

Roman Catholic High School

Course Catalog

BUSINESS, COMPUTERS, AND INFORMATION TECHNOLOGY (BCIT)

FINANCIAL FITNESS

College Prep

This half-credit course will introduce students to the world of fiscal responsibility. Topics covered will include consumer math, career planning, money management, investing, credit management, real estate, automobiles, risk management, and insurance. With knowledge of these areas, the student will begin a more successful life of personal financial planning and consequently, a higher quality of life.

INFORMATION TECHNOLOGY

College Prep

The student begins by learning about the basic ins and outs of information technology, progresses to applications that will likely be used in the workplace, and finishes by learning about the interconnectivity that runs in daily life. Students will gain valuable and marketable experience working with personal computers. The best way to introduce students to computing is with an applications course that gives them considerable 'hands-on' computer experience. Through a student-centered environment, they learn to utilize Microsoft Office 2010 software applications in word processing, electronic spreadsheets, databases, and presentations graphics. In addition, students will utilize "The Google DOCS Specialist" e-Book which is an integrated Google Apps project based workbook. Effective use of the Internet will also be covered.

ACCOUNTING I

Honors, College Prep

This course is aimed at the college-bound student considering business-related fields. Students will receive training of two types of business-propriatorships and corporations. Course utilizes personal computers using web-based textbook and workbook, and online accounting software. Each type of business is presented in a complete accounting cycle covering analyzing transactions, journalizing, posing petty cash, financial statements, and adjusting and closing entries. Accounting concepts are introduced using business theory and practical applications. In addition to focusing on the accounting functions within business, the student will gain a valuable introduction to general business topics: business ethics, technology, legal issues, careers in accounting, and relevant personal financial skills.

BUSINESS ECONOMICS

Honors

Economics is the study of how individuals, firms, and organizational structures make economic decisions. This course focuses on the study of economic problems and the methods by which societies solve them. Characteristics of the market economy of the United States and its function in the world and methods of applying economics to one's life will be explored. Topics include problems of scarcity, productivity, economic institutions and incentives, supply and demand macro and microeconomic measures, and business economic cycles will be examined. Students will learn to evaluate the strengths and weaknesses of economic decision-makers by employing concepts of efficiency and equity. Students also analyze and evaluate the effects of government intervention. Throughout the course, learning emphasis is placed on reasoned, logical argument. Use of the computer lab will be included, as well as group learning and supplemental readings.

BUSINESS LAW

Honors, College Prep

Business Law is a background course that will enable the students to recognize their rights and responsibilities as a citizen in the American society. This course stresses the fact that law involves basic rules of conduct for everyone and shows the application of law to the common problems of the individual. The students will gain knowledge and respect for both the legal system as well as the free enterprise system of economics. They will be exposed to a comprehensive study of the many facets of the US legal system such as its history, criminal law, civil law, consumer law, contract law, insurance, credit, real estate, and other practical areas of interest. Guest Speakers will be scheduled throughout the course.

Honors track includes in-depth writing, additional readings, and case analysis.

ENTREPRENEURSHIP

Honors, College Prep

In these exciting and dynamic economic times, students and young adults need proper business education. This course aims to prepare students with knowledge and understanding of economic and business concepts. The students will be introduced to our economic system of free enterprise while gaining new insights into the different roles of business, government, management, labor, and consumers within that system. Topics include: economics, business organizations (corporations, partnerships, sole-proprietors), international business, social and ethical issues, saving and investing, borrowing, insurance, credit, banking and much more. Guest Speakers will be scheduled throughout the course.

SPORTS MANAGEMENT

College Prep

This course is intended to expose students to the varying business aspects of the sporting world. Each student will be exposed to business competencies, including management, finance, economics, marketing, facilities and events,

communication, and various other topics. By the end of the course, each student will have analyzed the business of sport from the youth and community level up through professional athletics.

COMPUTER PROGRAMMING

Honors

Using Microsoft Visual Basic, students learn the essentials of app development, as well as the initial groundwork for a degree in IT Programming. The class blends visual demonstrations of professional quality programs with in-depth discussions of today's most effective programming concepts and techniques. No prerequisite is required.

ELA (ENGLISH LANGUAGE ARTS)

ELA I: Genre

Honors

This honors course is intended for the highly motivated learner. It is a foundation course designed to increase the student's knowledge of all genres of literature as it strengthens and develops essay skills with an emphasis on the structures of grammar. Critical thinking and strong organizational skills are necessary for the significant amounts of independent work required.

College Prep

This course provides the student with the opportunity to develop an appreciation and understanding of the literary genres through discussion and writing. He will be expected to master the elements of grammar and sentence structure as outlined in the Grammar for Writing Program, as he develops his essay skills. Intensive vocabulary study and emphasis on SAT preparation will be required.

Academic

The basic objectives of the course are similar to those outlined in College Prep; however, the teacher will modify the objectives whenever appropriate to accommodate the student's needs. Despite the modifications, this course is intended for the college-bound student.

ELA II: British and World Literature

Honors

This course is an accelerated course designed for the highly motivated, active learner. (Placement in this course will be assigned by the freshman Honors English teacher according to performance). A wide selection of British and World Literature and nonfiction texts will be studied in order to gain a fuller understanding of major literary themes spanning the globe. A large portion of class time will be devoted to development of essay writing: personal, reflective, expository, argumentative, persuasive, comparison and contrast, and analytical. Additionally, the student will master the structures and mechanics of grammar

while he continues to build his vocabulary and increase his basic understanding of successful SAT-taking strategies. Oral presentations based on independent research will be required. The student will be given opportunities to conduct subject-appropriate research on the Internet. Overall, Honors English II is a comprehensive communications course.

College Prep

The student will study a wide array of literary genres and works of British and World Literature in order to gain a better understanding of world literary themes. He will be expected to master the structures of grammar as outlined in the Grammar for Writing Program and demonstrate this mastery in a series of essays. Additionally, he will continue to work on his SAT strategies, vocabulary development, oral presentation skills, and independent electronic research techniques. Overall, this course lays the foundation for active, independent learning while promoting mastery of oral and written communications.

Academic

The course objectives and expectations are similar to those for College Prep: the major difference will be the amount of independent work required and the speed at which the material will be read, taught, or researched. This course is designed for the college-bound student.

ELA III: Early American Literature—1800s to 1914

Advanced Placement (AP)

This advanced placement course will use many of the same essays and poetic forms as the honors track. However, the number of required readings will be increased in order to conform to the requirements of the Advanced Placement Examination in Language and Composition. In addition, classroom activities will center around extemporaneous composition writing based on difficult reading material (more often than not, nonfiction material), a skill needed for success in the A.P. Examination. Grammatical elements, rhetorical modes, and significant vocabulary studies are special features of this course. In order to lay a solid foundation for the Advanced Placement Literature coursework, the sonnet and

the novel will be stressed, particularly the difference between types of sonnets and the difference between the American novels of the 19th and 20th century. All students are required to take and to pay for the Advanced Placement Examination.

Honors

Selection is based on a student's PSAT score and his sophomore teacher's recommendation. This course will use the same group of essays and literary forms as College Prep; however, the number of required novels and plays will be increased to conform to the requirements of the Advanced Placement Test for English Literature and Composition which some of these students may take in their senior year. In addition, classroom activities will center around extemporaneous composition writing based on difficult reading material. This skill is needed for success in the AP Test for English Literature and Composition.

College Prep

Course material will be made to challenge the reading and writing abilities of the students. Focusing primarily (but not solely) upon the literature of America from the Colonial Period to the Modern Period (around the early 20th century), this course invites the student to contemplate the relevance of American history on our country's literature as well as some uniquely American themes. Additionally, the student will continue to work on his SAT strategies, vocabulary development, oral presentation skills, and independent electronic research techniques. This course aims to see the student become a fully active, independent learner as well as a skilled communicator of the written and the spoken word.

Academic

The course content is the same as the honors track. The material is covered at a slightly slower pace. The extra reading and writing assignments will be fewer. This course is designed for the college-bound student. Focusing primarily (but not solely) upon the literature of America from the Colonial Period to the Modern Period (around the early 20th century), this course invites the student to contemplate the relevance of American history on our country's literature as well as some uniquely American themes. Additionally, the student will continue to

work on his SAT strategies, vocabulary development, oral presentation skills, and independent electronic research techniques.

ELA IV: Modern to Contemporary American Literature

Advanced Placement

This advanced placement course will use some of the same essays and poetic forms as the honors track. However, the number of required readings will be increased in order to conform to the requirements of the Advanced Placement Examination in Language and Composition. There is also a summer reading requirement before the class begins. In addition, classroom activities will center around extemporaneous composition writing based on difficult reading material, a skill needed for success in the A.P. Examination. Grammatical elements and significant vocabulary studies are special features of this course. All students are required to take and to pay for the Advanced Placement Examination.

Honors

This course will provide the student with a sense of American literary history. Readings will chronologically unfold the spectrum of thought from the Modern writers of the early 20th century to contemporary authors. Selections will be made to challenge the reading and writing ability of the students. All of the readings will be geared toward well-designed writing assignments that will be modeled in class before they are assigned.

College Prep

This course will provide the student with a sense of American literary history. Readings will chronologically unfold the spectrum of thought from the Modern writers of the early 20th century to contemporary authors. In addition, greater emphasis is placed on improving the basic writing skills. This course is designed for those students who are college bound.

Academic

Readings in American literature will be presented from a text that allows the student to gain an appreciation of his American literary heritage, which is

appropriate to the student's learning style and skills. In addition, strong emphasis will be placed on the basic communication skills needed in practical life situations.

Fine Arts

INTRODUCTION TO ART

College Prep

This course is an introduction to Art. The basic fundamentals of the elements and principles of design are taught. Students will work with a variety of materials and subject matters. Emphasis is placed on studio production, supplemented with art history, aesthetics, and criticism. Class production and homework are required.

There is a \$40.00 fee that is used to pay for all the materials supplied by the school.

STUDIO ART II

College Prep

In this course students are introduced to a more sophisticated approach to ideas, and subject matters. The basic fundamentals taught in Art I are applied in a more creative and developed manner. Experimentation in new media and graphic design is taught. *There is a \$40.00 fee required to pay for all the materials supplied by the school.*

STUDIO ART III

Honors

In this course, students will continue the exploration of processes and techniques taught in Art I and II. Coursework combines the creative use of various media with student investigation of artistic styles and concepts. Students begin larger scale, sustained works. The design and development of individual projects is introduced and encouraged. Art careers and college applications are discussed. *There is a \$40.00 fee used to pay for all of the materials supplied by the school.*

STUDIO ART IV

Honors

In this course, students will work towards building a cohesive portfolio. Projects highlight students' conceptual interests, technical development and quality, and exploration of personal style. Throughout the year, students evaluate the impact of different media and techniques on personal expression, while identifying the processes that best suit their own goals. Students engage in critique and peer-to-peer assessment, with emphasis on employing the vocabulary of formal analysis. Art careers and college applications are discussed. *There is a \$40.00 fee used to pay for all of the materials supplied by the school.*

PAFA PROGRAM

Prerequisite: Good background in drawing; presentation of the student's portfolio and approval of the department chair. Students in grades 9 through 12 may be eligible to participate.

Honors

Roman Catholic High School offers advanced art classes through a program at the Pennsylvania Academy of the Fine Arts (PAFA). The John McShain Charities, Inc. and John H. Ball sponsors this program.

Students have the opportunity of earning college credits. Classes are attended after the end of the regular school day for a period of 2½ hours once a week. Each semester consists of 15 weeks. Students receive marks on their report cards at the end of each semester. The curriculum is based on the fundamentals of Art accompanied by demonstrations, critiques, and visits to the museum. Drawings are made from natural objects from the Academy's Nature Lab, as well as casts and live models.

The school may withhold marks if the student has been absent more than the allotted time according to PAFA regulations. Students will not be dropped from the program during the term; failure to improve in attendance will result in being prohibited from enrolling the following term.

MUSIC I

College Prep

This course is designed to give the beginning student basic-level instrumental music education. This class provides fundamental skills of performance for the student in a variety of settings. The daily objective of the course is to learn basic major and minor scales (up to 2 sharps and flats), understanding musical notes, expressing simple phrase and dynamics, and developing easy-level of ensemble. As a member of the band program, group effort and cooperation is necessary to a successful program. Band is a skilled effort in which each student is expected to show technical and musical growth throughout this course.

MUSIC II

College Prep

This course is designed to give the beginning student intermediated-level instrumental music education. This class provides advanced skills of performance for the student in a variety of settings. The daily objective of the course is to learn all major and minor scales, understanding musical notes, expressing musical phrase and dynamics, and developing advanced-level of ensemble. As a member of the band program, group effort and cooperation is necessary to a successful program. Band is a skilled effort in which each student is expected to show technical and musical growth throughout this course.

MUSIC III

Honors

This course is designed to give the student an enriching and diverse instrumental music education. This class provides a number of performance opportunities for the student in a variety of settings. The daily objective of the course is to foster and promote musical growth through the playing of an instrument by the student. As a member of the band program, group effort and cooperation is necessary to a successful program. Band is a skilled effort in which each student is expected to show technical and musical growth throughout this course.

Music IV

Honors

This course builds upon the music education provided in Music III. This class provides additional performance opportunities for the student in a variety of settings. The daily objective of the course is to foster and promote musical growth through the playing of an instrument by the student. As a member of the band program, group effort and cooperation is necessary to a successful program. Band is a skilled effort in which each student is expected to show technical and musical growth throughout this course.

CHORUS

Honors, College Prep

The chorus is a male singing group consisting of students from grades 9 through 12. Aural skills, ear training and sight singing will be a part of the course. Performances and special functions are required. All students are welcome. No auditions required. This class provides a number of performance opportunities for the student in a variety of settings. The daily objective of the course is to foster and promote musical growth through the singing by the student. Academic credit is given for each year of the program. Chorus is rostered as an academic class and scheduled during the course of the school day. An honors designation for this course must be approved by both the instructor and Assistant Principal for Academic Affairs.

DIGITAL PHOTOGRAPHY

Honors

This course introduces students to the specialized techniques used in digital photography at an advanced level. Students will learn and apply such concepts as depth of field, shutter speed, and use of light. In conjunction with digital photography, the students will be exposed to the digital darkroom. Through the use of Photoshop, students will learn how to improve their post-production photographs. Students will also learn how to manipulate pictures to create special photographic effects.

College Prep

This course introduces students to the specialized techniques used in digital photography at the fundamental level. Students will learn and apply such concepts as depth of field, shutter speed, and use of light. In conjunction with digital photography, the students will be exposed to the digital darkroom. Through the use of Photoshop, students will learn how to improve their post-production photographs. Students will also learn how to manipulate pictures to create special photographic effects.

DIGITAL VIDEO

Honors, College Prep

This course will focus on the basics of digital video production. Specific course topics include: basics of project management for digital video production; fundamentals of video composition; video production elements and terminology; preparation of video files for TV and Web; and understanding the Adobe Premiere interface and production process. Students will be expected to create video content for Roman's morning news, website, and social media accounts. Assignments will be given and each student is responsible to complete them in a specific time period. NOTE: Students will be required to produce content outside of the scheduled class time as necessary.

THEATER

College Prep

The Theater Course is open to those students who have a desire to study theater production either as actors, technicians, or stage crew. All aspects of production will be taught, giving the student a complete overview and first-hand experience in theater roles both on and behind the stage. Students are required to participate in all of the classroom curriculum, regardless of their preference to any one area of the theater. Classes consist of scene study (acting), vocal production (singing), and movement (basic dance and movement techniques). Classes are taught by theater professionals.

HEALTH AND PHYSICAL EDUCATION

PHYSICAL EDUCATION/HEALTH

College Prep

The course will meet for one semester. The following aspects of health, sports and physical fitness are included in this course: Physical Fitness, Basketball, Volleyball, Recreational Football, Street Hockey, Cooperative Activities, Low Impact Aerobics, Mental and Social Health, Communicable Diseases, Alcohol, Drugs, Cigarettes, Nutrition, Personal Hygiene, and AIDS.

INTRODUCTION TO SPORTS MEDICINE

Honors

This reading and writing intensive course will introduce the student to the ever-changing and growing world of sports medicine. Course content will range from the historical beginnings of sports medicine to the various disciplines within today's modern sports medicine team. Emphasis will be placed on classroom lectures and hands on practice of manual techniques.

College Prep

This course will introduce the student to the ever-changing and growing world of sports medicine. Course content will range from the historical beginnings of sports medicine to the various disciplines within today's modern sports medicine team. Emphasis will be placed on classroom lectures and hands on practice of manual techniques.

MATHEMATICS

ALGEBRA I

Honors

This course meets the needs of those students who have superior mathematical capabilities, as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. It introduces the important aspects of algebra and develops an appreciation of civilization's dependence on mathematics. Topics from geometry will be introduced.

College Prep

This course meets the needs of those students who have an above average ability in mathematics as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. It introduces the important aspects of algebra and develops an appreciation of civilization's dependence on mathematics.

Academic

This course meets the needs of those students who have an average ability in mathematics, as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. The students will receive a firm mathematical foundation, which will significantly contribute to their ability to function effectively in a technical environment.

ALGEBRA II

Honors

This course builds on the foundation laid in Honors Algebra I, providing a continuation in quadratics, complex numbers, and simultaneous equations. Students will study conic sections, probability, matrices, and the fundamentals of plane and solid geometry.

College Prep

An intermediate course for those students with above average abilities in mathematics who are preparing for college. The course continues where Algebra I finishes and introduces quadratics, complex numbers, simultaneous equations, the parabola, circle, ellipse, and hyperbola. Stress is placed on solving word problems.

Academic

This course prepares students for college who have average abilities in mathematics. It reviews and strengthens the concepts treated in Algebra 1, especially equations of first and second degree. Irrational numbers and the quadratic formula are introduced. Stress is placed on applying algebraic equations to everyday life.

GEOMETRY

Honors

For students with advanced mathematical capabilities, this course covers terminology, construction, and reasoning, as well as distance, area, volume, congruence, and similarity. Solid geometry, coordinate, and space geometry are treated. Critical thinking is an integral part of the course.

College Prep

Terminology, construction, and reasoning are used with triangles and circles. Congruence, similarity, area, and volume are stressed. Proofs are introduced. Solid geometry is treated. Critical thinking is a very important part of this course.

Academic

This course provides a useful mathematical foundation for those whose plans include attendance at a business school or in a program of a technical nature. Generally, content is comparable to that of the higher tracks, but the material is presented in a manner that allows the student to learn at his own pace. Greater effort is placed in practice and reinforcement of important concepts; remediation is used as needed.

PRE-CALCULUS

Honors

This course prepares the students for the rigors of AP Calculus senior year. The properties of trigonometric functions and their graphs, trigonometric identities and equations, the Laws of Sines and Cosines, and vector applications are covered along with the properties of exponential and logarithmic functions, the straight line and conic functions. *Please note that a T.I Graphic Calculator is required.*

College Prep

This course T.I. prepares the students for the rigors of Calculus senior year. The properties of trigonometric functions and their graphs, trigonometric identities and equations, the Laws of Sines and Cosines, and vector applications are covered along with the properties of exponential and logarithmic functions, the straight line and conic functions. *Please note that a T.I. Graphic Calculator is required.*

CALCULUS

Advanced Placement

AP Calculus deals with the differentiation and integration of the algebraic, trigonometric and other transcendental functions and their applications, including curve sketching, optimization problems areas, volumes, and related rates. All students will be required to take and pay for the Advanced Placement Examination. *Please note that a T.I Graphic Calculator is required.*

Honors

This course deals with the differentiation and integration of the algebraic, trigonometric and other transcendental functions and their applications, including curve sketching, optimization problems areas, volumes, and related rates. *Please note that a T.I Graphic Calculator is required.*

TRIGONOMETRY

Academic

This course is designed to provide the students with the basic understanding of trigonometric functions and their applications. The students will study relations, functions, graphs, trigonometry, polar coordinates, complex numbers, limits, and derivatives. The student will analyze and graph mathematical functions.

STATISTICS

Honors

In this course, students will be introduced to the major concepts of probability, interpretation of data, and statistical problem solving. Students will analyze existing data as well as data collected through a survey, observational study or experiment. They will then display the data in different ways, analyze it, and draw conclusions based on the results.

SCIENCE

Physics First

College Prep, Academic

This course provides an investigative approach to the basic concepts of physics. Topics include the metric system, the laws of motion and factors affecting motion, forces, use of forces, simple machines, the nature of matter, electricity and magnetism, simple circuits, energy, the ecology of energy, sound, light, lenses and mirrors, and research on current events in science. Many topics require use of simple algebra and a simple calculator. Lab investigations and demonstrations are included to provide hands-on experience for increased understanding of the various concepts. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

Biology

Advanced Placement

This advanced placement course is designed for honors juniors and seniors and aims to provide the students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Emphasis is on developing and understanding of concept, which requires the application of the chemistry and physics principles in the area of biology. Students will develop analytical and critical thinking skills. Students will grasp science as a process rather than an accumulation of facts. All students are required to take and pay for the Advanced Placement Examination.

Honors

This course offers a comprehensive investigation of living systems. It emphasizes both, the similarities and the uniqueness of living things as well as the social implications of modern biology, microbiology, molecular biology, heredity, and genetics. There will be more stress placed upon the biochemistry of living systems such as ecology, ecosystems, evolution zoology, botany and human biology. This course will also develop general scientific principles through laboratory

investigations, which are an integral part of this course. The students will be required to read and follow lab procedures, as well as write comprehensive laboratory reports.

College Prep, Academic

This course provides a view of the world of living things, emphasizing the social implications of biology and the appreciation of life. Topics include cellular biology and genetics, ecology and evolution. There is less stress placed upon the chemistry of living systems and more direction given toward the development of general biochemical concepts. Students will be required to read and follow lab procedures, as well as to write comprehensive lab reports.

CHEMISTRY

Honors

The course provides a survey of various fields of chemistry, developing a solid foundation of fundamental laws and principles through a problem-solving approach. Topics include a general background and history of chemistry, the mathematics and language of chemistry, chemical kinetics, atomic and molecular structure, periodic law and its application, properties of gases, and the universal gas law. The students are required to write comprehensive laboratory reports. A scientific calculator is required. Note that merely signing up for the course does not guarantee acceptance.

College Prep, Academic

This course is focused on the study and investigation of the structure of matter. Thus, the course begins with the study of matter in terms of composition, classification, chemical reactions, the Periodic Table and periodic properties. The course will also include the mole concept, stoichiometry, oxidation-reduction and the gas laws. Laboratory investigations are offered to enhance the different concepts taught in chemistry by providing students with the opportunity to discover, to analyze problems, and to use different forms of laboratory techniques. The students are required to write comprehensive laboratory reports

and a scientific calculator is required. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

PHYSICS

Advanced Placement

AP Physics I is an algebra-based, introductory college-level Physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum. All students are required to take and pay for the Advanced Placement Examination.

Honors

This is an intense course that offers a highly mathematical approach to the principles of physics. Trigonometry and algebra are used extensively for problem solving physics problem topics including Newtonian mechanics, wave energy, optics, thermal energy, electricity, magnetism and simple circuits. Regular research is required on recent and current events in physics. One major project with comprehensive research and visual aids is required each semester. Frequent laboratory investigations and classroom demonstrations enhance the understanding of concepts. Students maintain lab manuals and periodically write/type formal lab reports. Extensive use of computer based research, calculator based experiments, and PowerPoint presentations fill out the course. *Scientific calculators or apps are required for the course.*

College Prep

This course offers a less mathematical approach to the principles of physics. Trigonometry and algebra are used less extensively for problem solving physics problem topics including Newtonian mechanics, wave energy, optics, thermal energy, electricity, magnetism and simple circuits. Regular research is required on recent and current events in physics. One major project with comprehensive research and visual aids is required each semester. Frequent laboratory investigations and classroom demonstrations enhance the understanding of concepts. Students maintain lab manuals and periodically write/type formal lab

reports. Some use of computer based research, calculator based experiments, and PowerPoint presentations fill out the course. Scientific calculators or apps are required for the course.

ENVIRONMENTAL SCIENCE

College Prep

This course will expand on the scientific knowledge learned in the previous science courses and integrate scientific concepts with current environmental issues and concerns. Students will become scientifically literate, informed citizens, and ethical caretakers of the environment. The course will include environmental problems affecting water systems, the atmosphere, and natural phenomenon. Energy conservation will also be included. Students will be required to complete a major project each quarter.

ANATOMY & PHYSIOLOGY

Honors

This course corresponds to a college seminar class of the anatomy and physiology of the human body. Classes consist of student discussions and teacher clarification of the structures and functions of the human body from the most basic cells to the most complicated systems. Integral to the course are formal research and student presentations, which require the use of technology, such as the web, PowerPoint, and other audio-video equipment. Frequent lab investigations and dissections enhance student understanding. All labs require formal write-ups in a lab manual. Occasional field trips round off the course.

Astronomy

Honors, College Prep

The course is a general introduction to the part of contemporary astronomy. The course gives special attention to the exciting discoveries of the past few years. Topics include the planets, the Sun, concepts of time and scale, asteroids,

meteors and comets, the Apollo missions, the Hubble Space Telescope, past and present astronomers as well as current events. Documentary films and online discussions are utilized as well. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

Introduction to Engineering

Honors

This course is provided for upperclassmen pursuing a future in an engineering field. Students will learn about different engineering fields including mechanical, civil, electrical, and technology and how they connect and work together. Topics also include the history of engineering in Philadelphia. Students hear lectures from a military engineering college professor in a video lecture series. Half of the course includes hands on practice with 3D computer aided design software, SOLIDWORKS. Writing assignments and mechanics of equilibrium are an intense part of this course. Several field trips are planned for the students to connect to engineering outside the classroom.

SOCIAL STUDIES

WORLD HISTORY

Honors

This course is designed for the outstanding and highly motivated student. A history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space and disciplines and which promote the use of critical historical, global, and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth.

College Prep

This course is designed for the motivated college-bound student. A history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space and disciplines and which promote the use of critical historical, global, and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth.

Academic

This college preparatory course provides a history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space and disciplines and which promote the use of critical historical, global, and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth.

AMERICAN GOVERNMENT AND POLITICS

Honors

Designed for the outstanding and highly motivated student, this course is a comprehensive examination of the supreme and fundamental characteristics of the American Governmental system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civic, economic, and historical literacy skills to explore global patterns of change over time.

College Prep

This course is designed for the motivated college-bound student. This course is a comprehensive examination of the supreme and fundamental characteristics of the American Governmental system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civic, economic, and historical literacy skills to explore global patterns of change over time.

Academic

This course is a comprehensive examination of the supreme and fundamental characteristics of the American Governmental system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civic, economic, and historical literacy skills to explore global patterns of change over time.

UNITED STATES HISTORY

Advanced Placement

Designed for the outstanding, highly motivated, student, this course is a survey of political, economic, and social history of the United States from a European colony into a present day superpower. The material is presented at an accelerated pace, emphasizing critical thinking and writing skills necessary for completion of the national Advanced Placement test. Emphasis will be placed on independent reading and research skills necessary for college social studies

course work. All students are required to take and pay for the U.S. History Advanced Placement Exam.

Honors

Designed for the outstanding student, this course is a survey of the political, economic, and social history of the United States from the early days of colonization through the Civil War era, ending with the events of the late 1990's. The course encourages critical thinking, discussion, and student research. America's role in developing a global society is presented through the use of newspapers, magazines, films and text in an effort to promote a common appreciation of diverse opinions and a deep respect for cultural diversity.

College Prep

This course is a college preparatory social history survey of the United States from colonial days to the present. Reading, writing, and thinking skills are incorporated into the lessons in an effort to promote a common appreciation of diverse opinions and a deep understanding of America's role in the world community. An integrated use of technology is used incorporating Internet and Database research.

Academic

A survey study of American History for the college bound student, from colonial times to the present. This course highlights various political and social events of our nation. Geography, reading, and critical thinking skills are incorporated into the lessons in an effort to promote a common appreciation of diverse opinions. Various instructional methods are used in this course, including creative group role-play.

Comparative Government and Economics

Advanced Placement

The AP course in Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to

explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Comparison assists both in identifying problems and in analyzing policymaking. All students are required to take the Comparative Government Advanced Placement Exam.

Honors

This reading and writing intensive course would build upon the students' knowledge from the freshman and sophomore years. It would take their understanding of the global community and enable them to see how political structures influence international relations, economic and global policies; as well as the events in the 21st century world driving those systems. Understanding the political and economic positions of major countries throughout the world will provide students with the critical information they need to deliberate and make vital decisions regarding public affairs.

College Prep

This course would build upon the students' knowledge from the freshman and sophomore years. It would take their understanding of the global community and enable them to see how political structures influence international relations, economic and global policies; as well as the events in the 21st century world driving those systems. Understanding the political and economic positions of major countries throughout the world will provide students with the critical information they need to deliberate and make vital decisions regarding public affairs.

PSYCHOLOGY

Advanced Placement

This course is designed to introduce students to the systematic and scientific behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. Within the course a special focus will be given to the following topics: History and Research Methods, Physiological Psychology, Sensation, Perception, Memory, Learning, Stress & Health, Cognition,

Intelligence, Personality, Mental illness, Treatment Methods, Emotion/Motivation, and Social Psychology. Emphasis will be placed on independent reading and research skills necessary for college level social science work. All students are required to take and pay for the AP Psychology Examination.

Honors

This reading and writing intensive course is designed to introduce the study of psychology. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. Methods which psychologists employ in their science and practice are also explored. Within the course a special focus will be given to the following topics: History and Research Methods, Physiological Psychology, Sensation, Perception, Memory, Learning, Stress & Health, Cognition, Intelligence, Personality, Mental illness, Treatment Methods, Emotion/Motivation, and Social Psychology.

College Prep

This course is designed to introduce the study of psychology. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. Methods which psychologists employ in their science and practice are also explored. Within the course a special focus will be given to the following topics: History and Research Methods, Physiological Psychology, Sensation, Perception, Memory, Learning, Stress & Health, Cognition, Intelligence, Personality, Mental illness, Treatment Methods, Emotion/Motivation, and Social Psychology.

THEOLOGY

THEOLOGY I

Honors, College Prep

1st Semester - The Revelation of Jesus Christ in Scripture: This course gives students a general knowledge and appreciation of the Sacred Scriptures. Through the study of the Bible they will come to encounter the Living word of God, Jesus Christ. Students will learn about the Bible, its development and content, and how God is its author. Particular attention will be focused on the gospels, where students may grow to know and love Jesus Christ more personally.

2nd Semester - Who is Jesus Christ: This course introduces students to the mystery of Jesus Christ, the living Word of God. Students will understand that Jesus, the Second Person of the Blessed Trinity, is the ultimate Revelation about God, from God.

Required is 20 hours of Christian Community Service.

THEOLOGY II

Honors, College Prep

1st Semester - The Mission of Jesus Christ (The Paschal Mysteries): This course helps students understand all that God has done for humanity through his son, Jesus Christ. God has planned, from all eternity, for human beings to share everlasting happiness with him. This is accomplished only through redemption in Christ.

2nd Semester - Jesus Christ's Mission Continues in the Church: This course helps students understand that they encounter the Living Jesus Christ in and through the Church. The Church was founded by Christ through the Apostles. It is sustained by him through the Holy Spirit. The Church is the living Body of Christ.

Required is 20 hours of Christian Community Service.

THEOLOGY III

Honors, College Prep

1st Semester -Catholic Morality: This course is intended to present morality as a personal response to almighty God. It explores conscience, laws, and decision-making skills based on the Commandments, corporal and spiritual works of mercy, and the beatitudes, in order to serve as a guide for the formation of Catholic morality. Its purpose is to instill in the student confidence in his ability to make correct moral Catholic choices.

2nd Semester - Sacraments as Privileged Encounters with Jesus Christ The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

Required is 20 hours of Christian Community Service.

THEOLOGY IV

Honors, College Prep

The course outline presents a development of the Church through its 2000-year history focusing on the people of God who make up the Church. It, then, challenges the student to take an active role in the Church community through the living out of a personal vocation of service to God and the Church. This course was purposely developed as a challenge for the teacher and students through the study of these people to recognize the contemporary personalities and issues of importance in Church life today. A personal vocation in the church as single, lay, religious or cleric only makes sense in the context of the long tradition we share. Active participation by the students in the Church is to be the end result of this yearlong course.

Required is 20 hours of Christian Community Service.

WORLD LANGUAGES

SPANISH I

College Prep

Spanish I is an introductory course in the fundamentals of the Spanish language and culture with emphasis on developing the ability to read, speak, write and understand the Spanish language. The student is also exposed to an overview of Spanish culture through films, music and current events.

SPANISH II

College Prep

Spanish II provides a systematic review and expansion of Spanish grammar and vocabulary as well as the student's written and oral proficiency in the subject. The previous exposure to Spanish and Latino culture is enhanced through individual and group research and projects.

SPANISH III

Honors

Those students who possess a better than average aptitude and attitude towards Spanish are invited to continue their course of study in Spanish III, which exposes the student to advanced grammatical concepts and more intensive exposure to spoken and written Spanish, especially with respect to practical situations and daily conversation. The course also begins to familiarize the student with Spanish literature and poetry.

SPANISH IV

Honors

The course is designed for those serious students who have above average competency in the basic skill areas as well as a genuine appreciation for the language and culture. Emphasis is given to the refining of grammatical structures, writing, reading, and conversation skills as well as to further development of

studies in literature, history, civilization and art. Stress is placed on the application of acquired skills especially communication skills.

Spanish IV: Medical/Business

Honors

The course is intended for those students who are serious about learning Spanish and who are interested in entering the health care and/or business fields. The course is designed to teach students vocabulary and basic sentence structures in order to enable them to develop their own dialogue as it relates to these fields. Students will also learn about cultural similarities and differences of Spanish speaking individuals.

FRENCH I

College Prep

This basic introductory course with a proficiency approach aims to give the student the ability to speak and understand the language through tapes and dialogues between students and the knowledge of fundamental grammar. Stories, filmstrips, movies and songs acquaint the student with the historical and cultural background of French culture.

FRENCH II

College Prep

This course offers a continuance of the approach offered in French I. The basic fundamental concepts of French I are expanded. More emphasis is placed on grammatical and reading skills with further development of vocabulary.

FRENCH III

Honors

This course continues to develop basic language skills by providing expanded practice in the target language and using important grammar

structures in reading and writing. The curriculum is expanded to include the history, civilization, and French literature.

FRENCH IV

Honors

In this course, the advancement of basic skills is made to develop fluency. An exposure to varied literacy forms is broadened. Application and review of acquired skills is stressed.

ITALIAN I

College Prep

Italian I is an introductory course designed to expose the students to the fundamentals of the Italian language and to the history, art, literature, music and the contemporary life of the Italian people. The emphasis of the course is on enabling the students to acquire the necessary skills to speak, write, read proficiently, and understand the Italian language at its basic level.

ITALIAN II

College Prep

The second year of Italian focuses on the review and expansion of Italian grammar and vocabulary as well as the written and oral proficiency of the language. Emphasis is placed, also, on exposing the students to Italian art, history, literature and culture.

ITALIAN III

Honors

The third level of Italian focuses on the expansion and refinement of all language skills. The course will introduce the student to Italian literature, history and art. Particular emphasis will be placed on communicative skills.

ITALIAN IV

Honors

This course is offered to those students who possess a genuine interest in learning the Italian language and culture and who have demonstrated to possess a better than average aptitude and attitude toward Italian. This course is intended to further enhance all the basic skills and to continue to expose students to Italian literature, history and culture. Major emphasis is placed on developing communicative skills.

LATIN I

Honors

An intensive course in which students learn to appreciate the importance of Latin to the study of English and to Romance Languages. The course, through its concentration on vocabulary, structure and syntax, helps the development of memory, logical thinking and academic discipline. An appreciation of Roman History and culture is taught through translation and research.

MANDARIN CHINESE I

Honors

Using an audio-lingual approach, this course teaches pronunciation, vocabulary, and grammar fundamentals as essential elements in reading, writing, and understanding elementary Chinese. The course also covers necessary culture, customs, philosophy, and history which serve as keys to studying the Chinese language.

MANDARIN CHINESE II

Honors

This course is a continuation of Chinese 1 and covers the elementary grammar. It includes the reading of simplified texts with emphasis on oral expression and further study of Chinese history and culture.

Ancient Greek

Honors

This is a beginning course for students who have not studied ancient Greek before or whose background in Greek is not sufficient for more advanced work. Students proceed through a study of grammar and vocabulary to the reading and writing of sentences and short narratives in the language of Athens of the fifth century B.C.E. Selected topics in Greek history and art are also considered.