

John F. Kennedy Catholic Preparatory School



Course Catalogue
2024-2025

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INTRODUCTION

The courses that will be offered (pending sufficient enrollment) in the 2024-2025 academic year are described in this catalogue.

The section on graduation requirements explains what courses you must take each year or before graduation. Read this section carefully. *Concerns regarding diploma requirements should be brought to your Guidance Counselor.*

As you begin to select courses for next year, think about your interests and abilities, your strengths and weaknesses, your short-term and long-range plans. Think about the subjects or areas you like and are interested in. Talk with your parents about the choices available to you. Listen to your current teachers as they provide information about what future courses will cover. As you enter Senior year here at Kennedy Catholic, you should look at the suggestions or requirements of the program or college in which you have an interest and choose your electives accordingly.

Questions regarding placement into courses should be directed to the student's current teacher and/or Department Chairperson in that subject area. Students who want to enroll in Honors and/or AP Courses must receive course recommendations from their current teacher and approvals from the appropriate Department Chairperson before selecting the course during the registration process. The Scheduling Department will confer with the subject area teachers, Guidance Department, and/or Department Chairperson to ensure correct placement.

Kennedy Catholic offers seven courses for college credit through St. John's University, Iona College, and SUNY Albany. Placement in a particular course level is subject to change based on recommendation and grade performance.

Kennedy Catholic is proud to be partnering with PACE University's "Lubin School of Business". Kennedy's School of Business offers college credit courses starting the student's fall semester of Junior year. The current cost per credit is \$150 (\$450 total per class) and is payable to PACE University. All fees are subject to change and all courses will be taught at Kennedy Catholic. PACE courses may be taken individually or as a senior elective. Business School courses may fulfill a senior elective requirement provided two (2) semester courses are taken during an academic school year.

College Board fees for the AP Exams will automatically be billed to the students FACTS account. Fees for any dual-enrolled courses (College Credit) will not be billed through FACTS. It is the student's responsibility to submit the registration form and fee at the required time for these courses.

Sophomores and Juniors will automatically be registered for next year's courses. Senior course registration and electives must be completed and submitted by May 17, 2024.

IMPORTANT DATES

May 17th: Registration deadline for Seniors

June 3-7: All students confirm course registration and placement using PowerSchool

June 7: Last day for students to request changes to course registration and placement

Students will not be permitted to request changes after this date including adding or dropping a course. Requests for these types of changes will not be considered beyond June 7 or during the first weeks of school.

First Week of Fall Semester: Register for college credit (Iona College, St. John's University, SUNY Albany)

First Week of Spring Semester: Register for college credit (Iona College, St. John's University, SUNY Albany)

GUIDELINES FOR REGISTRATION

1. Selecting a course DOES NOT guarantee a student's enrollment in the course. Final rosters are determined at the sole discretion of the Vice President of Academics in conjunction with the Department Chairpersons and Guidance Department.
2. Limited space is available in ALL Honor courses, Advanced Placement and College level courses. Students must be recommended by each department to be considered for one of these courses. A recommendation alone DOES NOT guarantee a student will be enrolled in the class.
3. In order to receive "College Credit" from ANY dual-enrolled course, students MUST complete the registration form at the beginning of each semester with the college/university offering the class. It is the student's responsibility to submit the registration form and fee at the required time.
4. If any course in this process does not receive sufficient enrollment requests, the class may not be offered for the 2024-2025 school year. In the event that this occurs, students may be assigned placement in a different course at the school's discretion.
5. Students will be automatically enrolled into required courses based on their grade level for Physical Education, Health, and PSAT. These courses will not appear as options in PowerSchool during the registration process.
6. During the registration process, if there is a course that is **not listed as a choice that a student needs**, they should send an email to Mrs. Abbamont at Maria.Abbamont@kennedycatholic.org
7. If there are any questions regarding the registration process, students should email Mrs. Abbamont at Maria.Abbamont@kennedycatholic.org.
8. If there are any questions regarding selection and/or placement into courses, students should direct their questions to their current teacher and/or Department Chairperson.

GRADUATION REQUIREMENTS

A diploma is issued to all students who have successfully completion of the following Kennedy Catholic core requirements for graduation as follows:

Core Requirements

Theology 4 years
English 4 years
Social Studies 4 years
Mathematics 4 years
Science 4 years
World Languages 3 years*
Fine Arts 1 year
Health ½ year
PSAT 1 year
Physical Education 4 years

The above core requirements plus electives meet the NYS minimum requirement of 22 units.

***Students are not permitted to change from one language to another;** for example, a student that takes Italian in Freshman year must take it Sophomore year **and** Junior year. Once a student has chosen a language Freshman year, that student must take that language until Level 3:

Senior Graduation Requirements:

- All Seniors must pass each course taken to receive a diploma.
- Seniors failing a half-year course in January must make arrangements to pass that course before the end of the school year, or during the summer, before they will receive a diploma.
- Seniors enrolled in any additional course may not drop the overloaded course after the first two weeks into the first marking period.
- All seniors must carry at least 6 academic subjects, plus Physical Education, each semester.
- Seniors who are failing three or more courses in January may be asked to withdraw from Kennedy Catholic.
- Seniors failing two or more classes may not be allowed to participate in the senior prom or in the commencement exercises.
- In order to participate in the Senior Prom and Graduation Exercises, each senior must:
 1. Complete the required number of Christian Community Service hours by March 15th.
 2. Meet all financial obligations by May 15th.
 3. Meet the academic requirements. Seniors failing two or more courses in June (this would include a half-year course failed in January) may not be permitted to participate in graduation ceremonies.

PROGRAM OF STUDIES

Ninth Grade:

- Theology I
- Pre-AP English 1 or Pre-AP English 1 Honors
- Pre-AP World History & Geography or Pre-AP World History & Geography Honors
- Pre-AP Algebra 1 or Pre-AP Geometry with Statistics
- Pre-AP Biology, Pre-AP Biology Honors, or Freshman AP Biology
- Spanish I, or Latin I, or Italian I
- Physical Education
- One of the following: Art & Music Appreciation, Studio Art, Chorus*, Band*, String Ensemble*, Music History & Theory, or Theater/Acting.

**Students in a Fine Arts homeroom will be required to take an additional Fine Arts class during the school day.*

Tenth Grade:

- Theology II
- Pre-AP English 2 or Pre-AP English 2 Honors
- World History 2 or AP World History: Modern
- Pre-AP Geometry with Statistics, Pre-AP Geometry with Statistics Honors, Pre-AP Algebra 2, or Pre-AP Algebra 2 Honors
- Pre-AP Chemistry or Pre-AP Chemistry Honors
- Spanish II or II Honors, or Latin II, or Italian II
- PSAT Prep
- Physical Education
- Optional: Chorus, Band, String Ensemble, Studio Art II

Eleventh Grade:

- Theology III
- English 11 or AP English Language
- U.S. History & Government or AP U.S. History
- Pre-AP Algebra 2, Pre-AP Algebra 2 Honors, Pre-Calculus, or Pre-Calculus Honors
- Physics or AP Physics, Earth Science
- Spanish III, Spanish III Honors, AP Spanish, Latin III, or Italian III
- Physical Education
- College Placement & Career Planning Seminar or College Writing
- Optional: Advanced Visual Art I, Chorus, Band, String Ensemble
- Optional: **Kennedy School of Business:** Business 101, Business Management 150

Twelfth Grade:

- Theology IV
- English 12 or AP English Literature
- Civics Government & Economics, AP U.S. Government & Politics, or AP Macroeconomics
- College Algebra, Pre-Calculus, Pre-Calculus Honors, AP Calculus AB or AP Statistics

- AP Biology, AP Chemistry, AP Environmental Science, Environmental Science, AP Physics or Applied Physics (Required for any student who has not taken Physics or AP Physics)
- Physical Education
- One or more of the following electives.

3D Computer Modeling

AP Art History

AP Computer Science Principles

AP Latin

AP Macroeconomics

AP Psychology

AP Spanish

AP Statistics

AP U.S. Government & Politics

Ceramics & Applied Art

Spreading the Word through Art

Advanced Visual Art II*

Band*

Chorus*

String Ensemble*

AP Italian

General Education College Prep & Advanced Writing and Research (2 ½ semester courses)

**These are Fine Arts homeroom electives. If one of these is selected, students may be required to choose one or more of the electives from the above list.*

- Elective selection is subject to Department Chairperson approval and Guidance Department review.
- Course selection is subject to Administration approval.
- Administration reserves the right to place students in electives as necessary, based on section size and student aptitude.
- Course selection once finalized indicates that the student is matriculated and obligated to successfully complete the course in accordance with school academic standards and requirements.
- **Kennedy School of Business:** Business 101, Business Law 150, Business Management 150, Investments 101 and Compliance 101. PACE courses may be taken individually or as a senior elective. Business courses may fulfill a senior elective requirement provided two (2) semester courses are taken or one (1) full year course is taken during an academic school year.

Courses may be subject to change/deletion depending upon faculty availability, student interest, budgeting concerns and the requirements of the State of New York.

THEOLOGY DEPARTMENT

The Theology department follows The United States Conference of Catholic Bishop's *Doctrinal Elements of a Curriculum Framework for the Development of Catechetical Materials for Young People of High School Age*. There are two theology courses per academic year.

9th Grade - Theology I

Course I - The Revelation of Jesus Christ in Scripture

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. If they have not been taught this earlier, they will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

Course II - Who Is Jesus Christ?

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be.

10th Grade - Theology II

Course I - The Mission of Jesus Christ (The Paschal Mystery)

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with him, which is accomplished through the redemption Christ won for us. Students will learn that we share in this redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails.

Course II - Jesus Christ's Mission Continues in the Church

The purpose of this course is to help the students understand that in and through the Church they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about events in the life of the Church but about the sacred nature of the Church.

11th Grade - Theology III

Course I - Sacraments as Privileged Encounters with Jesus Christ

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

Course II - Life in Jesus Christ

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples.

12th Grade - Theology IV

Course I - Sacred Scripture

The purpose of this course is to give an overview of Sacred Scripture with an introduction to the basic principles for understanding and interpreting the Bible. Because of the extent of the scriptural material, this outline will not try to cover the vast content but rather offer comments about Scripture's purpose and religious significance. Given the limits of a semester of study, it will not be possible to introduce all the books of the Bible here. But every effort is made to project a sense of the unity of the narrative for the divine plan of salvation, the presence of God's action in this record of his Revelation, and his desire to share his merciful love with us. It is suggested that for the detailed curriculum, comments on authorship, date of composition, and formation of text of each book of the Bible be drawn from introductions in the New American Bible.

Course II - Faith & Reason

This course will give students the apologetical tools to defend Christian beliefs by exploring questions of both empirical and intellectual interests surrounding both theology and philosophy. will attempt to turn the rising tide of unbelief in our culture through contemporary, rational, and science-based evidence for God, Jesus, the soul, the Catholic Church, and her moral teaching. It will also cover what constitutes true happiness, and why an all-loving God allows suffering.

ENGLISH DEPARTMENT

Pre-AP English 1

Aligned with the College Board's Pre-AP Course Framework, this course challenges students to develop reading, writing, speaking, and critical thinking skills through the exploration of several literary genres. Students will develop linguistic skills into a strong, college-bound academic foundation. Throughout the year, they will read closely and analyze a range of complex literary and informational texts. As writers, they will focus first on crafting complex sentences and well organized paragraphs. As the year progresses, they will write more sophisticated and longer analyses.

Pre-AP English 1 Honors

Prerequisites: Exceptional work in 8th grade, high achievement on the TACHS test, Department approval.

Aligned with the College Board's Pre-AP Course Framework, this Honors level course will enhance students' reading, writing, critical thinking, and verbal communication skills. Course material and pacing will be more rigorous than that of the Pre-AP English 1 course. Students will develop a strong college-bound academic foundation as they read and analyze a variety of complex literary and informational texts.

Pre-AP English 2

Prerequisite: Pre-AP English 1.

Pre-AP English 2 builds on the foundations of Pre-AP English 1. Focusing on the College Board principles of Close Observation and Analysis, Evidence-Based Writing, Higher-Order Questioning, and Academic Conversation, this course is designed to help students strengthen critical thinking abilities and writing skills.

Extensive discussions will focus on a variety of texts from world literature (prose, poetry, drama, and nonfiction). The application of literary elements and devices will direct the students to be thinking on a higher level of analysis.

Pre-AP English 2 Honors

Prerequisites: exceptional work and effort in Pre-AP English 1 or Pre-AP English 1 Honors, and Department approval.

Pre-AP English 2 Honors builds on the foundations of Pre-AP English 1. Focusing on the College Board principles of Close Observation and Analysis, Evidence-Based Writing, Higher-Order Questioning, and Academic Conversation, this course is designed to help students hone critical thinking abilities and writing skills. Course material and pacing will be more rigorous than that of the Pre-AP English 2 course. Extensive discussions will focus on a variety of texts world literature (prose, poetry, drama, and nonfiction). The application of literary elements and devices will direct the students to be thinking on a higher level of analysis.

English 11

Prerequisite: Pre-AP English 2.

This course focuses on an overview of American literature from pre-colonialism through the 21st century. Students will be introduced to the social and historical contexts to enrich their understanding of the literature. Students will read several major literary works and respond through discussion and writing. In the second semester, a short research paper will be required.

AP English 11 (Language and Composition)

Prerequisites: exceptional work and effort in Pre-AP English 2 or Pre-AP English 2 Honors, strong writing skills, and Department approval.

The AP exam is taken in May.

This is a reading and writing intensive course designed to enable students to develop their skills in analyzing rhetorical strategies in a variety of complex texts and gain proficiency in producing their own persuasive arguments. This course follows the College Board Framework.

English 12

Prerequisite: English 11.

This survey of British literature traces the chronological development of English from *Beowulf* through the 21st century. Students will read and discuss full-length novels and plays. Satisfactory completion of a series of critical and analytical assignments is required.

AP English 12 (Literature and Composition)

Prerequisites: exceptional work and effort in English 11 or A.P. Language and Composition, strong writing skills, and Department approval.

The AP exam is taken in May.

St. John's University credit is available for the fall semester only.

This course introduces students to the history of the English language and the major works of British literature from classics (novels and drama) to contemporary poetry and short stories. The class will learn about and apply the dominant schools of literary criticism. In addition, students will engage in advanced analysis and discussion as they improve critical thinking and writing skills.

College Placement & Career Planning Seminar

This course is designed to prepare a student for the college application process and career decision making process. The course features writing instruction, career research projects, and guidance about the college inquiry, application, and decision process. The course will also help the student with the college process by teaching them how to use *Naviance*, write a college essay and develop a curriculum vitae.

College Writing

Prerequisites: exceptional work and effort in Pre-AP English 2 or Pre-AP English 2 Honors, strong writing skills, and Department approval. **Students must be Juniors with a minimum 85 GPA**

St. John's University credit is available.

In contrast to English courses where students' writing is primarily literary analysis, this course is rooted in the field of Writing Studies. As such, students' ideas and interests are central to the course, and their writings are the primary texts for regular discussion. Students will write daily and discuss their work often during peer review sessions and teacher conferencing. Students will experiment with different forms of writing, appreciate the need to adapt to a range of rhetorical expectations in college, and recognize that writing is an ongoing process of learning and critical thinking. Among other assignments, students will write a research paper that explores their possible careers. The course will culminate in the compilation and submission of a portfolio. Since College Writing aligns with St. John's University course English 1000C, students must be Juniors with an 85 GPA. Students may opt to take this semester course for 3 college credits.

Advanced Writing and Research

Building on earlier writing and critical reading experience, this one semester course prepares seniors for completing scholarly research and writing in college. This course is paired with the General Education College Preparatory course. Students will learn to use major research tools (search engines, library resources, and online databases such as EBSCO) in order to locate, evaluate, and analyze information. In addition, they will learn how to incorporate information into their writing by summarizing, paraphrasing, synthesizing, and quoting, as appropriate. Students will learn to cite information and document sources according to MLA format. This course's practicum approach will also focus on style, language, organization, rhetoric, and problematic grammar rules. In lieu of a final exam, students will write a 6 to 8-page research paper with an oral presentation component. (This is a one semester course.)

SOCIAL STUDIES DEPARTMENT

9th Grade - Pre- AP World History and Geography

The Pre-AP World History and Geography course examines the early part of world history. The areas of focus prioritize the skills fundamental to the study of history and geography in high school, AP, and beyond. This gives students multiple opportunities to think and work like historians and geographers as they develop and strengthen these disciplinary reasoning skills throughout their education in history and the social sciences. Students explore World History using Pathway One exploring: Geography and World Regions, The Ancient Period to c. 600 BCE, The Classical Period c. 600 BCE to c. 600 CE and The Postclassical Period c. 600 CE to c. 1450 CE.

Pre-AP World History and Geography Honors

Honors Pre- AP is reserved for students entering the Honors Programs. The course is taught at a higher level, involving a more complex, in-depth study of the materials.

10th Grade - World History 2

Provides a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The last three Key Ideas focus on global issues, applying a more thematic approach. While the course emphasizes the importance of historical and spatial thinking, all the social studies practices and standards are included in the study of global history and geography.

AP World History: Modern

Prerequisite: Minimum 92 GPA. Approval from current history teacher and Department is required.

The AP exam is taken in May.

AP World History: Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

11th Grade – U.S. History and Government

Begins with the colonial and constitutional foundations of the United States and explores the government structure and functions written in the Constitution. The development of the nation and the political, social, and economic factors that led to the challenges our nation faced in the Civil War are addressed.

Industrialization, urbanization, and the accompanying problems are examined, along with America's emergence as a world power, the two world wars of the 20th century, and the Cold War. Students explore the expansion of the federal government, the threat of terrorism, and the place of the United States in an increasingly globalized and interconnected world.

AP U.S. History

Prerequisite: Minimum 92 GPA. Approval from current history teacher and Department is required.

The AP exam is taken in May.

In this course, students learn about American history from the colonial period to the present. This course involves a significant amount of written work, especially regarding analysis of the trends of American history. Students are required to take the Advanced Placement exam in May, and they may receive college credit upon successful completion of this exam. Class size in this course is limited. This course has a college-level curriculum. Students are expected to put in the effort required for a college course. Class size is limited as priority is given to students with higher GPA's and exam scores. Students are selected based on their performance in their current year's history course.

12th Grade – American Civics: Our Government and Economics

The purpose of this full year course is to study the two fundamental components of the American system – democracy and capitalism. The study of democracy examines the concepts of the Constitution, the structure and workings of our government, as well as our political system. The study of capitalism includes the basics of economic theory, as well as the practice of our free enterprise system. Students will also learn

about the issues that face our nation and our society today, and they will have the opportunity to participate in discussions and other methods of investigation regarding those issues. Evaluation is done through traditional testing techniques and alternative assessment.

AP U.S. Government and Politics

Prerequisite: Minimum 92 GPA. Approval from current history teacher and Department is required.

The AP exam is taken in May.

This full year course is an in-depth study of the American system of government as well as our political system. Topics covered include the Constitution, branches of government, political beliefs and behaviors, political parties, special interests, the media, public policy, civil liberties and civil rights. This course is taught in a seminar format. Students are required to do outside reading and to be informed about current political issues. This course is taken in place of American Civics: Our Government and Economics. Students may receive college credit upon successful completion of the Advanced Placement exam. This course has a college level curriculum. Students are expected to put in the effort required for a college course. For more information, students should consult the College Board website. Class size is limited as priority is given to students with higher GPA's and exam scores. Students are selected based on their performance in their current year's history course.

AP Macroeconomics

Prerequisite: Minimum 92 GPA. A teacher recommendation as required from previous course along with Department approval.

The AP exam is taken in May.

This course is offered as a senior level elective course. The purpose of the AP course in macroeconomics is to give the students a thorough understanding of the principles of economics that apply to an economics system as a whole. The course places particular emphasis on the study of national income and price-level determination, and develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. For more information, students should consult the College Board website. Class size is limited as priority is given to students with higher GPA's and exam scores. Students are selected based on their performance in their current year's history course.

AP Psychology

Prerequisite: Minimum 92 GPA. A teacher recommendation as required from previous course along with Department approval.

The AP exam is taken in May.

This course is offered as a senior level elective course. The AP Psychology course is a full year course designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. For more information, students should consult the College Board website. Class size is limited as priority is given to students with higher GPA's and exam scores. Students are selected based on their performance in their current year's history course.

MATH DEPARTMENT

Pre-AP Algebra I

The TI-84 Plus graphing calculator is required.

This course focuses on linear relationships by emphasizing patterns of change, multiple representations of functions and equations, modeling real world scenarios with functions, and methods for finding and representing solutions of equations and inequalities.

Pre-AP Geometry with Statistics

Prerequisite: Pre-AP Algebra I or Algebra I in 8th grade.

The TI-84 Plus graphing calculator is required.

This course focuses on the foundational geometric and statistical skills necessary for college and career readiness by connecting core ideas and promoting a coherent understanding of measurement to make connections with the use of mathematical knowledge and skills to problem solve across the domains of algebra, geometry, and statistics.

Pre-AP Geometry with Statistics Honors

Prerequisite: Pre-AP Algebra I and Departmental approval.

The TI-84 Plus graphing calculator is required.

This course is an accelerated approach to geometry and statistics with enrichment topics. The course focuses on the foundational geometric and statistical skills necessary for college and career readiness by connecting core ideas and promoting a coherent understanding of measurement to make connections with the use of mathematical knowledge and skills to problem solve across the domains of algebra, geometry, and statistics.

Pre-AP Algebra 2

Prerequisite: Pre-AP Geometry with Statistics

The TI-84 Plus graphing calculator is required.

This course focuses on conceptual understanding and procedural fluency of functions and data analysis with a concentration on mathematical content and skills necessary for college readiness by investigating polynomials, rational and radical relationships, and trigonometric and other functions.

Pre-AP Algebra 2 Honors

Prerequisites: Pre-AP Geometry with Statistics Honors or Pre-AP Geometry with Statistics and Departmental approval.

The TI-84 Plus graphing calculator is required.

This course is an accelerated approach to Algebra 2 with enrichment topics. The course focuses on conceptual understanding and procedural fluency of functions and data analysis with a concentration on mathematical content and skills necessary for college readiness by investigating polynomials, rational and radical relationships, and trigonometric and other functions.

Pre-Calculus

Prerequisites: Pre-AP Algebra 2 Honors or Pre-AP Algebra 2.

The TI-84 Plus graphing calculator is required.

This course focuses on function analysis, parametric equations, polar coordinate systems, analytic trigonometry and applications, matrices and conic sections. The course moves thematically through applications, while building numerical, symbolic, and graphical analytic skills.

Pre-Calculus Honors

Prerequisites: Pre-AP Algebra 2 Honors and Departmental approval.

SUNY Albany college credit is available for the spring semester only

The TI-84 Plus graphing calculator is required.

This course is designed for students with the highest aptitude and achievement in prior math courses. This course is an integrated approach to pre-calculus and calculus and focuses on elements of algebra and analytic geometry necessary to study one variable calculus; including functions, limits, continuity, differentiation of algebraic functions, and applications of differentiation.

AP Calculus AB

Prerequisite: Pre-AP Algebra 2 Honors in junior year or Pre-Calculus Honors and Department approval.

The AP exam is taken in May.

St. John's University credit is available for the fall semester only

The TI-84 Plus graphing calculator is required.

This course focuses on the understanding of the fundamental concepts and methods of differential and integral calculus with an emphasis on their application and the use of multiple representations incorporating graphic, numeric, analytic, algebraic, verbal and written responses. Topics of study include functions, limits, derivatives, and the interpretation and application of integrals, while gaining valuable real-world problem-solving skills. Students interested in exploring careers in engineering, economics, medicine, and business would benefit from AP Calculus AB.

College Algebra

Prerequisite: Algebra 2 and Department approval

The TI-84 Plus graphing calculator is required.

This course is designed to provide a firm foundation for college mathematics by exploring significant advanced applications of polynomial, exponential, logarithmic, and trigonometric functions. It includes the study of probability, statics, sequences and series, polynomial functions of higher degree, systems of equations and matrices. This course moves thematically through applications, while building numerical, symbolic and analytical skills.

AP Statistics

Prerequisite: Teacher recommendation and be in (or have completed) Pre-Calculus or Pre-Calculus H and Department approval

The AP exam is taken in May.

St. John's University credit is available for the fall semester only

The TI-84 plus graphing calculator is required.

This course focuses on the use of statistics and probability in the context of the real world by exploring statistical theory and practical applications in a variety of areas including physical and social science, public opinion and political science, business, economics, and medicine. Students will examine and interpret statistical information through applications, examples, projects, and exercises.

SCIENCE DEPARTMENT

Pre-AP Biology

Students are engaged in real-world data analysis and problem solving that spark critical thinking about our living world. The student will apply scientific concepts, principles and theories pertaining to the living environment and recognize the historical development of these ideas. As students engage in grade-level content, they utilize the kind of scientific reasoning skills needed to analyze the natural world—and to succeed in future science and social science courses in high school. Some topics covered are similarities and differences among living and nonliving things, inheritance of genetic information, changes in organisms and species over time, continuity of life, dynamic equilibrium in living organisms, dependence of plants and animals on each other, the effect of human decisions and activities on the physical and living environment. Students will have a double period lab once every six days with required laboratory work an acceptable written lab report for each laboratory investigation.

Pre-AP Chemistry

Designed for the student who has an interest in modern Chemistry and the effect that it has on their life. Some of the topics covered are matter and energy, atomic structure, bonding, periodic table, mathematics of Chemistry, kinetics, equilibrium, acids and bases, electrochemistry, and organic chemistry. Students develop a deep conceptual understanding of matter and energy at the molecular level as they learn to explain their macroscopic observations using particulate-level reasoning. As students engage in grade-level content, they utilize scientific reasoning skills needed to analyze the natural world—and to succeed in future science and social science courses in high school and college. Students will have a double period lab once every six days with required laboratory work an acceptable written lab report for each laboratory investigation.

Pre-AP Biology Honors and Pre-AP Chemistry Honors

Prerequisite: Department approval.

These courses involve a more intensive approach to the Pre-AP course of study. The more highly motivated students are recommended for these courses.

Earth Science

This course provides the student with an understanding and an appreciation of this planet. Some of the topics covered are: Earth dimensions, minerals and rocks, the dynamic crust, earthquakes, landscapes, glacial geology, the Earth's history, meteorology, water cycle and climate and environmental awareness. The student should have a background in the skills of observation and interpretation and analysis of data. Students will have a double period lab once every six days with required laboratory work an acceptable written lab report for each laboratory investigation

Physics

Prerequisites: Approval of current science teacher and be in (or have completed) Algebra 2.

This course covers the concepts of motion, Newtonian mechanics, energy, light and sound waves, electricity and magnetism, and modern physics. Emphasis is on mathematical analysis and real-world applications. Students will have a double period lab once every six days with required laboratory work an acceptable written lab report for each laboratory investigation.

AP Physics 1

Prerequisites: Approval of current science teacher and be in (or have completed) Algebra 2 Honors.

The AP exam is taken in May.

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; impulse and momentum. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Laboratory work and extensive lab reports are required.

AP Biology

Prerequisite: High School Biology with an average of 90 or above; Physics or AP Physics with an average of 85 or above, and Department approval.

The AP exam is taken in May.

The AP course is designed to be the equivalent of a college introductory Biology course taken by Biology majors. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interaction. Areas covered are cells, genetics, evolution, ecology, and plant and animal form and function. AP level approved labs will be a part of the curriculum, with appropriate lab reports. The student who does best in this course loves Biology and has a strong work ethic.

AP Environmental Science

Prerequisite: Physics or AP Physics or Earth Science with an average of 90 or above and accompanied by Department approval.

The AP exam is taken in May.

This is an advanced senior level elective course that includes the study of environmental science both locally and globally. A multidisciplinary course that ties together scientific principles from geology, chemistry, biology, geography, and Earth Science. It is designed to represent a one-semester introductory environmental science course. Students are expected to practice various scientific methodologies to examine, analyze, and interpret scientific evidence to propose and evaluate solutions to environmental problems. Topics will include ecological principles, population dynamics, economics, law, philosophy, resource management and sustaining society. Classroom work will be supplemented with regular lab work, which will require write-ups.

AP Chemistry

Prerequisite: 90 or above in Physics or AP Physics. Department and Instructor approval is required.

The AP exam is taken in May.

AP Chemistry is an introductory college-level course. Students cultivate their understanding of chemistry through inquiry-based lab investigations and they explore the four Big Ideas: scale, proportion and quantity; structure and properties of substances; transformations; and energy. Students who take the AP Chemistry course will develop advanced inquiry and reasoning skills, such as developing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses. Laboratory science is a major component of the AP Chemistry course and extensive lab reports are required

Applied Physics

This course is required for any senior who has not taken Physics or AP Physics.

This year long course will provide the student with an understanding of the major concepts of traditional physics, including measurements and mathematics, mechanics, energy, electricity and magnetism, waves and light, and the modern physics topics of quantitative mechanics, relativity, and nuclear physics.

Environmental Science

Prerequisite: Department approval.

This is a senior level course that includes the study of environmental science both locally and globally. Topics will include ecological principles, population dynamics, economics, law, philosophy, resource management and sustaining society. Classroom work will be supplemented with projects.

3D Computer Modeling

Prerequisite: High School geometry and the ability to use a Cartesian (x,y) coordinate system to represent points on a plane. Students should be comfortable working on a windows desktop computer.

An Apple Pencil (1st generation) or other Bluetooth pencil is required for this course.

The purpose of this course is to teach the principles of polygon modeling in Maya, Forger and Procreate. Students will begin by learning both the Maya and Forger interfaces and user settings, as well as good work habits. The class will proceed to review Maya primitives and how they can be modified. Modeling tools will be explained. The course will also discuss various methods and techniques for creating original sculptures from primitives (box modeling) and plotting vertices in XYZ space (patch modeling). Students will then take the objects that they have created in Maya and sculpt additional details on their iPad using Forger using tools such as move, inflate, smooth, masking, and painting. Time permitting, animation in Maya will also be explored. Through projects students will create various models and sculptures that will utilize skills learned.

AP Computer Science Principles

The AP exam is taken in May.

AP Computer Science Principles is an introductory course for any student interested in programming, computers, and technology. This is an on-line course and is self-paced. Previous experience in programming is not necessary; this course lays the groundwork for understanding the basic principles behind writing code in any language. The course begins by teaching programming principles by using Scratch, a free platform developed by MIT, that uses blocks to help students visualize their programs. The course then moves to Python, where students translate their visual programming skills in to text based ones. Throughout the course, topics such as image and sound manipulation are discussed, as well as data mining, security, and ethical practices. In addition to individual assignments, students also work on several group projects relating to the current module of the course.

WORLD LANGUAGES

Language offerings are Spanish, Latin, and Italian. Once a student has selected a language in Freshman year, that student must take that language until Level 3.

Language I

The four skills of foreign language (listening, reading, speaking, and writing) will be introduced and stressed. Materials included acquaint students with the new language. An introduction to the culture of the country will also be presented to familiarize the students with the daily life and traditions of the country.

Language II

Prerequisite: Successful completion of a Level I language.

The improvement of the basic skills acquired in the target language will be stressed. Emphasis will be placed on reading and listening skills

Spanish 2 Honors

Prerequisite: Teacher recommendation based on performance in Spanish I.

This course will further review the structure of the Spanish language, while providing additional practice in the four basic skills of reading, writing, listening, and speaking. It will also include a study of Spanish literary selections that require additional reading and analysis that is appropriate for an Advanced Level 2 Spanish Course. Spanish 2 Honors will be taught at a more rapid pace than Spanish 2, with higher expectations of students in all skills and extensive use of spoken Spanish.

Language III

Prerequisite: Successful completion of a Level II language.

A deepening of the skills acquired in the first two years is the goal of this course with additional emphasis on speaking and writing skills.

Spanish III Honors

Prerequisite: Teacher recommendation.

This course will further review the structure of the Spanish language, while providing additional practice in the four basic skills of reading, writing, listening, and speaking. It will also include a study of Spanish literary selections that require additional reading and analysis. Spanish 3 Honors will be taught at a more rapid pace than Spanish 3, with higher expectations of students in all skills and extensive use of spoken Spanish.

Spanish IV AP

Prerequisite: Successful completion of Spanish III and teacher recommendation

The AP exam is taken in May.

St. John's University credit is available.

Students use short stories, a play, poetry selections, and media articles from Spain and Latin America to develop proficiency in the skills of reading, writing, speaking, and listening. Advanced grammar points are included as a tool to improve communication. The course is conducted in Spanish. Students may be required to purchase books and/or supplemental materials.

Italian IV AP

Prerequisite: Successful completion of Italian III and teacher recommendation

The AP exam is taken in May.

Students use short stories, a play, poetry selections, and media articles from Italy to develop proficiency in the skills of reading, writing, speaking, and listening. Advanced grammar points are included as a tool to improve communication. The course is conducted in Italian. Students may be required to purchase books and/or supplemental materials.

Latin IV AP

Prerequisite: successful completion of Level 3 Latin and Department approval.

The AP exam is taken in May.

St. John's University credit is available.

Students use Vergil's *Aeneid* and Caesar's *Gallic Wars* to translate, interpret, and write critical analyses. Students also examine the historical, social, cultural, and political context of Vergil's *Aeneid* and recognize the influence of Latin literature on the artistic achievement of the modern world. Students will be required to purchase texts and/or supplementary materials.

FINE ARTS DEPARTMENT

Art & Music Appreciation

This full year course meets 4 days out of the 6-day cycle and is open to students in grade 9. This course is a study of the elements and principles of art and music to help formulate and understand their own artistic tastes. Development of a useful visual vocabulary and aural vocabulary will be addressed. Extensive time will be invested in the critiquing and evaluating of major works, styles, forms, media, and processes, while exploring a general overview of important art and music history. This course fulfills the Fine Arts requirement for New York State High School diploma.

Concert Band

This course is a full year course that rehearses daily during homeroom period. Open to grades 9-12 with teacher recommendation only. Concert Band is a performance group for brass, woodwinds, and percussion instruments. Students are expected to have at least one year of experience and will be asked to audition for the group. Students will practice diligently at home and rehearse at school. Concerts and Open House performances are requirements for our members as are regular recorded playing submission for assessments and tests/activities to reinforce music theory, concepts, and history. **Students will be contacted for an audition if necessary.**

String Ensemble

This course is a full year course that develops ensemble skill, performance technique, music literacy, and cultural understanding in the arts. The course includes daily homeroom instruction. Open to grades 9-12. Students will study and learn to read music of greater complexity, to include common time, cut-time, compound meter, major and minor keys, chromaticism, dynamic contrast, shifting technique and quality tone production. Concerts and Open House performances are requirements for our members. **Students will be contacted for audition if necessary.**

Chorus

Although no prior experience is needed. An audition is required for 9th graders.

Upperclassmen must obtain Department Chairperson approval to enroll.

This full year course is an instructional choral program open to grades 9-12 interested in music expression through voice in a large group setting. The course incorporates daily homeroom instruction. This program will expose students to a variety of music styles, as well as enforce proper vocal techniques, sight reading, dynamics, and style, while teaching students to read music and sing "in parts." Participation in the monthly school wide community liturgies as well as in the Kennedy Catholic Fine Arts performances (concerts and open houses) is required.

Theater/Acting

Although no prior experience is needed. An audition is required for 9th graders.

This full year course meets 4 days out of the 6-day cycle and is open to students in grade 9. This course will cover the following components: Introduction to Theater, Character Development, Monologue, Improvisation, Scene Work, Movement, and Resume Design for summarizing theatrical experiences. Through theatrical games and improvisational exercises, students will develop skills in dramatic technique. Students will work individually and in groups as they rehearse and perform theatrical works in class. This course fulfills the Fine Arts requirement for the New York State High School diploma. Students in this course are required to participate in some capacity in the spring musical.

Music Theory/History

Seniors may be admitted with Instructor approval.

This full year course meets 4 days out of the 6-day cycle and is open to students in grade 9 and 12. The course is a study of basic music theory and composition as well as the elements of music. A general overview of the history of music and an advanced appreciation. Extra help with material from performance groups will be offered. This course fulfills the Fine Arts requirement for the New York State High School diploma. This course is intended as an extension course for freshmen students in Chorus, Band and String Ensemble.

9th Grade - Studio Art I

Artwork submission is required.

This course is an introduction to the Visual Arts at the high school level. It is designed to acquaint the beginning student with a variety of medium and techniques enabling them to experience the creative process through the development of drawing skills coupled with historical reference. This course fulfills the fine Arts equipment of New York State High School diploma.

110th Grade - Studio Art II

Prerequisite: Department and Instructor approval. Studio Art or Artwork submission is required.

This elective course consists of daily homeroom instruction and is open to students in grade 10. This course covers the basic design concepts and color theory through the creation of paintings and drawings using a variety of media. Oil painting techniques and theories are introduced through practice and demonstration. Emphasis is placed on choice of materials, depiction of light and shadow, painting techniques, basic color mixing and composition. The course provides students with a foundation for creative expression in oil painting.

AP Art History

Prerequisite: Must be part of the Studio Art Program. Department and Instructor approval is required
The AP exam is taken in May.

This is a senior elective course. The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history.

Advanced Visual Arts I & II

This elective course consists of daily homeroom instruction and is open to grades 11 and 12. This course is designed for the advanced student who wishes to further their studies in the field of Visual Arts and has minimum of 2 years' studio experience at Kennedy Catholic, or the permission of the instructor. Students may elect to continue their studies of Painting and Drawing or broaden their knowledge of the Studio mainly through an understanding of the Applied Arts involving a variety of disciplines. These include but are not limited to Painting, Drawing, Printmaking, Ceramics, Sculpture, Collage, Digital Media, Textile and Fiber Arts.

Ceramics & Applied Art

Prerequisite: Student MUST be part of the Studio Arts Program. Department and Instructor approval is required.

This year full year elective introduces students to an array of art possibilities through traditional ceramic techniques, mosaics and more. The course offers understanding of the cultural and historical contributions of the applied arts through the student's own creative experience and application. Project specific techniques are demonstrated and reinforced through studio application and on an individualized basis. Students are required to keep a sketchbook and create their own "design library" for project reference and design terminology. Emphasis will be placed on composition and construction of artworks as useful and decorative objects. Introduction to traditional and historical ceramic and applied arts will be incorporated into the lab experiences.

Spreading the Word through Art

Prerequisite: Instructor approval and artwork submission.

This is a Senior level elective focusing on the role of the Catholic Church as patron and educator. This level offers the student the opportunity to explore and create devotional artwork through the use of traditional and contemporary techniques such as mosaic, iconography, painting and digital media.

GENERAL EDUCATION

Health

This one semester course follows the syllabus mandated by New York State. It includes first aid, mental health, human sexuality, marriage, nutrition, the effect of the use of tobacco, alcohol and drugs, and violence in society. Projects on some of the topics are required.

Physical Education

The physical education course follows the program prescribed by the New York State Education Department.

PSAT Prep Course

With limited exceptions, this one-year course is required for sophomores. Students will learn effective math and verbal strategies and practice extensively with actual PSAT exams. The PSAT measures critical reading skills, writing skills, and math problem solving skills. This test prepares students for the SAT as well as identifies National Merit Scholars.

General Education College Preparatory Course

This senior level elective course is a one semester course. It is an overview of general education classes focusing on key concepts that students will learn in the first two years of college. It synthesizes concepts learned in high school and beyond that will help facilitate a student's transition from high school to college in courses such as Sociology, Psychology, Geography, Philosophy, Language, Writing, etc. This course is a one semester course and is paired with Advanced Writing and Research (one semester course).

KENNEDY SCHOOL OF BUSINESS

Kennedy Catholic is proud to be partnering with PACE University's "Lubin School of Business". Kennedy's School of Business offers college credit courses to Juniors and Seniors. The current cost per credit is \$150 (\$450 per class) and is payable to PACE University. All fees are subject to change and all courses will be taught at Kennedy Catholic. PACE courses may be taken individually or as a senior elective. Business courses may fulfill a senior elective requirement provided two (2) semester courses are taken an academic school year.

Business 101

This is a required course for all PACE Business courses at Kennedy Catholic.

This interdisciplinary course will introduce students to the functions of business and their interrelationships. Students will work in teams to run simulated companies. Development of business writing and speaking, presentation and data analysis skills will be emphasized. **This course is offered only during the fall semester during homeroom.**

Business Management 150

Prerequisite: Business 101

This course examines basic managerial functions of planning, organizing, motivating, leading and controlling. Emphasis is also given to the behavior of individuals and groups with organizations. **This course is offered in the spring semester during homeroom.**

Business Law 150

Senior Level Course

Prerequisite: Business 101

This senior level online course is an introduction to the nature and sources of law; the role of ethics in the legal system, the law of torts and crimes, the law of contracts, and real and personal property law. **This course is offered in the fall semester after school.**

Compliance 101:

Senior Level Course

Prerequisite: Business 101

This is a senior level online course, offers a certification from Kennedy Catholic in conjunction with the Lubin School of Business after passing an exam. It is an introduction into procedures and examinations for the Financial Industry. **This course is a half year course and meets during 8th period. This course is offered in the fall semester.**

Investments 101:

Senior Level Course

Prerequisite: Business Management 150

This is a senior level course is offered by Kennedy Catholic in conjunction with the Lubin School of Business. Students who have successfully completed Business Management 150 are eligible to participate in the Business School's active trading experience. Students will leaner about the stock market and develop skills for the future. Class size is limited to 12 participants. **This course is a half year course and meets during 8th period. This course is offered in the spring semester.**