting with their audience and staying focused on the big picture...all concepts that reach far beyond art class!

Fashion Trends(S) ARTZ4360 1.25

Elective

Students create a portfolio of work while learning about the design process including inspiration, trend boards, target customers, preliminary sketching and final drawings. Designs are created based on a series of challenges inspired by topics such as foreign countries, historic decades, food, nature, public figures and celebrities.

Music Electives

Five-day Electives

Chorus – 5 day (Yr) MUSQ1110 5.00

Elective

The study of music through performance in chorus is designed to develop students' understanding and appreciation of music through practical skills and creative work. Students discover music as a source of enjoyment and personal satisfaction. Classical, Popular, Renaissance, Broadway, and Folk music are covered. Students learn music theory and history and how to balance and blend voices.

Beginning Band(Yr) MUSQ2110 5.00

Elective

Prerequisite: Marching Band (Spring Season)

This course is designed to develop skills and knowledge that will enhance one's understanding and enjoyment of music. It is for students who wish to learn to play a band instrument. Instruction in flute, clarinet, saxophone, trumpet, French horn, trombone, and euphonium is offered. A reasonable amount of practice is required of all students.

Contemporary Choir(Yr) MUSQ3110 5.00

Elective

Prerequisite: Audition

This ensemble sings a variety of gospel literature for mixed choir, from spirituals to contemporary gospel. Emphasis is placed on style, form, blend, intonation, independence of parts as well as accompanied and a capella singing. The ensemble is given the opportunity to showcase its work through various public performances at school and in the community.

Drumline(Yr) MUSQ5110 5.00

Elective

Prerequisite: Marching Band

This course encompasses the study of traditional and modern literature for percussion ensemble and the drumline within the marching band. Course content includes emphasis on music reading, music theory, solo and ensemble playing. Members must be self-disciplined and agree to work as a team with other band members. School pride and community service are an important focus. Additional rehearsals and participation in concerts are required. Summer band camp is required.

Two-day Electives (Full Year)

Chorus(Yr) MUSZ1310 2.50

Elective

The study of music through performance in chorus is designed to develop students' understanding and appreciation of music through practical skills and creative work. Students discover music as a source of enjoyment and personal satisfaction. Classical, Popular, Renaissance, Broadway and Folk music are covered. Students learn music theory and history and how to balance and blend voices.

Select Vocal Ensemble(Yr) MUSZ1320 2.50

Elective

Prerequisite: Chorus Member, Audition

Join students in an advanced vocal ensemble which performs more difficult music in several styles, languages and settings. Select Chorus members are encouraged to audition for county and regional choruses. Students in Select Chorus perform several times each year. Enrollment is by audition.

Select A Cappella (Yr) MUSZ1330 2.50

Elective

Prerequisite: Audition

Move over guys; this is a performance class for girls only. Everything students sing is unaccompanied, thus a cappella. Musical selections include popular music from the fifties to today. Enrollment is limited by number and by singing ability. For acceptance, students must have the ability to sing independently, to learn a part quickly and to be fearless! An audition is required.

Sight Singing and Ear Training (Yr) MUSZ1340 2.50

Elective

Sight Singing and Ear Training is designed primarily for singers who wish to further develop their ability to sing a piece of music at sight. That means being able to look at the sheet music and know what it sounds like without having ever heard it before! No prior knowledge of music reading is required.

Concert Band(Yr) MUSZ2320 2.50

Elective

Open to students who have had experience in band in middle school, this elective requires students to perform music of all types, including contemporary band repertoire and arrangements of music by the masters. Pianists are welcome. The course runs a full year and requires students to participate in performances.

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Jazz Band(Yr) MUSZ2330 2.50

Elective

Prerequisite: Concert Band, Audition

This course is open to the more experienced instrumentalists who are interested in performing music of this genre. The focus is on Swing, Blues and Jazz-Rock. All members learn to improvise and have opportunities to solo with the band. Instruments that are part of Jazz Band are trumpets, trombones, saxophones, keyboard, drums, guitar and bass guitar.

String Ensemble(Yr) MUSZ2340 2.50

Elective

Prerequisite: Audition

This course is open to experienced orchestral string players who are interested in developing their musicianship in an ensemble setting. Many different genres of music will be studied including Baroque, Classical and Contemporary. Performances are a required part of this class.

Clarinet Ensemble (Yr) (Not offered in 2010-2011) MUSZ2350 2.50

Elective

Prerequisite: Permission of instructor, possible audition

This course is designed to meet the needs of students who play the clarinet and wish to enhance their performance skills by studying, rehearsing and performing with other clarinetists. Repertoire is chosen from many different genres, including Baroque, Classical and Contemporary. Performances are a required part of this class.

Flute Ensemble (Yr) (Not offered in 2010-2011) MUSZ2360 2.50

Elective

Prerequisite: Audition

This course is designed to meet the needs of students who play the flute and wish to enhance their performance skills by studying, rehearsing and performing with other flutists. Repertoire is chosen from many different genres, including Baroque, Classical and Contemporary. Performances are a required part of this class.

Percussion Ensemble (Yr) (Not offered in 2010-2011) MUSZ2370 2.50

Elective

Prerequisite: Permission of instructor, audition

Drumming appeals to all people at the most basic level. In this class, a variety of genres may be explored, but the primary focus will be music written specifically for this type of ensemble during the 20th and 21st centuries. Enrollment is limited, and those with more advanced skills are given preference over others. Performances are a required part of this class.

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Beginning Guitar(Yr) (Not offered in 2010-2011) MUSZ2380 2.50

Elective

The main goal of this course is to have a student, with no prior knowledge of music or the guitar, gain enough skill to begin playing the instrument independently. Additionally, the strong foundation enables students to continue learning music through the guitar. Topics include reading music, chords, guitar technique and tuning. This class consists of lecture and highly individualized learning.

Guitar 2 (Yr) (Not offered in 2010-2011) MUSZ2390 2.50

Elective

Prerequisite: Beginning Guitar

Students pick which songs they want to learn and they are taught to play them. Songwriting is discussed in this class after students learn how other musicians wrote songs.

Applied Music(Yr) (Not offered in 2010-2011) MUSZ4310 2.50

Elective

Prerequisite: Permission of Instructor

Applied Music is an open-ended course available to any student. Students may take lessons, focus on specific areas of music study or receive extra help in areas of performance. Students with prior experience can also work in the MIDI lab to create CD's. Space is limited due to the amount of individualized instruction.

Music Composition (Yr) (Not offered in 2010-2011) MUSZ4320 2.50

Elective

This course is designed to meet the needs of students with no prior musical knowledge. In an interdisciplinary thematic unit, some of the mystery of music composition is lifted. Students work individually and in pairs to cover elements of rhythmic, melodic and harmonic composition. By the end of the unit, students compose their own twelve-bar blues and understand how they got there! In addition to music composition, this course also involves the disciplines of math, social studies, language arts and technology.

Popular Music and MIDI (Yr) (Not offered in 2010-2011) MUSZ4330 2.50

Elective

Students learn about the genres in popular music from early Blues to Hip-Hop. Students receive instruction on how to use the MIDI lab as they examine each genre in depth. As a culminating project, students create a one-hour simulated radio program centering on one genre.

Dance Workshop(Yr) MUSZ5310 2.50

Elective

This course offers group exploration of techniques slated to all areas of dance that include tap, jazz, modern and lyrical.

Technology Electives

Two-day Electives

Digital Design 1 (S) TECZ1310 1.25

Elective

This course focuses on the development of the student's graphic design skills through the use of technology. Students learn how to use Adobe Photoshop, Adobe Illustrator, and Adobe In-Design to create products such as book covers, CD jackets, magazine layouts and posters. Students spend class time learning graphic design applications, viewing samples of good design, brainstorming ideas for good design, and designing and sharing designs with the class for critique.

Digital Design 2 (S) TECZ1320 1.25

Elective

Prerequisite: Digital Design I

Learn more advanced features of Photoshop – how to use masks and channels, the painting and editing tools, the pen and shapes tools and special effects. Students create advanced projects using Adobe Illustrator for drawing on the computer and Adobe In-Design for page layout.

Digital Photography 1 (S) TECZ2310 1.25

Elective

The focus of this course is improving a student's composition and photography skills through critique, self critique and online information. The course begins with the history of photography and leads to individual student projects around specific photography subjects. Learning is self-directed and competency based. Fieldwork is required. Student work is edited and used as a teaching tool.

Digital Photography 2 (S) TECZ2320 1.25

Elective

Prerequisite: Digital Photography 1

Learn basic and advanced skills for cataloging and manipulating digital and digitally scanned photographs using Picassa and PhotoShop. Topics include healing, cropping, color adjustment, lighting adjustment, masks, curves, the histogram and high dynamic range compensation.

Flash Animation (S) TECZ5311 1.25

Elective

This is a one-trimester elective that focuses on advanced methods for creating interactive, animated presentations on the World Wide Web. Macromedia Flash is used as the primary tool for achieving this.

Running a Small Business with Microsoft Office (S) TECZ5312 1.25

Elective

This class reviews the general documentation concerns of running a small business. The class provides an overview of typical revenues and costs of small businesses and also provides some insight into determining more specific money flow. It demonstrates how to use Microsoft Office components (PowerPoint, Excel and Word) to generate business plans, estimate sheets, budget sheets and other business documents. This class focuses on automating budgets and estimates using advanced functions of Microsoft Excel.

NB: Certain Information Systems Academy Two-day Electives are also available.

Career path and Technical Concentrations

Biomedicine Academy

Science Safety, Careers and Bioengineering Honors(Yr) FBMA1310 2.00

Academy Core 9th Grade

This one-year seminar course will introduce students to the biomedical field with respect to the course content studies, the laboratory skills and the career path available. Each trimester will focus on a different aspect. Trimester one will engage the students in the application and manipulation of laboratory equipment and science safety concerns through experimentation; students will develop skills in handling tools in the biomedical field. In trimester two, students will explore several facets of biomedical engineering. The use of existing technologies to design and build devices in a biological context will introduce students to basic human anatomy. Trimester three will incorporate medical professionals from the community to provide students with the experiences in clinical practice. Career focus will encompass the scientific research sector, pharmacy, medicine, dentistry and the allied healthcare professions.

Epidemiology & Experimental Design Honors(Yr) FBMA2310 2.00

Academy Core 10th Grade

Prerequisite: Science Safety, Careers and Bioengineering

This one-year seminar course introduces students to the process of scientific investigation. During the first and second trimesters students use laboratory skills as they design and run their own experiment. Each student formulates an hypothesis, designs an experiment to test that hypothesis, and runs the experiment. Data collection and a final laboratory report are generated during the trimester. Students choose their own area of interest, and this may include some limited live animal use. Students have an opportunity to enter their project into a science fair competition. The remainder of the year is spent in the study of epidemiology – the science of Public Health. Epidemiology is the study of factors affecting the health and illness of populations and serves as the foundation for determining interventions made in the interest of public health and preventive medicine. The work of epidemiologists ranges from outbreak investigation to study design, data collection and analysis including the development of statistical models to test hypotheses, and the written submission of results to peer reviewed journals.

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Medical Terminology Honors(Yr) FBMA3310 2.00

Academy Core 11th Grade

Prerequisite: Epidemiology and Experimental Design

This course enables students to earn three college credits from Bergen Community College. In order to receive a Bergen Community College transcript, students must successfully pass the midterm and the final examination for this course. The topics that are found in the study of Medical Terminology encompass aspects of grammar (the study of prefixes, suffixes and word roots), as well as the terminology associated with each system in the human body. Students are exposed to terminology found in the practice of medicine through lecture, textbook, student-activity worksheets and readings from current scientific publications. The readings from journals and magazines allow the student to see, hear and use the terminology in context for greater retention. The goal is to familiarize students with the Language of Medicine so that they may converse with healthcare professionals in their internships in a knowledgeable fashion. Students may also improve their overall reading comprehension as they learn the meaning of Latin and Greek words that are part of our current language.

Pharmacology and Bioethics Honors(Yr) FBMA4310 2.00

Academy Core 12th Grade

Prerequisite: Medical Terminology

This course has two objectives: to introduce students to major concepts related to emerging and re-emerging infectious diseases and how the body defends itself and to familiarize students with the modern pharmaceuticals – drugs engineered to improve our lives. The improvement of personal and public health is the central mission of the National Institutes of Health, the world's largest organization devoted to biomedical research and a major contributor to the curriculum of this course. Bioethics is the field of study concerned with the ethics and philosophical implications of certain biological and medical procedures, technologies, and treatments. This includes issues pertaining to organ transplant, genetic engineering, care of the terminally ill, and advances in the fields of genetic engineering and drug research. During this senior level seminar course, students draw on their understanding of natural science (biology, chemistry, and physics) to discuss and determine the potential impact on society of innovations and discoveries in biomedicine.

Finance Academy

Introduction to Business Honors(Yr) FFIA1310 2.00

Academy Core 9th Grade

Students focus on the economic activities affecting everyday life, such as owning and operating a business. Students learn how business is affected by the global economy and by government, and how businesses find, train, and evaluate new employees. Computer skills are an integral part of the course to prepare students with the skills and knowledge needed for a technology-oriented market. Through the use of the Internet and software programs, students use technology for analysis and problem solving. It is the goal of this course to provide students with a basic foundation in a technology-driven and project-based environment, sufficient to meet their needs as they move through the Finance Academy curriculum.

Business and Personal Finance Honors(Yr) FFIA2310 2.00

Academy Core 10th Grade

Prerequisite: Introduction to Business

This course is designed to show students how to manage their personal finances now and in the future. This course gives insight into how businesses manage their finances and why wise financial management is critical to personal and business success. This course focuses on the scope of the work that comprises businesses such as insurance, real estate, public finance, accounting and the securities industry. Higher level skills, such as analytical reasoning, problem solving, critical thinking, interpersonal relationships and creativity are integrated into various activities and Internet projects.

Accounting with Real-World Applications Honors(Yr) FFIA3310 2.00

Academy Core 11th Grade

Prerequisite: Business and Personal Finance

Accounting with Real-World Applications is a full-year course where students learn how business transactions affect the financial records of the business. Students analyze typical transactions for a sole proprietorship, a service business, a merchandising corporation and a business partnership. Students record those transactions in a general journal and then post these entries to general ledger accounts. Payroll accounting is explored in depth. Special emphasis is given to ethics in accounting. This course gives insight into how businesses manage their finances and why wise financial management is critical to business success.

Marketing Honors(Yr) FFIA4310 2.00

Academy Core 12th Grade

Prerequisite: Accounting with Real-World Applications

This course is an introduction to business marketing. It is intended for seniors in the Finance Academy. It covers the basics of business marketing: advertising, sales, pricing, product definition and market research. It also covers topics such as product differentiation, product positioning and market segmentation.

Two-day Electives

Banking and Financial Services (S) FFIZ5310 1.25

Elective

This elective provides a fundamental background on the banking system, opening and using a checking account, writing and receiving checks, reconciling a checking account and other ways of making payments. Students are given the opportunity to use the Internet to explore various online banking services.

Expert Series: The Impact of Current Events on Business (S) (Not offered in 2010-2011) FFIZ5317 1.25

Elective

This elective brings outside experts into the classroom to discuss with students the effect of global events on the world economy. Students read the newspaper and weekly news magazines and watch news programs to gain an understanding of what is happening in the world and what effect these events have on the United States economy. Higher level skills, such as analytical reasoning, problem solving, critical thinking, interpersonal relationships and creativity are integrated into various activities and projects.

Fundamentals of Stock Market Investing (S) FFIZ5316 1.25

Elective

This elective shows students how to invest their personal finances in the stock market now and in the future. Increasing resources is an important part of achieving personal financial goals. The course discusses the fundamental aspects of investing in stocks, bonds and mutual funds. Students are given the opportunity to use the Internet to set up and manage a stock portfolio and research companies before investing.

Introduction to Accounting (S) FFIZ5314 1.25

Elective

Introduction to Accounting is a one-trimester elective designed to introduce the student to the world of business and accounting. All businesses keep financial records. Students learn how business transactions affect the financial records of the business. Learning to analyze business transactions correctly is the first step toward learning accounting. The students analyze typical transactions for a small business. Students record those transactions in a general journal and post these entries to general ledger accounts. Special emphasis is given to ethics in accounting. This course gives insights into how businesses manage their finances and why wise financial management is critical to business success.

DMAE Course Catalog

Introduction to U.S. Income Taxes (S) FFIZ5311 1.25

Elective

This elective discusses the importance of taxes for personal financial planning. Effective tax planning involves finding out how current tax laws affect the student. Calculating their adjusted gross income enables them to compute their taxable income. Knowing the appropriate tax form to use and how to complete it correctly enables students to file their taxes efficiently. Choosing appropriate tax strategies for financial and personal situations can maximize earnings and reduce tax liability.

Managing Your Money & Finances (S) (Not offered in 2010-2011) FFIZ5313 1.25

Elective

Managing Your Money and Finances is a one-trimester elective designed to alert, inform, and educate students about sound money management skills and the financial planning process. It is essential in our fast-moving society to have some working knowledge of the fundamentals of basic financial planning. Today's students, in adulthood, will be required to take more personal responsibility for actively managing their finances than people of any previous generation. Those who understand financial planning concepts and investment principles have a significant advantage over those who do not. This course focuses on the scope of the work that comprises personal financial planning such as setting financial goals, managing a successful career, budgeting, time value of money, investing, savings, managing credit and debts, and managing risk by purchasing insurance.

Starting Your Own Business (S) FFIZ5315 1.25

Elective

This elective explains the importance of wise financial planning and selecting the appropriate form of business ownership. The student examines such issues as the choice as to how business ownership is legally organized, the elements of an effective financial plan to enable one to determine required capital (cash) and how to set effective prices that yield large profits. Students are given the opportunity to use the Internet for research and the preparation of reports.

Information Systems Academy

CompTia A+ Certification Honors(Yr) FISA1310 2.00

Academy Core- 9th Grade

In this course, students learn the PC from the inside out. CompTia A+ covers the inner construction of PC's, operating systems and printers. Preventative maintenance and trouble shooting strategies are discussed for both hardware and software. At the end of the course, students are qualified for A+ certification and are able to build and troubleshoot their own PC's.

DMAE Course Catalog

Advanced Network Systems Honors(Yr) FISA2310 2.00

Academy Core 10th Grade

Prerequisite: CompTia A+ Certification Honors (or Introduction to Networking)

Students continue to build on the skills and knowledge obtained in Introduction to Networking. Using Cisco equipment and technology, they learn about routing, switching, network addressing, network wiring and construction, and configuring routers, switches, and gateways. Another goal of the course is to equip the student to pass either the Network + or CCENT certification.

Programming in Java Honors(Yr) FISA3310 2.00

Academy Core 11th Grade

Prerequisite: Advanced Network Systems

This is an introduction to procedural and object-oriented programming using the Java language. Students complete a variety of projects in which they produce functioning applications. This course introduces concepts which can help prepare students for the AP Computer Science test.

Microsoft Certified Technical Support Honors(Yr) FISA4310 2.00

Academy Core 12th Grade

Prerequisite: Programming in Java

Today's business environment depends heavily on the desktop PC and its connected environment. Students in this course learn to effectively troubleshoot both desktop and network problems. Completion of this course prepares the student for the MCTS and MCP Certifications. Getting certified requires taking two tests off site.

Two-day Electives

Advanced Web Design(S) FISZ5310 1.25

Elective

Prerequisite: Introduction to Information Technology

This course involves the design and building of advanced web sites. It includes the use of Java Script, Flash, PHP, and the building/administration of a web host. Students work in groups on various aspects of the design and creation of web sites.

Video Production (S) FISZ5314 1.25

Elective

The course covers the ins and outs of creating a video production including scripting, storyboarding, the concept of continuity, composition, sound and lighting values, video capture, editing including adding effects, transitions and titles, and creating a DVD or Video CD for display. Each trimester, a different theme is chosen and students are expected to create a video for that theme. Themes include, Diversity Day, Make a Music Video, News Journalism and Academy Awards. Trimester 1 is general fiction. Trimester 2 is oriented toward Diversity Day, etc. Students are allowed some flexibility in their production.

DMAE Course Catalog

Visual Basic (S) FISZ5315 1.25

Elective

This elective teaches the fundamentals of computer programming and the software design and development process using tools that are available on most computers today. The course is divided into 3 parts; learning about the programming, learning about software development and applying the first two to create a unique program. The final project for this course will vary from year to year, but usually involves implementing a strategy-based game. In past classes, some students have specified their own final project.

Introduction to Databases and SQL (S) FISZ5317 1.25

Elective

Microsoft Access is used as a tool to learn about databases. Students learn how databases organize their data. They investigate how tables, forms, queries and reports are all used to create, update, ask questions about and display data. This information is also used to see how web sites use databases in order to display information that changes.

Programming Concepts for Robotics (S) FISZ5318 1.25

Elective

Prerequisite: Must be IS Academy Student

The age of Robotics is growing closer and students should become aware of what is involved in creating controllable and autonomous robots. Students, using a standardized platform, will learn to address sensors, control motors, and develop robots that can meet goals and do work. Programming logic and a 4gl language will be taught.

C+ Programming for the XNA GS Environment/Xbox Honors (S) FISZ5319 1.25

Elective

Microsoft's C+ programming language is more than just a web development tool. Students will be able to create animations, logical puzzles and games for the Windows PC, the World Wide Web and for their Xboxes. C+ is an object oriented language that works within the Microsoft ".Net" environment and has many capabilities. Students will learn logical concepts as they apply to problem solving through application of the C+ language.

Introduction to Ham Radio (S) (Not offered in 2010-2011) FISZ5321 1.25

Elective

The original new technology was radio. Invented at the end of the 19th century, it is the grandfather of all modern electronic technologies. Still used today, Ham radio is both a hobby and a "service," as described by the Federal Communications Commission (FCC). Whenever there is an event or emergency, amateur radio operators get involved, providing communications support. Ham radio allows the user to get involved on many levels: space communications, short-wave communications, amateur satellites, computer based radio communications, digital modes and plain old "rag chewing" (conversation) about favorite topics. This elective prepares the student to pass the FCC Technician Class, entry level (or "no code") radio license. This license is obtained by getting an 80% or greater score on a 35 question, multiple choice examination. There is a fee for students taking the license test.

Logic for Programming (S) (Not offered in 2010-2011) FISZ5322 1.25

Elective

Learn the “scheme” computer language, a simple language that teaches ways to think through problem solving, object-oriented programming and logic. No previous programming knowledge required.

A Look at Operating Systems (S) (Not offered in 2010-2011) FISZ5323 1.25

Elective

Operating systems are the link between man’s mind and the computer. Operating systems come in ranges of type difference in GUIs and sometimes multiple interfaces. The point of this elective is to familiarize and teach students about various flavors of OSs, and show them that Microsoft Windows isn’t the only one running the show anymore. This class features hands-on projects and teamwork on the computers. Some computer experience is required in order to take this course. However, if one enjoys working around computers and is interested in the field as either an occupation or a hobby, one will find this course interesting.

Law and Public Safety Academy

Intro to Law:The Importance of Law in Everyday Life Honors(Yr) FLPA1310 2.00

Academy Core 9th Grade

This course is required for Law and Public Safety students. Students gain a comprehensive understanding of our system of law and advocacy and the use of law as a tool for addressing social issues and resolving disputes. Topics covered include the organization of the federal and state court system, civil and criminal law and the trial process.

Criminal Law Honors(Yr) FLPA2310 2.00

Academy Core 10th Grade

Prerequisite: Introduction to Law

In this course, students explore the nature of crime, comparing poverty crimes and crimes against the person. Students will also look at criminal procedure including investigation, accusation, trial, verdict and sentencing for a crime. In addition, students examine the issues of fairness, security and rights in a free society. Students research and create projects which analyze current debates about criminal law in modern American society.

Constitutional Law Honors(Yr) FLPA3310 2.00

Academy Core 11th Grade

Prerequisite: Criminal Law

This course begins with an overview of the Constitution and how the American legal system works. Students look at the work of the Supreme Court by investigating why the Court takes certain cases and not others. While a wide range of cases are examined, the course focuses on cases of particular interest to high school students, including censorship of high school papers, drug use, drug testing, desegregation, religious prayer in school, hate speech, privacy and responsibility, poverty and inequality in school financing, and freedom of speech. Students analyze Court decisions, interpreting the words used and weighing the merits of the majority and dissenting opinions. Finally, students learn about the impact of the Court's cases and how the impact has changed over time.

Issues in Law and Public Policy Honors(Yr) FLPA4310 2.00

Academy Core 12th Grade

Prerequisite: Constitutional Law

In this full year course, students examine contemporary social, economic and cultural issues and the development of public policies to address them. Students analyze the roles of the legal system and public and private actors in the development and implementation of policy initiatives. Students research key issues and analyze the effectiveness of existing policies and proposed policy initiatives.

Two-day Electives

Juvenile Justice (S) FLPZ5311 1.25

Elective

This course provides an overview of the juvenile justice system in the United States. Students examine a number of issues, including the history of the juvenile justice system, juvenile crime, the differences between the juvenile and adult systems and current issues in juvenile justice including the increasing trend to treat juveniles as adults and racial disparities in the treatment of juveniles.

Mock Trial (S) FLPZ5312 1.25

Elective

Mock Trial is a trimester elective course designed to guide a student in preparing and implementing the necessary trial procedures practiced in the New Jersey Court System. Effective communication and cooperation skills are honed through the development of public speaking, listening, reading and reasoning skills, and by the preparation of the current mock trial case as provided by the New Jersey Bar Association.

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Model UN North America, Central America, South America and Europe (S) FLPZ5313 1.25
Elective

This elective course offers students interested in international relations, war/peace, the environment, human rights, and basic human and economic freedoms, the opportunity to become members of the Academies @ Englewood Model United Nations Team.

Students learn about the United Nations structure, organization, purpose and impact on a changing world. The course consists of learning about the causes, conditions and effects of warfare, poverty, oppression, illiteracy and the denial of human rights within nations and regions of the world, and the ability and willingness of the agencies of the United Nations to successfully respond to those conditions. Finding solutions to those problems is the responsibility of individual students or teams.

Trial Advocacy (S) FLPZ5314 1.25
Elective

Trial Advocacy is a trimester elective course designed to guide a student in preparing and implementing the necessary trial procedures practiced in the New Jersey Court System. Effective communication and cooperation skills are honed through the development of public speaking, listening, reading and reasoning skills, and by the preparation of the current mock trial case as provided by the New Jersey Bar Association.

Model UN – Africa, Asia and the Middle East (S) FLPZ5323 1.25
Elective

This elective course offers students interested in international relations, war/peace, the environment, human rights, and basic human and economic freedoms, the opportunity to become members of the Academies @ Englewood Model United Nations Team.

Students learn about the United Nations structure, organization, purpose and impact on a changing world. The course consists of learning about the causes, conditions and effects of warfare, poverty, oppression, illiteracy and the denial of human rights within nations and regions of the world, and the ability and willingness of the agencies of the United Nations to successfully respond to those conditions. Finding solutions to those problems is the responsibility of individual students or teams.

Criminal Psychology (S) FLPZ5316 1.25
Elective

Criminal Psychology explores the various schools of criminal psychology and poses the question: “If someone believes it’s okay to do something bad to others, how do they justify that others should not be able to do bad things to them?” The course revolves around a research project that forms an investigation of well known criminals, their crimes and their victims.

Law and Order (S) FLPZ5319 1.25

Elective

In this class, students will have the opportunity to examine the criminal justice system through the lens of the popular television series. The class will begin with an overview of the criminal justice with particular attention to investigations, arrest and the prosecutions. After students have learned key concepts of criminal law, they will evaluate their depiction on television with particular attention to the differences between fact and fiction.

Of Codes & Crowns: Development of Law... (S) FLPZ5321 1.25

Elective

This course is focused on the development of law. Beginning with ancient societies and progressing to the Age of Enlightenment, there will be an examination of how law was implemented and developed in different regions. Students will examine Hammurabi's harsh yet thorough law code, blood feud in Ancient Greece, the development of Roman Law, an examination of the English justice system (trial by jury), and the trial of Galileo (science vs. the Church). In addition, there will be a focus on Islamic and Judaic law and their similarities and difference.

Understanding Business and Personal Law (S) FLPZ5322 1.25

Elective

This elective explains business law in a practical, straightforward manner. Connections to real-world business situations help students understand the relevance and importance of the issues presented. Personal law topics are explored, targeting legal issues that will affect, or have affected, the lives of students. This course takes a look at situations and issues that students will confront every day, including contracts, consumerism, and sales agreements.

Pre-Engineering Academy

Intro to Engineering Design Honors(Yr) FPRA1310 2.00

Academy Core 9th Grade

This course begins with the concept of developing a computer-generated model of an object that is already in 3-D. The model is created and observed from many different viewpoints: animated, textured, highlighted and dimensions. Students learn to create, control and use this new and powerful environment.

Computer Integr Manufacturing Honors(Yr) FPRA2310 2.00

Academy Core 10th Grade

Students learn the fundamentals of object construction, the creation of working machines, robotics and automated systems, and the rationale, components and applications of Computer Integrated Manufacturing.

Principles in Engineering Honors(Yr) FPRA3310 2.00

Academy Core 11th Grade

This course helps students understand the field of engineering and engineering technology. Through application of theory and hands-on experiences, students gain first-hand knowledge of engineering systems, mechanical design applications, materials testing, structural and statistical analysis, remote control systems and dynamics. Students explore various technology systems and manufacturing processes to learn how engineers and technicians use math, science, and technology to solve everyday engineering problems to benefit people.

Engineering Design and Develop Honors(Yr) FPRA4310 2.00

Academy Core 12th Grade

Students in this course work in teams to research an open-ended engineering problem and design a creative solution to it. A detailed journal containing all designs, experiments, procedures and sketches is kept by each team. Progress reports are also submitted at various times detailing the team's current point of development. At the end of the course, each team submits a research paper and a working prototype of its unique solution to the original problem. Each group is required to defend what it has learned with an oral presentation before an outside panel.

Two-day Electives

Architecture 1 (S) FPRZ1310 1.25

Elective

Students learn how to use professional software commonly used by architects. All students work individually on the computer, learning how to use the "Rivet" architectural program created and licensed by AutoDesk Company. During the second quarter, participating students research existing plans and employ good home design elements as they create their own private residence or develop a commercially viable design. Students generate 3-D models of their home with full color interior, exterior and landscaping details. Students generate an animated walkthrough of their home that can be saved and viewed as an independent AVI file on their home computer.

Architecture 2 (S) FPRZ2310 1.25

Elective

Prerequisite: Architecture 1

Students work on an architectural project from the design concepts in Revit to the creation of a model of their design. The initial requirements are provided by an architectural firm based on a real project they have worked on. At the culmination of the class, the project is presented as if students were competing to win the bid for construction. Students may be required to work with hand and/or power tools in the shop area.

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CO-2 Dragsters (S) FPRZ5310 1.25

Elective

Students design, build and race a CO-2 powered car on a specially built 40-foot track. Students first design the racer on the computer, sculpt the aerodynamic body, paint it and then race it for medals.

Medibotics (S) FPRZ5312 1.25

Elective

The New Jersey Institute of Technology (NJIT) has established a program where high school teachers are trained to integrate the topics of medicine, robotics and information technology in a course offered to high school students. The activities for Medibotics utilize the software programming and design of robots from kits by LEGO NXT Mindstorm. This is a one-trimester elective aimed at students in the Pre-Engineering, Information Systems and Biomedicine Academies. Students will develop a brief understanding of a human body system and then build a robot that will perform a simulated 'surgery' related to that body system. This course is designed to develop reasoning skills and problem-solving techniques more than specific course content. It is cross-disciplinary and provides opportunities for the kinesthetic and visual learners.

Creative Design Challenge (S) FPRZ5313 1.25

Elective

Prerequisite: Introduction to Robotics

Engineering consists in finding creative solutions to technical problems. Come and learn the basic skills needed to build a robot out of popsicle sticks and Lego pieces. The class will culminate with the strongest teams participating in the Panasonic Creative Design Challenge, an enjoyable and potentially financially rewarding competition. Please visit www.panasonic.com/cdc for additional information about the competition.

Advanced CAD (S) FPRZ5314 1.25

Elective

Prerequisite: Introduction to Engineering Design

Students will use their learning of Autodesk inventor to design more elaborate projects. The emphasis will be placed on advanced surface modeling and object rendering. The class will culminate in a project centered on the detailed representation of a car.

Flight Science (S) FPRZ5315 1.25

Elective

The goal is to explore the scientific and engineering principles involved in flight. Students will learn from various sources and then put the information to test in a series of experiments from building a simple wing to designing their own flying model.

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Introduction to Electronics (S) FPRZ5316 1.25

Elective

This course is designed for the electronics beginner. Students will be introduced to the fundamental concepts of electricity and electronics components such as resistors, capacitors, transistors and so forth. Students will read and analyze simple schematics and build them on breadboards.

Introduction to Robotics (S) FPRZ5317 1.25

Elective

In introduction to robotics, students will learn how to create a simple tethered remote control and how to create simple gear systems. The class will work initially on the individual parts and will finish with a fun project during which students will be designing a remote controlled car.

Renewable Energy (S) FPRZ5322 1.25

Elective

There has been considerable interest recently in the topic of renewable energy. This is primarily due to concerns about environmental damage (especially acid rain and global warming) resulting from the burning of nonrenewable fossil fuels. However, investing in renewable energy is controversial for several reasons. First, not all scientists agree on the degree of environmental damage that can be attributed to fossil fuels. Second, fossil fuels are relatively abundant and cheap energy sources, and have contributed significantly to economic growth. Abandoning inexpensive fossil fuels for more expensive renewable ones will have major economic ramifications. In this class, students will enjoy analyzing this interesting and controversial topic.

Wood Working (S) FPRZ5323 1.25

Elective

In the wood working class, students will learn the use of basic wood working tools such as the band saw, jigsaw, router, planner and sander. Students will also work on safety issues related to wood working. The class will culminate with a final project during which students will build a toy.