

APPENDIX A

2022-2023

COURSE CATALOG (REVISED FEBRUARY 2022)

GRADES 8-12

Business

Philosophy

The business curriculum, designed to meet the diversified needs of all students, develops students' ability to identify, analyze and solve a range of basic and complex business issues. The breadth of courses offered also invites our students to not only explore our business class offerings but also provides the student the necessary familiarity for those who are looking to major in business during college.

Business Department Faculty:

Mr. Brian Carlson, Department Chair

Mr. Brian Corcoran

Mr. Cole Farrand

Mr. Matthew Fowler

Mrs. Grace Halevy

BUS 101 Introduction to Business

This introductory course is designed to promote student investigation of basic business principles that can be used in future coursework and in life. Topics will include entrepreneurship, marketing, economics and accounting. This course will provide a solid foundation for students who may wish to pursue other business courses throughout high school and beyond.

Credit: 5

Quality Point Group: I

Open to Grades: 8, 9

Prerequisite: None

BUS 304 Introduction to Economics and Business Law

Designed for students who plan to study business in college, this course provides a basic understanding of economic principles and theories and introduces students to the role government plays in the economy as well as laws governing business formation and transactions.

Topics include Introduction to Economics, Global Trade, United States Economy, Business Cycles, Fiscal Policy, Monetary Policy, Government Regulatory agencies, World Trade Organization, Legal Contracts, International Law, and Consumer Law.

Credit: 5

Quality Point Group: I

Open to Grades: 9, 10, 11, 12

Prerequisite: *9th graders only must have successfully completed Introduction to Business during 8th grade.

BUS 305 Retail and Fashion Marketing

During the first semester, all students will take Intro to Marketing, where they will examine both traditional and online marketing strategies. Students will also focus on analyzing and creating advertising materials, including branding, logo design, and advertising techniques. During the second semester, students will use the strategies and techniques learned in the first semester, and apply them to the specific concentration which they have selected. This course is designed to provide a basic understanding of marketing principles and how they work in the context of the fashion industry. Topics will include: Target markets, marketing research, consumer behavior, marketing mix, the history and evolution of fashion, the textile industry, color and design, fashion forecasting, wholesale markets, retail markets, branding, and distribution.

Credit: 5

Quality Point Group: I

Open to Grades: 10, 11, 12

Prerequisite: None

BUS 306 Sports and Entertainment Marketing

During the first semester, all students will take Intro to Marketing, where they will examine both traditional and online marketing strategies. Students will also focus on analyzing and creating advertising materials, including branding, logo design, and advertising techniques. During the second semester, students will use the strategies and techniques learned in the first semester, and apply them to the specific concentration which they have selected. This course is designed to provide a basic understanding of marketing principles and how they work in the context of the sports and entertainment industries. Topics will include: Target markets, marketing research, consumer behavior, marketing mix, event management, sponsorship, promotion, and endorsements.

Credit: 5

Quality Point Group: I

Open to Grades: 10, 11, 12

Prerequisite: None

BUS 307 Principles of Entrepreneurship

In this business course, students learn what it takes to be an entrepreneur while mastering the basics of planning and launching a successful business. Whether starting your own money making business or creating a non-profit to help others, this course develops the core skills needed to be successful. Students will learn how to come up with a new business idea, attract investors, market your business, manage expenses, and learn how to prepare financial statements. This course will rely on outside resources such as guest lectures and developing summer

internships for juniors and seniors.

Credit: 5

Quality Point Group: I

Open to Grades: 11-12

Prerequisite: Minimum grade of 85 in BUS 101 Introduction to Business and/or BUS 304 Economics/Business Law

BUS 312 Accounting Principles

Accounting, the language of business, is designed to provide both the college-bound and business student with a text and computer-based study of accounting concepts. All students planning to major in business, finance, accounting, or management in college are strongly advised to take Accounting Principles. Topics include the business cycle for a service business and merchandising business:

Journalizing, Ledger Posting, Cash Controls, Worksheet and Adjustments, Financial Statements, and Closing Entries. Microsoft Excel is used extensively throughout the course.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: Final grade of 85 or above in any Business Department or math class

Bus 314 Honors Economics

This class is designed for students who are looking to further their basic understanding of economic models, methodology, and economic theories. This knowledge will be applied to examine in detail current economic issues. The pedagogy for this class will be model from a freshman level college macroeconomics course.

The Council for Economic Education (CEE) has compiled a list of 51 key economic concepts common for all U.S. State requirements for high school economic classes. These key concepts will be categorized into 5 main topics.

1- Fundamental Economics

2- Macroeconomics

3-Microeconomics

4-International Economics

5- Personal Finance Economics

Credit: 5

Quality Point Group: II

Open to Grades: 11, 12

Prerequisite: Any Business Department class with a final grade of 90 or higher and a cumulative GPA of 3.2 or higher. Students with no Business Department classes must have a cumulative GPA of 3.5 or higher.

BUS 501 Advanced Placement Macroeconomics

The AP course in macroeconomics offers students a thorough understanding of economic principles that apply to an economic system as a whole. With an emphasis on the study of national income and price-level determination, the course also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. All students taking the course are required to take the Advanced Placement Macroeconomics examination that is administered at the end of the school year. *(Only offered in September of even years)*

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Minimum GPA requirement 3.50 and successful completion/concurrent enrollment in Hon. Precalculus, Calculus, or AP Calculus. Teacher recommendation.

BUS 502 Advanced Placement Microeconomics (not running 2022-2023)

The AP course in microeconomics provides students with a thorough understanding of the economic principles that apply to individual decision makers, both consumers and producers, within the larger economic system. The course primarily emphasizes the nature and functions of product markets as well as the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. All students taking the course are required to take the Advanced Placement Microeconomics examination that is administered at the end of the school year. *(Only offered in September of odd years)*

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Minimum GPA requirement 3.50 and successful completion/concurrent enrollment in Hon. Precalculus, Calculus, or AP Calculus. Teacher recommendation.

Computer Science

Philosophy

The computer science curriculum prepares students to succeed in this rapidly expanding technological society. Instruction focuses on programming, analysis, independent reasoning, and problem solving. The sequence of courses is geared toward students who are interested in pursuing a technological, STEM course of study (computer science, engineering, robotics, etc.) after high school.

Computer Science Department Faculty

Mrs. Elizabeth Buniak, Department Chair

Mr. Brian Corcoran

Mr. William Myers

CMP101 Introduction to Programming Using Visual Basic

Designed to be the first course in a sequence ending with Java, CMP101 provides students with solid problem-solving and programming skills in a clear, coherent format. Students will be introduced to object oriented programming using Microsoft programs. Topics include: fundamentals of programming, input routines, print formats, simple graphics, looping, and arrays.

Credit: 5

Quality Point Group: I

Open to Grades: 8, 9, 10, 11, 12

Prerequisite: None

CMP102 Problem Solving Logic

This course will be an overview of logic and its application in academics and everyday life, laying a foundation in recognizing, understanding, appreciating, and applying problem-solving strategies through the use of logic puzzles, mysteries, and challenges. Students will explore and develop critical thinking skills needed to succeed in their advanced studies at Pope John. Through multiple approaches and solutions students will be able to display relationships visually, symbolically, numerically and verbally. Special attention will be given to logic both symbolic and propositional, formal and informal fallacies, scientific and algebraic reasoning.

*After successfully completing this course and having had PJMS Engineering students may enroll in AP Computer Science Principles as a 9th grade student.

Credit: 5

Quality Point Group: I

Open to Grades: 8

Prerequisite: None

CMP 200 Honors Intermediate Programming - C++

The purpose of this course is to continue the content of the prerequisite course with an elaboration of C-based languages, specifically C++. Topics shall include : basic language but not limited to the fundamentals of C++, top-down program design, functions, classes, and objects. This course is designed to be the second course in a sequence ending with Java.

Credit: 5

Quality Point Group: II

Open to Grade: 9, 10, 11, 12

Prerequisite: Minimum grade of B in CMP101 Introduction to Programming or skills assessment (placement test).

CMP 312 Honors Cybersecurity

Students will learn foundational cybersecurity topics including networking fundamentals, software security, system administration and the basics of cryptography and programming. This course is designed for students with some exposure to computer science in which students will learn basic SQL and JavaScript, and will utilize basic HTML and JavaScript within specific contexts. This course prepares students with crucial skills to be responsible citizens in a digital future.

Credit: 5

Quality Point Group: II

Open to Grades: 11, 12

Prerequisite: While not required, some computer programming experience is recommended. This course would be a good fit for students who had success in AP Computer Science Principles and/or AP Computer Science A

CMP 501 Advanced Placement Computer Science A

The Advanced Placement Course in Computer Science is structured according to the guidelines of the College Board Advanced Placement Program. It is a rigorous course taught in the Java programming language. The course is intended for the mathematically able and analytical student who is able to demonstrate proficiency in the areas of problem solving, reading, writing and using math notation at the Algebra II level, and general writing skills. Students considered to take the AP course in Computer Science must be highly motivated to keep up with the fast-paced schedule of project deadlines. They must be interested in and capable of working through independent study assignments with guidance from the instructor. Topics to be covered include program design, implementation and analysis, standard data structures, standard algorithms, and computer systems.

Credit: 5

Quality Group III

Open to Grade: 10*, 11, 12

Prerequisites: Minimum grade of B+ in Honors Intermediate Programming - C++ (CMP 200) and required placement test.

CMP 502 Advanced Placement Computer Science Principles (APCSP)

The Advanced Placement Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course and is the year-two course for students working within the Interactive Design/Computer Science Track for the PJ STEM program. APCSP is organized around the investigation of seven big ideas (Creativity, Abstraction, Data and Information, Algorithms, Programming, The Internet, and Global Impact), all of which are fundamental principles essential to thrive in a variety of computing and STEM careers. It provides a pathway for becoming a well-educated and informed citizen who understands how computer science impacts people and society.

Credit: 5

Quality Group III

Open to Grade: 9*, 10, 11, 12 Minimum grade: B+ (MAT101 or SCI100), or have taken MAT102, or MAT teacher recommendation

Prerequisites: Students do not need to have prior computer science knowledge or experience. A strong foundation in basic algebraic concepts dealing with function notation and problem-solving strategies. Students should be able to use a Cartesian (x, y) coordinate system to represent points on a plane.

English

Philosophy

Critical reading, writing, and speaking skills are keys not only to academic and career achievements but also to personal fulfillment. The study of literature and rhetoric enables us to share common human experiences, to identify and empathize or challenge others' viewpoints, and to reason with a world that is not always rational.

English Department Faculty:

Mr. Brian Vohden, Department Chair

Mr. Brendan Berls

Mrs. Joyce Cluess

Ms. Cara Freda

Mrs. Jo-Ann Higgs

Mrs. Susan Haggerty

Mrs. Ronda Oosterhoff

Mrs. Katherine Stehr

ENG 8 Eighth Grade Literature

The eighth grade literature focuses on enriching students' vocabulary and sharpening their critical reading and writing skills. The course also familiarizes students with a variety of genres—including fiction, nonfiction, poetry, drama, informational text, myths, legends, and folktales—and teaches them to analyze plot, conflict, characterization, setting, mood, style, voice, and tone.

Credit: 5

Quality Group I

Open to Grades: 8

Prerequisite: None. Enrollment based on placement testing.

ENG 8H-L Honors Eighth Grade Literature

Like the regular level course, the eighth grade literature focuses on enriching students' vocabulary and sharpening their critical reading and writing skills. The course also familiarizes students with a variety of genres—including fiction, nonfiction, poetry, drama, informational text, myths, legends, and folktales—and teaches them to analyze plot, conflict, characterization, setting, mood, style, voice, and tone. At the Honors level, coursework will be supplemented with class studies of full-length novels and independent reading projects.

Credit: 5

Quality Group II

Open to Grades: 8

Prerequisite: None. Enrollment based on placement testing.

ENG 8-W Writing Skills

This course offers instruction in grammar, structure, usage, and mechanics as well as a wide variety of writing experiences, including essays, creative writing, and research. Students learn and apply the criteria for effective writing, such as clear organization, coherence, precise word choice, and sentence fluency. They also practice the writing process: prewriting, drafting, revising/editing, proofreading, publishing/presenting.

Credit: 5

Quality Group I

Open to Grades: 8

Prerequisite: Enrollment based on placement testing.

ENG 8H-W Honors Writing Skills

This course offers a variety of writing experiences at the Honors level, including essays, creative writing, and research, as well as instruction in advanced grammar, structure, usage, and mechanics. Students learn and apply the criteria for effective writing, such as clear organization, coherence, precise word choice, and sentence fluency. They also practice the writing process: prewriting, drafting, revising/editing, proofreading, publishing/presenting.

Credit: 5

Quality Group II

Open to Grades: 8

Prerequisite: Enrollment based on placement testing.

ENG 101 English I

English I pairs the study of grammar, vocabulary, composition, and public speaking with various literary genres, such as autobiographies, biographies, essays, short stories, dramas, novels, and poetry. Students also learn proper research skills, including how to effectively and accurately support an argument using secondary sources and MLA format.

Credit: 5

Quality Point Group: I

Open to Grades: 9

Prerequisite: Enrollment based on placement testing.

ENG 102 Honors English I

Honors English I is designed for students with advanced reading comprehension and writing skills. The course surveys major literary genres and requires analysis and evaluation of selected short stories, myths, poems, and Shakespeare's plays *Romeo and Juliet* and *Macbeth*. Students also study Greek and Latin vocabulary roots, public speaking, and proper research skills, including how to effectively and accurately support an argument using secondary sources and MLA format. By year's end, students should be able to write clear, effective, and structurally accurate essays.

Credit: 5

Quality Point Group: II

Open to Grades: 9

Prerequisite: Pope John 8th graders must have a 93 average in BOTH English and Writing Skills or an 85 in BOTH Honors English and Honors Writing Skills to proceed to Honors English I. Students entering Pope John as 9th graders must take a placement test.

ENG 201 English II

English II offers a survey of American literature, including autobiographies, biographies, essays, short stories, dramas, novels, and poetry. The course also reinforces proper research skills, including how to effectively and accurately support an argument using secondary sources and MLA format. Students study grammar, vocabulary, public speaking, and the fundamentals of writing clear, effective, and structurally accurate essays.

Credit: 5

Quality Point Group: I

Open to Grades: 10

Prerequisite: Final grade of 65 in English I

ENG 202 Honors English II

Honors English II offers qualified students an accelerated survey of American literature, including essays, short stories, dramas, novels, and poetry. Students will hone not only their critical reading, writing, and public speaking skills, but also their ability to effectively and accurately support an argument using secondary sources and MLA format. Honors English II stresses the development of critical thinking skills, reading comprehension and analysis, and coherent and logical expression of written and spoken ideas.

Credit: 5

Quality Point Group: II

Open to Grades: 10

Prerequisite: Final Grade of 83 in Honors English I or 93 in English I.

ENG 301 English III

English III offers a survey of British literature, including essays, short stories, dramas, novels, and poetry. Students also study grammar, vocabulary, public speaking, and the fundamentals of writing clear, effective, and structurally accurate essays. The course reinforces proper research skills, including how to effectively and accurately support an argument using secondary sources and MLA format.

Credit: 5

Quality Point Group: I

Open to Grades: 11

Prerequisite: Final grade of 65 in English II.

ENG 401 English IV

English IV offers an overview of World Literature, often pairing an ancient text from a particular

region with a modern one, for example the Persian epic *The Shahname* with *The Kite Runner*. Works studied include essays, short stories, dramas, novels, and poetry from ancient to modern times. Students also study grammar, vocabulary, public speaking, and the fundamentals of writing clear, effective, and structurally accurate essays. The course reinforces proper research skills, including how to effectively and accurately support an argument using secondary sources and MLA format.

Credit: 5

Quality Point Group: I

Open to Grades: 12

Prerequisite: Final grade of 65 in English III.

ENG 410 Journalism

This course focuses on journalism, graphic design, photography, editing, and marketing skills. Students will produce the Pope John yearbook as well as online journalism content.

Credit: 5

Quality Point Group: I

Open to Grades: 10,11,12

Prerequisite: 85 or above in prior English class and a writing sample.

ENG 412 Honors Great Books: Learning and Education

Only offered in September of even numbered years

This course offers students the opportunity to combine critical reading of texts and critical self-reflection of students' own experiences and prior knowledge to answer the questions "What is learning?", "What is education?", and "What is knowledge?". Students will draw upon selections from the so-called "Great Books" of Western thought, namely works by St. Augustine, John Locke, George Berkely, and John Dewey, to actively interrogate their own understanding of what it means to learn and teach. Further, students will push the boundaries of what we consider to be "texts," and are encouraged to analyze modern forms of discourse and communication, like sitcoms, podcasts and popular music, in order to unpack diverse pedagogical and epistemological theories. Great Books is a seminar course, which requires students to engage in critical thought, lead class discussions, and develop convincing oral and written arguments, in order to prepare them for university-level, roundtable discussions in the tradition of a liberal arts education.

Credit: 5

Quality Point Group: II

Open to Grades: 10,11,12

Prerequisite: Incoming 10th graders: a final grade of 83 in Honors English I or 93 in English I.

Incoming 11th graders: Final grade of 83 in Honors English II or 93 in English II. Incoming 12th

graders: Final grade of 83 in AP Literature and Composition or 83 in Honors English III or 93 in English III.

ENG 413 Honors Great Books: Identity and the Self (Not offered 2022-2023)

Only offered in September of odd numbered years

This course offers students the opportunity to combine critical reading of texts and critical self-reflection of students' own experiences and prior knowledge to answer the questions "What is the self?", "How can we know we exist?", and "What is identity?". Students will draw upon selections from the so-called "Great Books" of Western thought, namely works by Plato, Aristotle, René Descartes, Sigmund Freud, and Jean-Paul Sartre, to actively interrogate their own understanding of what it means to be and exist in the world. Further, students will push the boundaries of what we consider to be "texts," and are encouraged to analyze modern forms of discourse and communication, like sitcoms, podcasts and popular music, in order to unpack diverse philosophical and existential theories. Great Books is a seminar course, which requires students to engage in critical thought, lead class discussions, and develop convincing oral and written arguments, in order to prepare them for university-level, roundtable discussions in the tradition of a liberal arts education.

Credit: 5

Quality Point Group: II

Open to Grades: 10,11,12

Prerequisite: Incoming 10th graders: a final grade of 83 in Honors English I or 93 in English I.

Incoming 11th graders: Final grade of 83 in Honors English II or 93 in English II. Incoming 12th graders: Final grade of 83 in AP Literature and Composition or 83 in Honors English III or 93 in English III.

ENG 501-11 Advanced Placement English Literature and Composition

This course is designed according to the guidelines of the Advanced Placement Program of the College Board. At the conclusion of the course, all students sit for the Advanced Placement examination in English Literature and Composition. A course in literary interpretation, AP Literature and Composition offers an intense study of the various genres in literature: poetry, drama, the short story, the novel and the essay. Through critical essays and class discussion, students consider the work's structure, style, theme(s) as well as the use of figurative language, imagery, symbolism and tone.

Credit: 5

Quality Point Group: III

Open to Grade: 11

Prerequisite: Final grade of 87 in Honors English II or 97 in English II.

ENG 502-12 Advanced Placement English Language and Composition

The AP English Language and Composition course teaches students to recognize and analyze a variety of rhetorical contexts and to write skillfully for multiple purposes and audiences. At the conclusion of the course, all students sit for the Advanced Placement Test in English Language and Composition. The course emphasizes the expository, analytical, and argumentative writing practiced by academics and other professionals as well as personal and reflective writing. Students will read primary and secondary sources carefully, synthesize materials from these texts in their own compositions, and cite sources using the Modern Language Association (MLA) conventions.

Credit: 5

Quality Point Group: III

Open to Grade: 12

Prerequisite: Final grade of 83 in AP Literature and Composition or 97 in English III.

Fine and Performing Arts

Philosophy

Art and music are vital factors in the development of the whole child; not only are they stimulating and fulfilling disciplines, but research confirms that performing, creating, and responding to both visual art and music strengthen students' problem-solving and critical thinking skills, thereby enhancing academic achievement and cultural literacy.

Fine and Performing Arts Faculty:

Mrs. Susan Elvena, Department Chair

Mr. Chris Arnold

Mrs. Catherine Kiff-Vozza

Mrs. Karen Scott

Mr. Frank Setlock

FNA 101 Introduction to Art

Using pen and ink, charcoal, pencil, wax and paint, students are taught the fundamentals of visual arts principles, including proportion, shading, perspective and design. Lectures and audiovisual presentations on art appreciation and history complement the classroom projects.

Credit: 5

Quality Point Group: I

Open to Grades: 8-9

Prerequisite: None

FNA 102 Introduction to Band

This class offers the Band experience at the beginning level. No prior experience is necessary – only the desire to play a musical instrument. The instruments taught in this course are flute, clarinet, saxophone, trumpet, French horn, trombone and percussion. Some instruments are available through the school, but students are welcome to use their own or rent an instrument. The course will introduce musical topics such as reading rhythms and notes, understanding notation and learning to perform Concert Band music with other students. No audition is required for placement in Intro to Band - all that is necessary is the desire and motivation to study a musical instrument!

Credit: 5

Quality Point Group: I

Open to Grades: 8-12

Prerequisite: None

FNA 201 Art I

Designed for the student who has basic art skills and aptitude, Art I is a first year painting and drawing course. The first half of the course refines students' drawing skills in pencil, charcoal, pastels, pen and ink, and design; during the second half, students analyze the use of color and learn basic techniques in acrylic and water-based painting. Lessons in art history and appreciation complement classroom projects.

Credit: 5

Quality Point Group: I

Open to Grades: 9-12

Prerequisite: Previous art experience and permission of the instructor.

FNA 202 Mixed Chorus

A practical course in choral singing, Mixed Chorus welcomes students who are unsure of their vocal abilities but willing to try. The primary aim is developing the student's voice as naturally and artistically as possible. Students will not only learn good vocal techniques (posture, breath control, diction), but also how to read choral music and appreciate its history and quality. Chorus members will participate in many of the school activities, such as liturgies, concerts, and school assemblies.

Credit: 5

Quality Point Group: I

Open to Grades: 8-12

Prerequisite: None

FNA 213 Honors Concert Band

The Honors Concert Band is a Music Performance-based class open to all grade levels. The musical repertoire for this class offers great variety and challenges in musical performance through standard and contemporary Concert Band literature as well as transcriptions and arrangements. Class activities emphasize the development of instrument technique, tone production, tuning, fundamentals of music theory, music reading, and listening skills. In addition to daily ensemble performance, students have the opportunity to receive small group instruction. The Concert Band performs at various concerts, contests and festivals annually.

Credit: 5

Quality Point Group: II

Open to Grades: 8-12

Prerequisite: Previous experience and teacher recommendation required

FNA 204 Music Appreciation and Theory

Music shapes and is shaped by our lives. This course is about listening, appreciating and understanding music on every level. We will explore the aesthetic and historical perspective of music, covering a variety of styles from past to present. In order to enhance understanding, essential aspects of melody, harmony, rhythm and form will be studied as well as basic notation, scales, key signatures, intervals, and harmonies. We will also work on song-writing and the elements of writing your next big hit. This course is highly recommended for students with any

interest in how music works.

Credit: 5

Quality Point Group: I

Open to Grades: 9-12

Prerequisite: Experience in music performance at the individual or ensemble level.

FNA 205 String Ensemble

The String Ensemble is offered to all students from 8th to 12th grade with prior experience on a stringed instrument (violin, viola, cello, bass). Educational emphasis is placed on the advancement of instrumental technique, further development of Music reading and comprehension skills, independent musicianship, style, and a deeper understanding of small group ensemble music and orchestral literature. Literature will comprise both Classical and Popular Music. Students will have the opportunity to perform in small group ensemble projects as well as full ensemble performances.

Credit: 5

Quality Point Group: I

Open to Grades: 8-12

Prerequisite: Prior stringed instrument experience

FNA 301 Art II

Art II is designed as a second year drawing and painting course. The first semester is devoted to drawing skills and the second semester to painting. The course aims to refine the student's skills and encourage the development of his/her personal style in drawing (pastels, pencil, charcoal, pen and ink, colored pencil) and in painting (oils, watercolors, and acrylics). In the painting component of the course, students learn canvas stretching and investigate color and composition theory, modeling form, and use of light. Only original works are accepted: the emphasis is on "performance." Audio-visual presentations, lectures, and field trips on art history and appreciation complement classroom projects.

Credit: 5

Quality Point Group: I

Open to Grades: 10,11,12

Prerequisite: Completion of previous course in Art sequence or demonstration of competency.

FNA 302 Honors Concert Chorus

Concert Chorus is a vocal performance class designed for those with a serious interest in singing various choral genres. Students are instructed in performance techniques and will sing for liturgies, school concerts, and assemblies. This course is open to all students in grades 9-12, but admission to this class requires an audition.

Credit: 5

Quality Point Group: II

Open to Grades: 9, 10,11,12

Prerequisite: Audition required and permission of the instructor.

FNA 303 Honors Jazz Ensemble

The Honors Jazz Ensemble is designed for students who are interested in the performance and mastery of literature written for Jazz Band. Offered to advanced instrumental students. All students must be recommended by the director for admission into this course. Emphasis is on advanced instrumental techniques, performance of jazz music for the ensemble, sight-reading, improvisation theory and technique and preparation for regional and college auditions. The ensemble studies a wide range of popular music genres; from Swing Era to Latin, Rock, and Funk. Performances at concerts, competitions, and festivals are requirements of this course.

Credit: 5

Quality Point Group: II

Open to Grades: 9,10,11,12

Prerequisite: Audition Required

FNA 400 Honors Women's Chorus

Women's Choir is a select, auditioned choir that requires advanced performances for treble voices. These young women are expected to perform four part treble harmonies, such as SSAA music, and to lead the liturgical music for the Pope John monthly Masses. The women's choir will also perform for community service events and for the Pope John winter and spring concerts.

Credit: 5

Quality Point Group: II

Open to Grades: 10,11,12

Prerequisite: Audition required and permission of the instructor.

FNA 401 Honors Art

The student in Honors Art concentrates on building a portfolio and exploring career opportunities in art. Honors Art is a performance course that helps the student refine his/her skills in the areas of design, composition, drawing, painting, sculpture, and computer graphics. Only original works that complete the student's portfolio over the course of the year are accepted. Audio-visual presentations and lectures on art history and appreciation complement studio projects. The Art and Guidance departments cooperate to ensure that each student is informed of career and educational opportunities in the art field. Student activities include attending open houses and other art events at colleges and universities, visiting museums and craft shows, and presenting their works in exhibitions and arts festivals.

Credit: 5

Quality Point Group: II

Open to Grades: 11-12

Prerequisite: Completion of previous course in Art sequence or demonstration of competency

and instructor permission.

FNA 402 Honors Select Chorus

This course is recommended for those students considering a career in music and/or those interested in singing at the university level. Students will perform college level music based on the madrigal choir curriculum of both Westminster Choir College and St. Olaf's College. With an emphasis on proper vocal technique and production, the course provides an in depth study of various musical styles from the Renaissance through contemporary musical theater. As musical ambassadors, the Select Chorus will perform for school concerts, liturgies, assemblies and many community venues.

Credit: 5

Quality Point Group: II

Open to Grades: 9,10,11,12

Prerequisite: Audition required and permission of the instructor

FNA 403 Graphic Design

Graphic Design is an introductory course for students interested in exploring visual arts on the computer. The course focuses on learning basic design theories while creating several "real world" projects, including business cards, logos, promotional and marketing materials, as well as original digital illustrations using Adobe Illustrator CC. Students use Adobe Photoshop CC software to digitally manipulate photographs and images. All work culminates in a Capstone project in the 4th marking period where students will demonstrate their ability to create an advertising campaign in both Adobe programs.

Credit: 5

Quality Point Group: I

Open to Grades: 9-12

Prerequisite: None

FNA 406 Graphic Design II

In Graphic Design II students will learn to be productive, solve problems, develop original ideas, organize thoughts, budget time, and be successful. Each student will learn about digital media literacy and become effective producers of digital media. Students will implement twenty-first century skills and practices required for using technology and creating digital media. In this course students will combine concepts from Graphic Design 1 including typographic, compositional and digital imaging skills with new concepts including color psychology, to create effective visual branding. Students will apply their design skills with intention to create brand recognition, generate leads, motivate for action and drive sales. Students will continue to work with the latest industry standard software (Adobe CC Photoshop and Illustrator) to solve a variety of sophisticated graphic design problems. Projects will range from digital and social media marketing campaigns, 2D posters and prints to 3D package design and culminate with a capstone project in the fourth quarter.

Credit: 5

Quality Point Group: I

Open to Grades: 10-12

Prerequisite: Successful completion of Graphic Design I

FNA 407 Honors Art Studio

A progressive course in art sequence. Building on the techniques learned in the previous courses, students will create two and three dimensional art incorporating the elements and principles of art and design. Individuality of creativity and expression will be stressed. Emphasis is on developing skills and artistic growth.

Credit: 5

Quality Point Group: II

Open to Grades: 12

Prerequisite: Honors Art, permission of the instructor

FNA 408 Intro to Cinema & Digital Non-Linear Filmmaking

This course introduces students to digital non-linear filmmaking and to the basics of film analysis. We will explore the building blocks of cinematic production, including mise-en-scene, cinematography, sound, and editing. In addition, the class will examine formal cinematic techniques in conjunction with genre, narrative structure, storytelling, and performance. Students will develop the skills to write analytically about film as an art form while continuing to enjoy it as an entertainment medium. In digital non-linear filmmaking, students will use supplied equipment as well as their personal cameras (iPhones, iPads, or DSLR's) to create strong, visually driven short films and video exercises with an emphasis on the foundations of narrative storytelling. Using Apple's Final Cut Pro, students begin by learning the elements of digital filmmaking with video exercises that start off simply, and, with each new assignment, add a new element of filmmaking until they advance to final film projects.

Class size: Limited to 10

Credit: 5

Quality Point Group: I

Open to Grade: 12

Prerequisite: Permission of the instructor

Health/ Physical Education

Philosophy

The health and physical education curriculum at Pope John XXIII High School gives each student an opportunity to develop athletic skills and to improve and maintain his/her level of physical fitness through exercise and nutrition; the course also prepares students to operate a motor vehicle safely and to administer basic emergency first aid care.

Health/Physical Education Faculty:

Mr. Joseph Lopez, Department Chair *

Mr. Dominique Gaston

Mr. Brian Eyer**

Mr. Michael Squillante

* Red Cross Certified Instructor.

** Driver's Education Certified Instructor

HPE 8 Health/Physical Education 8

With emphasis on skills, rules, team play, and sportsmanship, the 8th grade Physical Education curriculum introduces students to a variety of physical activities and sports, including badminton, soccer, and softball. Students will have two quarters of general health instruction.

Credit: 5

Open to Grades: 8

Prerequisite: None

HPE 100 Health/Physical Education 9

The health and physical education curriculum at Pope John XXIII High School gives each student an opportunity to develop athletic skills and to improve and maintain his/her level of physical fitness through exercise and nutrition. A wide variety of team and individual games are played. The course also prepares students to safely operate a motor vehicle and to administer basic emergency first aid care, CPR, and AED. Various health topics such as nutrition, anatomy, and cardiopulmonary lessons are included in the curriculum.

Credit: 5

Quality Point Group: I

Open to Grades: 9

Prerequisite: None

HPE 200 Health/Physical Education 10

The health and physical education curriculum at Pope John XXIII High School gives each student an opportunity to develop athletic skills and to improve and maintain his/her level of physical fitness through exercise and nutrition. A wide variety of team and individual games are played. The course also prepares students to safely operate a motor vehicle and to administer basic emergency first aid care, CPR, and AED. Various health topics such as nutrition, anatomy, and cardiopulmonary lessons are included in the curriculum. Driver's Education will be taught in 10th grade.

Credit: 5

Quality Point Group: I

Open to Grades: 10

Prerequisite: HPE 100

HPE 300/400 Health/Physical Education 11/12

The health and physical education curriculum at Pope John XXIII High School gives each student an opportunity to develop athletic skills and to improve and maintain his/her level of physical fitness through exercise and nutrition. A wide variety of team and individual games are played. The course also prepares students to safely operate a motor vehicle and to administer basic emergency first aid care, CPR, and AED. Various health topics such as nutrition, anatomy, and cardiopulmonary lessons are included in the curriculum.

Note: ONLY Juniors and seniors with a minimum CUMULATIVE GPA of 3.0 may opt to take a course in lieu of HPE 300/400.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: HPE 200

HPE 305 Strength Training

This full year course is designed for athletes and non-athletes who would like to use the Paternostro training center during the school day. This class will include strength training, cardio, speed, and agility work with a focus on improving athletic performance and/or physical fitness. Individual programs will be adjusted for in-season, out of season, and multi-sport athletes.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: None

Mathematics

Philosophy

The Mathematics Department of Pope John XXIII High School offers a flexible curriculum to meet the needs of a diverse student body. Each student advances according to his/her goals and demonstrated ability. Emphasis on the five general goals of the National Council of Teachers of Mathematics encourages students to value mathematics, grow confident in their ability to solve problems, and learn to communicate and reason mathematically.

Mathematics Department Faculty:

Mr. Joseph Giovannone, Department Chair

Mr. Brian Corcoran

Dr. Thomas Kane

Mrs. Donna Keller

Mrs. Margaret Maneri

Mrs. Jessica Rosario

Mr. Bruce Shuert

NOTE: The prime criterion for placement in the 8th grade courses Honors Algebra I (MAT802), Algebra I/Accelerated (MAT801), and Pre-Algebra (MAT800) is performance on the Pope John Math Placement Test for 8th Graders. Other criteria (when available) will include performance in 7th grade, 7th grade teacher recommendations, and standardized test scores.

MAT 800 Pre-Algebra (8TH Grade)

A full-year course that provides a transition from the arithmetic of elementary school to the algebra of high school, Pre-Algebra offers students additional time and opportunity to master basics that are critical to success in higher-level mathematics. In addition, students will learn the building blocks of algebra through topics such as solving equations, exponents, and polynomial operations.

Credit: 5

Quality Point Group: I

Open to Grades: 8

Prerequisite: See Note

MAT 100 Algebra I

Designed to ease the transition from the concrete concepts of arithmetic to the abstract concepts of algebra, this first course in Algebra focuses on fundamental mathematical skills and introductory algebraic concepts. Topics include signed integers; greatest common factor and least common multiple; fractions, decimals, and percents; linear equations; word problems; scientific notation; geometric applications; and radicals. Students earning 90 or higher in this

course can progress to Algebra I/Accelerated in their sophomore year; students earning a passing grade less than 90 will progress to Geometry.

Credit: 5

Quality Point Group: I

Open to Grades: 9, 10, 11

Prerequisite: For Pope John 8th graders, a final grade of less than 77 in 8th grade Pre-Algebra-A (MAT 800A) OR final grade of less than 90 in 8th grade Pre-Algebra-B (MAT 800B). Students entering Pope John as 9th graders must take a placement test.

MAT 101 Algebra I/Accelerated

Algebra I Accelerated is a comprehensive algebra I course. Topics are covered at an accelerated pace and include solving and graphing linear equations and inequalities, mathematical operations with exponents and polynomials, factoring polynomials, as well as graphing and understanding quadratic functions and equations. There is a strong emphasis on problem solving skills throughout the course and a unit dedicated to word problems.

Credit: 5

Quality Point Group: I

Open to Grades: 8-11

Prerequisite: For Pope John 8th graders, a final grade of 77 or better in 8th grade Pre-Algebra-A (MAT 800A) OR final grade of 90 or better in 8th grade Pre-Algebra-B (MAT 800B). Students who earn a final grade of less than 84 in 8th grade Algebra I Accelerated (MAT 801) OR a final grade of less than 77 in 8th grade Honors Algebra I (MAT802) may elect to take Accelerated Algebra I. Students entering Pope John as 9th graders must take a placement test.

MAT 102 Honors Algebra I

Designed for students whose placement exams demonstrate their superior ability in mathematics, the course covers the topics in Algebra I/Accelerated with a stronger emphasis on problem solving and critical thinking. The computational level is more demanding, and the course includes more work with applications and algebraic modeling, more challenging coverage of factoring and radicals, and a deeper exploration of quadratic functions.

Credit: 5

Quality Point Group: II

Open to Grades: 8-11

Prerequisite: For Pope John 8th graders, a final grade of 84 or better in 8th grade Algebra I/Accelerated or less than 84 in Honors Algebra I may elect to take Honors Algebra I in 9th grade. Students entering Pope John as 9th graders must take a placement test.

MAT 200 Geometry

This course in plane geometry places more emphasis on logical reasoning and critical thinking skills. Students are taught a system of geometric definitions, theorems, and postulates using algebraic principles, constructions, and other manipulative techniques. Topics include parallel

and perpendicular lines, polygons, properties of triangles and triangle congruence, coordinate plane geometry, and an introduction to right triangle trigonometry. There is a strong emphasis on the review of algebraic concepts throughout the course.

Credit: 5

Quality Point Group: I

Open to Grades: 9, 10, 11, 12

Prerequisite: Final grade of less than 90 in Algebra I OR less than 77 in Algebra I/Accelerated

MAT 201 Geometry/Accelerated

Covering all the topics of Geometry (MAT 200) but at an accelerated pace, this course in plane geometry is a deeper and more comprehensive study of the elements of analytic and solid geometry, including formal proofs, right triangle trigonometry, transformations, and geometry in a coordinate plane. Facility with a scientific calculator is necessary.

Credit: 5

Quality Point Group: I

Open to Grades: 8-12

Prerequisite: Final grade of 77 or better in Algebra I/ Accelerated (MAT 101) OR a final grade of less than 84 in Honors Algebra I (MAT 102)

MAT 202 Honors Geometry

This advanced Geometry course is designed for students who have demonstrated superior ability in mathematics, and specifically, mastery of Algebra 1. Taught in an investigative, critical thinking style, the course covers all topics in Accelerated Geometry (MAT 201) but with a strong emphasis on deductive and inductive reasoning, development of formal proofs, visualization, problem solving, and algebraic approaches to prove theorems and solve geometric problems in a coordinate plane.

Credit: 5

Quality Point Group: II

Open to Grades: 8-12

Prerequisite: Final grade of 84 or better in Honors Algebra I OR 93 or better in Algebra I/ Accelerated. For students entering Pope John as 9th graders, satisfactory performance on the Math Department Honors Geometry Placement.

MAT 300 Algebra II

Algebra II further develops the concepts taught in Algebra 1 and then advances to the study of functions, linear equations and inequalities, systems of linear equations, polynomial operations, rational expressions, irrational and complex numbers, quadratic equations, exponential and logarithmic functions, and basic probability and statistics. Additionally, some time will be devoted to SAT and ACT preparation.

Credit: 5

Quality Point Group: I

Open to Grades: 10, 11, 12

Prerequisite: Final grade of 65 or better in Geometry.

MAT 301 Algebra II/Accelerated

Algebra II/Accelerated begins with a review of the materials taught in Algebra I/Accelerated and then progresses to more advanced algebraic concepts. There is a strong emphasis on functions including quadratic, polynomial, exponential, logarithmic, rational, radical and piecewise functions as well as a unit on function transformation and probability.

Credit: 5

Quality Point Group: I

Open to Grades: 9-12

Prerequisite: Final grade of less than 84 in Honors Algebra I and Honors Geometry OR a final grade of 65 or better in Geometry/Accelerated and 77 or better in Algebra I/Accelerated.

Requirement: TI 84+ graphing calculator

MAT 302 Honors Algebra II

Designed to extend and further develop the concepts and theories introduced in Algebra I, Algebra II Accelerated places a stronger emphasis on problem solving and critical thinking. The computational level and pace is more demanding, and the course is extended to cover conics, sequences and series, and an introduction to trigonometry.

Credit: 5

Quality Point Group: II

Open to Grades: 9-12

Prerequisite: Final grade of 84 or better in Honors Geometry OR 93 or better in Algebra I Accelerated and Geometry Accelerated.

Requirement: TI-84+ graphing calculator.

NOTE: Students may elect to take both Honors Geometry and Honors Algebra II during their sophomore year. The prerequisite for this option is a minimum of 85 in Honors Algebra I. Other doubling-up combinations involving accelerated and honors Geometry and Algebra II are also available with Department Chair approval.

MAT 303 Pre-Calculus

This course in Precalculus will cover functions and their graphs, including linear, quadratic, polynomial, rational, exponential and logarithmic. It will also include an exploration of trigonometric functions and their graphs. This course is designed for students who need an introduction to precalculus topics before college.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: 70 – 79 in Algebra II/Accelerated or 90+ in Algebra II **and** Math Department Chair approval

Requirement: TI 84+ graphing calculator

MAT 305 Precalculus Accelerated

This course will cover functions, concepts of trigonometry and their application. It will also include algebraic, trigonometric, exponential and logarithmic functions. This course will emphasize through technology a comprehensive coverage of the topics of trigonometry including polar coordinates and their use in problem solving.

Credit: 5

Quality Point Group: I

Open to Grades: 10-12

Prerequisite: Final grade of less than 84 in Honors Algebra II OR 80 or better in Algebra

II/Accelerated.

Requirement: TI 84+ graphing calculator

MAT 304 Honors Precalculus

Honors Precalculus integrates the major concepts and technology required for Calculus. The curriculum covers functions, modeling change, exponential and logarithmic functions, trigonometry, combinations, and a brief introduction to Calculus.

Credit: 5

Quality Point Group: II

Open to Grades: 10-12

Prerequisite: Final grade of 84 or better in Honors Algebra II OR 93 or better in Algebra

II/Accelerated and Geometry Accelerated.

Requirement: TI 84+ graphing calculator

MAT 400 Personal Finance

Students will learn to manage personal finances and make intelligent, daily consumer decisions. Topics include: budget preparation, saving and investing, insurance protection, income tax preparation, credit, and consumer/internet fraud protection laws.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: None

MAT 402 Statistics

This course serves as an introduction to applied statistics. Descriptive and inferential uses of statistics in reference to business, the social and behavioral sciences, and the natural and physical sciences will be discussed. Topics covered include organization of data, measures of central tendency and dispersion, probability, sampling, elementary hypothesis testing, and correlation and prediction. Microsoft Excel is used extensively.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: Final grade of 70 or better in Precalculus, Accelerated Precalculus, Honors Pre-Calculus, or Honors Algebra II, OR 73 or better in Algebra II or Algebra II/Accelerated

Requirement: TI-84+ Graphing Calculator

MAT 413 Honors Calculus

In Calculus, the mathematical language of change, topics include limits, derivatives, and integrals. Major concepts are introduced through data, applications, mathematical modeling, and technology.

Credit: 5

Quality Point Group: II

Open to Grades: 11, 12

Prerequisite: Final grade of 77 or better in Honors Pre-Calculus OR 84 or better in Accelerated Pre-Calculus.

Requirement: TI-84+ Graphing Calculator

MAT 501 Advanced Placement Statistics

AP Statistics is a college level course in statistics that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to the four broad conceptual themes: exploring data; sampling and experimentation through planning and conducting a study; anticipating patterns through exploring random phenomena using probability and simulation; and statistical inference through estimating population parameters and testing hypotheses. Students who successfully complete the course and AP exam may qualify for college placement and earn credit for an introductory college statistics course.

Credit: 5

Quality Point Group: III

Open to Grades: 10-12

Prerequisite: Final grade of 93 or better in Accelerated Pre-Calculus OR 84 or better in Honors Pre-Calculus OR 84 or better in Honors Algebra II OR 93 or better in Algebra II/Accelerated, AND final grade of 84 or better in English II or III. AP Statistics may be taken concurrently with, but not as a replacement for, Honors Calculus, AP Calculus AB or AP Calculus BC.

Requirement: TI-84+ Graphing Calculator

MAT 502 Advanced Placement Calculus - AB

AP Calculus is designed as a college level course. The course begins with a brief review of Pre-Calculus and progresses to the study of limits and continuity of functions, the derivative and its applications, the definite integral and its applications, and some basics of differential equations.

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Final grade of 84 or better in Honors Precalculus, OR final grade of 93 or better in Accelerated Precalculus, OR 93 or better in Honors Calculus.

Requirement: TI-84+ Graphing Calculator

MAT 503 Advanced Placement Calculus - BC

AP Calculus BC is a full year, college level course in the calculus of functions of a single variable. The course covers all topics presented in Calculus AB, some in greater depth, plus topics primarily related to polynomial approximations and series, improper integrals, vector, parametric and polar functions. The BC course is designed to qualify the student for college placement and credit that is one course beyond that granted for AB.

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Final grade of 93 or better in Honors Pre-Calculus.

Requirement: TI-84+ Graphing Calculator

MAT 504 Honors Discrete Math

Discrete Mathematics, when offered, is an introduction to the foundations for advanced studies in mathematics and computer science. Students will be introduced to the basics of mathematical terminology and abstract reasoning. Topics include logic, number theory, methods of mathematical proof, set theory, functions and relations, and probability.

Credit: 5

Quality Point Group: III

Open to Grades: 11, 12

Course Prerequisites: Final Grade of 84 or better in Honors Precalculus

MAT 601 Multivariable Calculus

Multivariable Calculus is an elective course for our most gifted and talented students who have a strong interest in mathematics. Many of the ideas of elementary calculus in the plane generalize naturally to space by extending to three dimensions, whereas other concepts will be new to the student. Topics include partial derivatives, vector valued functions, multiple integrals, vector calculus, differential equations, and relevant applications. Students will recognize the fundamental multivariable calculus plays in all of science and engineering and will gain a new appreciation for the achievement of higher mathematics.

Credit: 5

Quality Point Group: III

Open to Grades: 12

Prerequisite: Final grade of 84 or better in AP Calculus BC and passing grade on the AP Calculus BC exam

Requirement: TI-84+ Graphing Calculator

Science

Philosophy

The science department meets the most rigorous core content standards by developing critical thinking skills, promoting creativity, and helping students connect scientific phenomena to real world issues. Through “hands-on, minds-on” learning opportunities in all scientific disciplines, students master concepts using technology, laboratory activities, peer collaboration, and long-term projects.

Science Department Faculty:

Mrs. Kristine Carollo

Mr. Christopher Kappelmeier

Mrs. Judith Loff

Mrs. Fabiana Lynch

Mrs. Patricia Olsen

Ms. Sabrina Presti

Mr. Frank Setlock

Mr. Michael Wagner

SCI 8 Physical Science

Physical Science is an introductory course to the study of chemistry and physics. Chemistry, the study of the properties, classes, and structure of matter and its changes, includes topics such as the periodic table of elements, atomic structure, molecules, solutions, and chemical reactions. Physics is the study of the interrelationships of matter and energy, including the study of motion, electricity, sound, and heat.

This physical science course uses a hands-on approach to exploring the general principles of physical science. Using the text and lab activities, students study forces, machines, motion, energy, electricity, magnetism, sound and light. Students will also study general chemistry concepts including the structure of matter, the periodic table, chemical bonds and reactions, and mixtures and compounds. Throughout this course, students discover the relationship between science and daily life and gain a firm understanding of the scientific method by working through carefully planned experiments. Lab activities are supplemented by carefully chosen POGIL (Process Oriented Guided Inquiry Learning) and STEM activities.

Credit: 5

Quality Point Group: I

Open to Grades: 8

SCI 8-H-1 Honors Physical Science

The Honors Physical Science course explores the foundational principles of chemistry and physics. Using the text and lab activities, students study forces, machines, motion, energy,

electricity, magnetism, sound, light, fluid dynamics, density and buoyancy. Students will also study general chemistry concepts, including the structure of matter, the periodic table, chemical bonds and reactions, mixtures and compounds, and organic chemistry. Math skills are stressed, e.g., graphical analysis of experimental data.

Throughout this course, students will use Process Oriented Guided Inquiry Learning (POGIL) and carefully selected STEM exercises and activities, which focus on core concepts and encourage deep understanding while developing higher-order thinking skills such as critical thinking, problem solving, and communication through cooperation and reflection (helping).

Credit: 5

Quality Point Group: II

Open to Grades: 8

Prerequisite: Placement test

SCI 103 Principles of Biomedical Science

This course provides an introduction to the biomedical sciences through the exploration of the human body systems and various health conditions. Students will be introduced to human physiology, medicine, research processes, and bioinformatics. Engineering principles including the design process, feedback loops, and the relationship of structure to function are also incorporated.

Credit: 5

Quality Point Group: I

Open to Grades: 9-10

Prerequisite: Strong performance in previous science and mathematics courses recommended

SCI 104 Human Body Systems

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

Credit: 5

Quality Point Group: I

Open to Grades: 10-11

Prerequisite: Successful completion of SCI 100 Innovations and/or SCI 103 Principles of Biomedical Science

SCI 4009 Conceptual Physics

Conceptual Physics is an introductory physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, simple machines, momentum, simple harmonic motion and waves.

Credit: 5

Quality Point Group: I

Open to Grades: 9

Prerequisite: None (Not recommended for students in accelerated math)

SCI 4019 Physics

SCI 4019 Physics is an algebra-based, introductory 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, simple harmonic motion, torque and rotational motion.

Credit: 5

Quality Point Group: I

Open to grade: 9

Prerequisite: Students must be concurrently enrolled in Accelerated Algebra I or higher.

SCI 201 Biology

The study of biology includes biochemistry, cellular biology, genetics, biological relationships between structure and function and evolutionary relationships amongst organisms. The class will emphasize central biological concepts and will identify the roles of atoms, molecules, and energy in the formation of dynamic living systems. This course will provide the student with a rigorous laboratory experience that investigates the anatomy and physiology of living cells through a molecular approach. Technology-enhanced, student-centered instruction and laboratory experiments will complement the learning environment.

Credit: 5

Quality Point Group: I

Open to Grades: 11

Prerequisite: None

SCI 202 Honors Biology

Honors Biology follows the same course of study as General Biology but in greater depth. This course will provide the student with a rigorous laboratory course that investigates the anatomy and physiology of living cells through a molecular approach. The course will develop students' attitudes of curiosity for the world around them and the role that they play in that world. The class will emphasize central biological concepts and will identify the roles of atoms, molecules, and energy in the formation of dynamic living systems. Finally, the class will present scientific concepts in such a way as to develop critical thinking skills, problem solving abilities, and advanced laboratory skills.

Credit: 5

Quality Point Group: II

Open to Grades: 11

Prerequisite: Grade of at least 80 in Honors Chemistry or 93 in Chemistry

SCI 300 Conceptual Chemistry

The Conceptual Chemistry course emphasizes the importance of chemistry in students' personal and professional lives, and prepares them to make informed decisions. The curriculum includes metric system, basic dimensional analysis, atomic structure, the periodic table, chemical formulae, balancing chemical equations, the mole, gas laws, and bonding.

Credit: 5

Quality Point Group: I

Open to Grades: 10

Prerequisite: Concurrent enrollment in Algebra II or Geometry. Not eligible for students in accelerated math.

SCI 301 Chemistry

This course is designed to satisfy the secondary science chemistry requirement for students planning studies in the science or health fields. Through comprehensive laboratory study, the student explores the laws and theories of chemistry, the use of chemical calculations, and the nature of chemical reactions. Topics include the metric system, atomic structure, the periodic table, chemical formulae, chemical equations, stoichiometric relations, gas laws, molecular structures, and bonding. Interested students must demonstrate skill in solving equations.

Credit: 5

Quality Point Group: I

Open to Grades: 10

Prerequisite: Final grade of 65 in Physics. Concurrent enrollment in Algebra II Accelerated or Geometry Accelerated

SCI 302 Honors Chemistry

An accelerated chemistry course offered to students who have demonstrated an aptitude for science, Honors Chemistry follows the same course of study as General Chemistry but in greater depth. Students must demonstrate the ability to study independently as well as strong analytical and mathematical skills.

Credit: 5

Quality Point Group: II

Open to Grades: 10

Prerequisite: Final grade of at least 85 in Honors Physics or 93 in Physics. Concurrent enrollment in an honors level Math course.

SCI 304 Environmental Science

This lab course presents a comprehensive overview of critical environmental issues, both current and future. Given the broad scope of environmental problems, the course's interdisciplinary approach addresses ecology, geology, atmospheric science, biology, chemistry, law, economics, and ethics. Ultimately, the student will recognize the vital role humans play in determining our environment's destiny.

Credit: 5
Quality Point Group: I
Open to Grades: 11,12
Prerequisite: Passing grades in all previous science courses

SCI 306 Honors Anatomy and Physiology

The Anatomy and Physiology course is a thorough and detailed study of the relationships between the structure and form of the human body and the chemical/physical processes that allow it to function. Students will understand the structure and function of various organ systems as well as their relation to specific disorders. Laboratory exercises will include dissection.

Credit: 5
Quality Point Group: I
Open to Grades: 10,11,12
Prerequisite: Final grade of 73 in Chemistry and 73 in Biology or concurrent enrollment in Biology.

SCI 307 Forensic Science

Forensic Science offers a thorough and detailed study of forensic techniques used by crime laboratories and private examiners. Students will explore key cases and “real world” applications of techniques in criminal and civil cases. By nature lab intensive, Forensic Science requires students to perform many scientific procedures.

Credit: 5
Quality Point Group: I
Open to Grades: 12
Prerequisite: Final grade of 80 in Biology, Chemistry and Physics or concurrent enrollment thereof.

SCI 309 Honors Zoology

Honors Zoology provides a college level introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Laboratory exercises including microscopic observations and dissections reinforce topics discussed in class lecture.

Credit: 5
Quality Point Group: II
Open to Grades: 11,12
Prerequisite: Final grade of 85 in Honors Biology and Honors Chemistry or final grade of 93 in Biology and Chemistry or concurrent enrollment thereof.

SCI 310 Principles of Engineering and Design Tech

This elective course touches upon various fields of Engineering including Civil, Mechanical, Environmental, and Biomedical. The course is heavily hands-on, and as such safety is taught and heavily reinforced. Students are also taught the Design Loop and are required to utilize its techniques while working in groups on all projects. In addition, students are required to submit sketches, reports, and present their findings to the class.

Credit: 5

Quality Point Group: I

Open to Grades: 11,12

Prerequisite: Final grade of 80 in Physics and final grade of 80 in Chemistry or concurrent enrollment thereof.

SCI 311 Exercise Science

Students will examine the relationship between exercise and human performance and the importance of physical activity to maintaining a healthy lifestyle. Exercise science includes biomechanics, exercise physiology and biochemistry, growth and development, exercise nutrition, measurement and evaluation, and exercise psychology. The course is designed to provide an effective blend of classroom instruction and practical experience.

Note: Students taking exercise science are expected to participate in some physical activity.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: Minimum cumulative GPA of 3.0

SCI 501 Advanced Placement Biology

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. Students taking this course are required to sit for the Advanced Placement Biology examination at the end of the school year.

Credit: 5

Quality Point Group: III

Open to Grades: 12

Prerequisite: Final grade of 87 in Honors Biology or 93 in Biology and a final grade of 87 in Honors Chemistry, or 93 in Regular Chemistry. Highly recommend completion or concurrent enrollment in AP Statistics.

SCI 502 Advanced Placement Chemistry

Advanced Placement Chemistry is the equivalent of a first year college general chemistry class; recommended for those students planning college studies in engineering or the physical sciences. The course is designed to provide the advanced science student with a deeper and more diverse background in chemistry, laboratory skills, and scientific reasoning skills. The course is

comprised of 9 units: atomic structure and properties; molecular and ionic compounds; structure and properties; chemical reactions; kinetics; thermodynamics; equilibrium; acids and bases; and applications of thermodynamics.

Credit: 5

Quality Point Group: III

Open to Grades: 11-12

Prerequisite: Final grade of 87 in Honors Chemistry or 93 in Chemistry.

SCI 504 Advanced Placement Environmental Science

The Advanced Placement Environmental Science course is designed as the equivalent of an introductory college course in environmental science. Students learn the scientific principles, concepts, and methodologies necessary to understand the interrelationships of the natural world, to identify and analyze environmental problems--both natural and man-made—to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. AP Environmental Science is interdisciplinary, embracing a wide variety of disciplines, including earth science, biology, chemistry, physics, and geography. Students taking this course are required to sit for the AP Environmental Science exam at the end of the school year.

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Final grade of 87 in Honors Biology or 93 in Biology. Final grade of 87 in Honors Chemistry or a 93 in Chemistry. Final grade of 87 in Honors Algebra II or 93 in Algebra II Accelerated.

For 11th graders: Must be concurrently enrolled in Honors Bio. Final grade of 87 in Honors or 93 in Chemistry. Final grade of 87 in Honors Algebra II or 93 in Algebra II Accelerated.

SCI 510 Advanced Placement Physics I

AP Physics 1 is an algebra-based college-level physics course. This course follows the curriculum set forth by the College Board and is equivalent to a first semester algebra-based Physics course. Students will need a strong algebra background to be successful in this course. Students will also need to know basic right triangle trigonometry including: sine, cosine, and tangent ratios. A minimum grade of “B” or higher in 8th grade Honors Algebra 1 are good predictors for success in this course. Topics include kinematics, dynamics, uniform circular motion and gravitation, work and energy, impulse and momentum, simple harmonic motion, and rotational motion. There will be a focus on problem solving skills, reading and writing science, and inquiry-based laboratory investigations which challenge students to design and carry out experiments targeting certain learning objectives. This course is designed to help prepare students for future Honors and AP level courses. It is expected that all students sit for the AP Physics 1 exam in May.

Prerequisite (9th Graders): Completion of Accelerated or Honors Algebra I with a grade of “B” or better. Corequisite (9th graders): Concurrent enrollment in Honors Geometry (or higher)

Prerequisite (10th, 11th, 12th graders): Honors Geometry (or higher). Corequisite (10th, 11th, 12th graders): Honors Algebra II (or higher)

All students must complete the Summer Assignment to remain enrolled in AP Physics 1

Credit: 5

Quality Point Group: III

Open to Grades: 9, 10, 11, 12

SCI 511 Advanced Placement Physics 2

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through lectures, problem-solving, and inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. This is an excellent course for students planning to take science classes in college or intended to major in a STEM subject. Students taking this course are required to sit for the AP Physics 2 exam in May.

Credit: 5

Quality Point Group: III

Open to Grades: 10, 11, 12

Prerequisite: AP Physics 1 (recommended) or equivalent first-year physics course. Successful completion of the AP Physics 2 summer assignment.

Corequisite: Honors/AP Math (i.e. Honor Alg II, Honors Precalculus, Honors or AP Calculus, AP Statistics)

SCI 512 Advanced Placement Physics C, Mechanics and E&M

AP Physics C is equivalent to the introductory calculus-based physics two-semester sequence taken by science and engineering students at most colleges and universities. The first part of this course: Mechanics; covers kinematics; Newton’s laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; oscillations; and gravitation. The second part of the course: Electricity & Magnetism; explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus are used throughout the course. Students taking this course are required to sit for both the AP Physics C: Mechanics and AP Physics C: Electricity & Magnetism exams in May.

Credit: 5

Quality Point Group: III

Open to Grades: 11, 12

Prerequisite: AP Physics 1 (recommended) or equivalent first-year physics course. Successful completion of the AP Physics C summer assignment.

Corequisite: AP Calculus AB or BC

Social Studies

Philosophy

The social studies department familiarizes students with democratic institutions as well as competing or conflicting ideologies. Since modern citizens must be locally, nationally, and globally informed, students learn to analyze complex, often controversial issues, and to recognize their potential influence on and responsibility for our global society. Our goal is to create an appreciation for diversity and a foundation for world peace.

Social Studies Department Faculty:

Mr. Brian St. John, Department Chair

Mrs. Jacquelyn Burt

Fr. Calabro

Mr. Brad Cameron

Mr. Christopher Hoffman

Mrs. Laurie Lynch

Ms. Jenna MacDonald

Mr. Thomas Morro

Ms. Allison Zuckerman

SOC 8 Social Studies

The Foundations Social Studies course is designed to introduce students to the historical reasoning skills (HRS) and analytical skills needed to successfully complete an AP level history or social science class. The following themes covering the period from 1491 to the present will be explored: American and national identity; politics and power; work, exchange, and technology; culture and society; migration and settlement; geography and environment; and America in the world. Students will engage in analytical reading, document based questions, content-relevant literature, independent note taking, group and individual research projects, timed writing in response to specific prompts, and interpreting graphs, charts, maps, and political cartoons. The following HRS will be stressed: chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence, and historical interpretation and synthesis. The analytical skills developed will include: using graphs, charts, and data to analyze, describe, and explain political, economic, and behavioral concepts.

Credit: 5

Quality Point Group: I

Open to Grade: 8

Prerequisite: None

SOC 8 Honors Foundation of US History

This course builds students' essential skills and confidence to prepare them for a range of AP history and social science coursework during high school, including AP Human Geography and AP World History. The course is built around three ideas and three areas of focus. Ideas: History is an interrelated story of the world; history and geography are inherently dynamic; and historians and geographers are investigators. Areas of focus: evaluating evidence from a range of primary and secondary sources; incorporating evidence of quantitative, qualitative, and spacial data into written and oral arguments; and explaining historical and geographic relationships by explaining relationships among events and people by marshaling evidence for causation, comparison, contextualization, and continuity and change over time. This course is paced more rapidly than SOC 8.

Credit: 5

Quality Point Group: II

Open to: Grade 8

Prerequisite: Enrollment based on placement testing

SOC 101 World Cultures

The Foundations Social Studies course is designed to introduce students to the historical reasoning skills (HRS) and analytical skills needed to successfully complete an AP level history or social science class. The following themes covering the period from 600 B.C.E. to the present will be explored: Technological and Environmental Transformations; Organization and Reorganization of Human Societies; Regional and Interregional Interactions; Global Interactions; Industrialization and Global Integration; and Accelerating Global Change and Realignments. Students will engage in analytical reading, document based questions, content-relevant literature, independent note taking, group and individual research projects, timed writing in response to specific prompts, and interpreting graphs, charts, maps, and political cartoons. The following HRS will be stressed: chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence, and historical interpretation and synthesis. The analytical skills developed will include: using graphs, charts, and data to analyze, describe, and explain political, economic, and behavioral concepts.

Credit: 5

Quality Point Group: I

Open to Grades: 9

Prerequisite: None

SOC 102 Honors World Cultures

The Honor World Cultures course is designed for students who have demonstrated superior performance in eighth grade. This course covers the core curriculum content areas from prehistory to the Post 9/11 world in great depth and at an accelerated pace. Using primary and secondary sources, students will master the critical reading and writing skills needed to excel in upper level history and social science classes. Students who wish to enroll must pass a departmental entrance examination.

Credit: 5
Quality Point Group: II
Open to Grades: 9
Prerequisite: Enrollment based on teacher recommendation

SOC 201 United States History I

This course, a requirement for all 10th grade students, studies the history of the United States from its founding to the Reconstruction Era. The course is divided into four specific periods: Colonization to the American Revolution; the Constitution; Jefferson to Lincoln; the Civil War and Reconstruction.

Credit: 5
Quality Point Group: I
Open to Grades: 10
Prerequisite: None

SOC 202 Honors United States History I

Taught as a preparation for junior year Advanced Placement American History, Honors US I is open to all 10th grade students who demonstrate both the interest and ability to tackle an in-depth study of American History. The course spans the Colonial period to the Civil War, with an emphasis on the Revolutionary period, the Constitution, Jacksonian Democracy, Nationalism, the Civil War and Reconstruction. Students will engage in analytical reading, document based questions, content-relevant literature, independent note taking, group and individual research projects, timed writing in response to specific prompts, and interpreting graphs, charts, maps, and political cartoons. The following HRS will be stressed: chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence, and historical interpretation and synthesis. The analytical skills developed will include: using graphs, charts, and data to analyze, describe, and explain political, economic, and behavioral concepts.

Credit: 5
Quality Point Group: II
Open to Grades: 10
Prerequisite: Final grade of 83 in Honors World Cultures or final grade of 83 in AP World History or final grade of 93 in World Cultures

301 United States History II

This course, a requirement for all 11th grade students, surveys the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. Topics examined will include industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Additionally, themes include consumer society, culture, religion, civil and human rights, technological change, economic change, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.

Credit: 5
Quality Point Group: I
Open to Grades: 11
Prerequisite: Final grade of 65 in US History I

SOC 302 Honors United States History II

This course is open to 11th grade students who wish to pursue an in-depth study of American History. Topics include United States history from the Age of Imperialism to modern times, with an emphasis on the Progressive era, the World Wars and their consequences (including the Holocaust, the Cold War, the rise of consumerism), the modern Civil Rights and Women's Movements, Vietnam, Watergate and its aftermath, and New Federalism. Using primary and secondary sources, students must demonstrate their critical thinking, reading, and writing skills.

Credit: 5
Quality Point Group: II
Open to Grades: 11
Prerequisite: Final grade of 83 in Honors United States History I or 93 in United States History I.

SOC 401 Global Issues

(Only offered in September of even years)

This elective course in Global Studies tackles the issues and challenges facing our increasingly global world. Through topics such as modern-day slavery, terrorism, refugee crises, genocide, effects of decolonization, world hunger, and health, students will learn how truly interconnected we are. Students will explore controversies as they unfold in the news and, through that exploration, will acquire a greater understanding of the roles played by governments and international organizations.

Credit: 5
Quality Point Group: I
Open to Grades: 10,11,12
Prerequisite: None.

SOC 402 Sociology and Psychology

The course begins with a survey of sociology: the study of culture, social structure, social institutions; the role of class, race, and gender in our society; the impact of inequality on people's lives; and finally, the impact of society on the individual. The psychology portion of the class covers learning, cognitive processes, and socialization: students will explore the connection between mind and body; various personality and psychological tests; and abnormal psychology and its relevant therapies. This course is designed to hone critical thinking and observation skills as well as to deepen the students' understanding of the world and themselves.

Credit: 5
Quality Point Group: I
Open to Grades: 11,12

Prerequisite: None

SOC 403 United States Government

This course explores how the Constitution works in the 21st Century by tracing the development of Constitutional doctrine, the growth of US Supreme Court power and its relationships with other branches of government using debates, case studies, and simulations. Discussed are major constitutional law decisions, their political and social impact, and the flexibility of the Constitution to apply 235 year old principles to a modern technological society.

Credit: 5

Quality Point Group: I

Open to Grades: 11,12

Prerequisite: U.S. History I

SOC 404 Mass Media and Society

Given our media-driven society, students must learn how to analyze and evaluate all forms of communication and discuss the rights, responsibilities and interdependence of media in a diverse global society. The course surveys and assesses mass media in economic, historical, political, psychological, and sociological terms, with an emphasis on the power and significance of mass communications: books, newspapers, magazines, radio, television, motion pictures, the Internet, social media, and advertising.

Credit: 5

Quality Point Group: I

Open to Grades: 11, 12

Prerequisite: None.

SOC 405 History of Great Trials

This course includes an in-depth historical survey of various legal systems and trial methods. Students will study noteworthy trials from Socrates to Saddam Hussein, as well as actual trial transcripts, Supreme Court opinions, forensic data, mock trials, and oral arguments.

Credit: 5

Quality Point Group: I

Open to Grades: 10,11,12

Prerequisite: None.

SOC 408 International Conflicts, Crimes and Crises *(Only offered in September of odd years)*

This course investigates current international conflicts, crimes, crises and their impacts on the international community. For example, natural disasters can exacerbate conflict in a war-torn region, and criminal activities such as human trafficking arise and are perpetuated by unstable conditions in devastated areas. Since we live in a global world that is increasingly interdependent, citizens of the world must develop an understanding of global matters and how they impact all of us.

Credit: 5
Quality Point Group: I
Open to Grades: 10,11, 12
Prerequisite: None

SOC 500 Advanced Placement World History

AP World History is structured around the investigation of five course themes in six different chronological periods. Rather than simply collect and memorize facts, students must master key concepts for each historical period through the investigation of five overarching themes: (1) interaction between humans and the environment; (2) development and interaction of cultures; (3) state-building, expansion, and conflict; (4) creation, expansion, and interaction of economic systems; and (5) development and transformation of social structures. By focusing on these themes, students will develop historical thinking skills necessary to analyze change and continuity over time, identify global processes, compare and contrast societies, and explore the broad trends of world history. Students enrolled in the course are required to sit for the College Board Advanced Placement examination in World History. A satisfactory score on this examination can lead to college credit for the course.

Credit: 5
Quality Point Group: III
Open to Grades: 9-12
Prerequisite: For grades 10-12 a final grade of 87 in Honors World Cultures, Honors U.S. History I or II or a final grade of 97 in Regular World Cultures, U.S. History I or II. PJ 9th graders based on teacher recommendation and enrollment in Honors 8th Grade Social Studies. Other incoming 9th graders must take a placement exam.

SOC 501 Advanced Placement European History

AP European History is a comprehensive course tracing the development of European civilizations from the High Renaissance to the present. Major areas of concentration include the political, social, economic, and diplomatic development of the European nations. The intellectual and cultural history of Europe is also addressed along with a study of European literature, arts, and music. Students enrolled in the course are required to sit for the College Board Advanced Placement examination in European History at the end of the school year. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5
Quality Point Group: III
Open to Grades: 10, 11, 12
Prerequisite: Incoming 10th graders: an 83 in AP World History, or an 87 in Honors World Cultures, or a 97 in World Cultures.
Incoming 11th graders: an 83 in any AP Social Studies course, an 87 in Honors US History I, or a 97 in US History I.
Incoming 12th graders: an 83 in any AP Social Studies course, an 87 in Honors US History II,

or a 97 in US History II.

SOC 502 Advanced Placement U.S. History

AP US provides an accelerated and detailed study of the American Republic from 1491 to the present. The course focuses on research, critical reading and writing, and analysis of primary historical sources. Students enrolled in the course are required to sit for the College Board Advanced Placement examination in American History in May. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5

Quality Point Group: III

Open to Grades: 11

Prerequisite: Final grade of 87 in Honors US History I or 97 in US History I.

SOC 503 Advanced Placement U.S. Government

The AP course in U.S. Government and Politics expands students' understanding of America's government and current domestic and foreign policy agendas. AP Government also looks at hot topics such as free speech, assembly, religion, and the death penalty as well as current elections. The course requires familiarity with the various institutions, groups, beliefs, and ideas that constitute US politics. Topics include the Constitutional underpinnings of the United States' political beliefs and behaviors; political parties; interest groups; mass media; institutions of national government; public policy; and civil rights and civil liberties. Prerequisites for admission include 1) a brief persuasive essay that includes the student's motivations for selecting this course; and 2) a contract, signed by both the student and parent, acknowledging that summer course work and a community service project are mandatory for passing the course. The student must take the AP U.S. Government examination in May. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Final grade of an 83 in AP US History, or an 87 in Honors US History I, or a 97 in US History II.

SOC 503-A Advanced Placement Comparative Government and Politics

AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures and policies, and the political, economic, and social cultures of six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. Students must take the AP Comparative Government examination in May. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5

Quality Point Group: III

Open to Grades: 11,12.

Final grade of 83 in any AP Social Studies course, or an 87 in any Honors Social Studies course, or a 97 in US History I and II, or US Government.

SOC 506 Advanced Placement Psychology

The AP course in psychology introduces the systematic and scientific study of human and animal behavior and mental processes. Topics include the psychological facts, principles, and phenomena associated with each of psychology's major subfields and the ethics and methods used by psychologists in science and practice. Students enrolled in the course are required to sit for the College Board Advanced Placement examination in Psychology in May. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5

Quality Point Group: III

Open to Grades: 11, 12

Prerequisite: Final grade of 83 in any AP Social Studies course, a final grade of 87 in Honors US History II, or a final grade of 97 in US History II or Sociology & Psychology.

SOC 507 Advanced Placement Human Geography

AP Human Geography introduces students to the systematic study of patterns and means that have shaped human understanding, use, and alteration of the earth's surface. Students will employ spatial concepts and use maps to define regions and interpret the connectedness of places. This course emphasizes cooperative learning by employing geographers' methods and tools. Students enrolled in the course are required to sit for the College Board Advanced Placement examination in Human Geography at the end of the school year. A satisfactory score on this examination may lead to college credit for the course.

Credit: 5

Quality Point Group: III

Open to Grades: 10, 11, 12

Prerequisite: Incoming 10th graders: an 83 in AP World History, or an 87 in Honors World Cultures, or a 97 in World Cultures.

Incoming 11th graders: an 83 in any AP Social Studies course; or an 87 in Honors US History I or II, or an 87 in Honors World Cultures.

Theology

Philosophy

The Theology Department provides a developmentally appropriate, comprehensive, and systematic curriculum of Catholic beliefs to strengthen students' personal relationships with God, deepen their knowledge of the Catholic faith, and integrate these beliefs and traditions into their lives. Topics include the purpose and meaning of faith in everyday life; the Sacred Scripture; covenant and salvation history; Church history; Catholic moral theology, particularly the Theology of the Body; an exploration of major world religions; and an understanding of life's purpose through vocation and the maturation of students' spirituality.

Theology Department Faculty

Fr. Calabro, Department Chair

Mr. Lee Imbriano

Mrs. Abigail Cimorelli

Mrs. Catherine Conlee

Mrs. Shannon Jones

Ms. Pelagia Minsavage

THE 8 Theology 8

This course deepens students' understanding of their lives as a Christian Catholic and member of the Church. Topics include the Trinity and our human identity as a reflection of the Blessed Trinity, the Blessed Mother, the Rosary and other Catholic prayer traditions, the Saints, the Sacraments, the Mass, the Corporal and Spiritual Works of Mercy, the Pascal Mystery, the Kingdom of God, the Two Great Commandments and an in-depth study of Church teaching on the Eucharist.

Credit: 5

Quality Point Group: I

Open to Grade: 8

Prerequisite: None

THE 110 Theology I: The Revelation of Jesus Christ in Scripture / Who Is Jesus Christ? – The Blessed Trinity

Theology I, an introduction to Catholic Christianity for freshmen, explores the meaning and purpose of religion in everyday life. As a general introduction, it leads students toward a deeper,

more mature relationship with God and participation in Catholic life within the school and in the world at large. Students will learn about the Bible as the living word of God, Jesus Christ as God's ultimate Revelation, and the mystery of the Blessed Trinity and its implications for living the Christian life.

Credit: 5

Quality Point Group: I

Open to Grade: 9

Prerequisite: None

THE 210 Theology II: The Mission of Jesus Christ (The Paschal Mystery)/Jesus Christ's Mission Continues in the Church

This course focuses on all that God has done for humanity through his Son, Jesus Christ, and the redemption Christ won for us. Students will study the Church that was founded by Christ through the Apostles and sustained by him through the Holy Spirit, the Church as the living Body of Christ in both its divine and human elements, and what life as a disciple of Christ entails. Most importantly, the course poses the question, "Who is Jesus?" and attempts to answer it with an examination of His life, teaching, and ministry.

Credit: 5

Quality Point Group: I

Open to Grade: 10

Prerequisite: None

THE 310 Theology III: Church History and World Religions

This course includes units on the History of the Church, Inter-Religious Dialogue and Christian Call to Holiness. The first semester begins with the story of God's intervention into human history in the Person of his Son and continues through his Church to the present day. Students will come to a deeper understanding of the history of the Church.

A study of Ecumenism will help the students understand the manner in which the Catholic Church relates to other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church, the course is intended to help students recognize the ways in which important spiritual truths can also be found in other religions.

The second semester will help students understand vocations of life: how Christ calls us to live. In this course, students learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian Community.

Credit: 5

Quality Point Group: I

Open to Grade: 11

Prerequisite: None

THE 410 Theology IV: Moral Choices and Social Teachings

In the first semester students will study the Sacraments in depth and be introduced to the Moral life in Christ. Students will 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. Students will learn the moral concepts and precepts that govern the lives of Christ's disciples as a response to living a Sacramental Life.

The second semester is a deepening of development of conscience in the moral life. This course aids the formation of consciences by presenting an overview of the moral teachings of the Catholic Church. This is followed by a study of Catholic social teaching. Students are to learn how Christ's concern for others, especially the poor and less fortunate, is present today in the Church's social teaching and mission.

Credit: 5

Quality Point Group: I

Open to Grade: 12

Prerequisite: None

World Language

Philosophy

The World Languages program immerses the student in the language, history, literature, and culture of foreign countries. Proficiency in the written and spoken language is stressed, as well as the inherent benefits of bi/multilingualism to intercultural understanding. Additionally, the study of languages enhances students' educational and career endeavors.

World Languages Department Faculty:

Mrs. Sophia Partida, Department Chair

Mrs. Gabriela Arnold

Mrs. Elizabeth Buniak

Mrs. Giulia Gavin

Mrs. Suzana

Ms. Maria Poli

WLA 101 Spanish I

WLA 102 French I

WLA 103 German I

WLA 105 Italian I

The first level of language study integrates basic conversation and grammar skills with cultural studies.

Credit: 5

Quality Point Group: I

Open to Grades: 8,9,10,11,12

Prerequisite: None.

WLA 201 Spanish II

WLA 202 French II

WLA 203 German II

WLA 205 Italian II

Level II continues the work of the first course with a more advanced approach to pronunciation, grammar, reading, and writing. Students will improve their conversational skills, sharpen their pronunciation, and draw comparisons between American culture and that of the target language.

Credit: 5

Quality Point Group: I

Open to Grades: 9,10,11,12

Prerequisite: Pope John 8th graders must have a grade of 90 in Level 1. All other students must have a grade of 77 in Level I.

WLA 301 Honors Spanish III

WLA 302 Honors French III

WLA 303 Honors German III

WLA 305 Honors Italian III

Level III, an advanced course, continues to stress oral communication. Students study and discuss current and classic writings on an introductory level, review and expand grammar, examine the written aspects of the language, and make deeper cultural connections to the target language.

Credit: 5

Quality Point Group: II

Open to Grades: 10,11,12

Prerequisite: Final grade of 83 in Level II.

WLA 300 Spanish III

This third level of Spanish will reinforce the skills necessary for proficiency, focusing on the present, future, and past tense conjugations. Additionally, students will be introduced to compound tenses. This course will also focus on Hispanic history, literature, and current events. Students enrolled in this course are **not** eligible to enroll in Hon. Spanish IV or AP Spanish upon completion.

Credit: 5

Quality Point Group: I

Open to Grades: 10,11,12

Prerequisite:

WLA 401 Honors Spanish IV

An advanced course, Honors Spanish IV enhances students' proficiency in the areas of listening, comprehension, speaking, reading, and writing. Students will also interpret and analyze representative literary works and develop an appreciation for the culture and history of Hispanic countries. Students will also complete a thorough Spanish grammar preparation for the Advanced Placement Spanish and Culture course.

Credit: 5

Quality Point Group: II

Open to Grades: 11,12

Prerequisite: Final grade of 83 in Honors Spanish III

WLA 402 Honors French IV

An advanced course, Honors French IV enhances students' proficiency in the areas of listening, comprehension, speaking, reading, and writing. Students will also interpret and analyze representative literary works and develop an appreciation for the culture and history of French-speaking countries.

Credit: 5

Quality Point Group: II

Open to Grades: 11,12

Prerequisite: Final grade of 83 in Honors French III

WLA 403 Honors German IV

Honors German IV is an advanced course that aims at taking students beyond the study of mechanics to application. While expansion of vocabulary and mastery of grammatical structures are stressed, students also read a variety of literature--fiction and nonfiction, historic and contemporary. Other media, such as film, television, music and art, will engage students on multiple levels. One of the course goals is to develop in students a level of proficiency and confidence that will allow them to place into higher-level German courses at their prospective colleges and universities.

Credit: 5

Quality Point Group: II

Open to Grades: 11,12

Prerequisite: Final grade of 83 in Honors German III

WLA 405 Honors Italian IV

Students of Honors Italian IV refine their listening, reading, speaking, and writing skills as well as study advanced grammar, composition and vocabulary. Students also gain proficiency by reading selected stories by noteworthy authors, and they increase their cultural awareness by reading passages, viewing films, and completing Internet activities.

Credit: 5

Quality Point Group: II

Open to Grades: 11,12

Prerequisite: Final grade of 83 in Honors Italian III.

WLA 501 Advanced Placement Spanish

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

The AP Spanish Language and Culture course engages students in an exploration of culture in

both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music , laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

Credit: 5

Quality Point Group: III

Open to Grades: 11,12

Prerequisite: Final grade of 87 in Honors Spanish IV and placement test.