

John F. Kennedy
Catholic High School



Course Booklet

2017 - 2018

INTRODUCTION

The courses that will be offered (pending sufficient enrollment) in the 2017 – 2018 academic year are described in this booklet.

The section on graduation requirements explains what courses you must take each year or before graduation. Read this section carefully. There are different requirements for the Regents and Advanced Regents diplomas. *All students must strive for the Advanced Regents diploma. Concerns regarding diploma requirements should be brought to the Dean of Academics or 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. If you are going into senior year and contemplating college, you should look at the suggestions or requirements of the program or college in which you have an interest.

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 should receive verbal approval from their current teacher and/or the appropriate Department Chairperson before selecting the course during the registration process on PowerSchool. The Dean of Academics will confer with the subject area teachers, Guidance Department, and/or Department Chairperson to ensure correct placement.

You will notice that thirteen courses are offered for college credit through St. John's University, Iona, and SUNY Albany. Placement in a particular course level is subject to change based on recommendation and grade performance.

The Registration Fee (\$200) as well as the AP Test Fees (\$100)/course and the Fine Arts Fees per course will automatically be billed to the students FACTS account. Fees for college credit will not be billed through FACTS, and will be collected along with the College Registration form at the appropriate time by the student's teacher.

Please complete your registration by logging into your PowerSchool account and clicking "Class Registration." Please complete your registration by Tuesday, April 4, 2017. Thank you.

Important Dates

Tuesday, April 4: Registration Deadline Using PowerSchool

June 12-23: Students Confirm Course Registration and Placement Using PowerSchool

June 23: 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 23 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)

REGISTRATION REMINDERS

1. Selecting a course DOES NOT guarantee student enrollment. Final rosters are determined at the sole discretion of the Vice Principal of Academics and the Dean of Academics in conjunction with the Department Chairpersons and Guidance Department.
2. Limited space is available in ALL 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 2017-2018 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 such as PE, Health, PSAT, Speech, Writing, et al. 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 thinks they would qualify for, or need to take, **they should** send an email to Mr. Genn at daniel.genn@kennedycatholic.org
7. If there are any registration questions, students should email Mr. Genn at Daniel.genn@kennedycatholic.org or stop by the main office.

Graduation Requirements

All Kennedy Catholic graduates must satisfy New York States Regents Exam requirements to earn a NYS Regents Diploma. All Kennedy Catholic students are expected to actively pursue an Advanced Regents Diploma in conjunction with successful completion of the following Kennedy Catholic core requirements for graduation as follows:

Core Requirements (all of the following, plus electives, for a minimum of 22 units):

Theology 4 years

English 4 years

Social Studies 4 years

Mathematics 4 years

Science 4 years

Language Other Than English 3 years*

Fine Arts 1 year

Health 1 year

PSAT 1 year

Physical Education 4 years

*Students are not permitted to change from one language to a different language at the same level from one year to the following year. For example, a student taking Spanish 1 as a freshman may not take Italian 1 in his or her sophomore year. Students are not permitted to change languages during the course of a

year. Students are required to take a language with the purpose of taking the Level 3 Language Checkpoint B Exam which is necessary for the Advanced Regents Diploma. Students that fail the Level 3 Language Checkpoint B are required to make up the exam. Students that have completed their language requirement may not take a Level 1 language as an elective.

In order to advance to Junior year, a student must pass a Regents Exam in math and a Regents Exam in science by January of sophomore year.

For a Regents Diploma:

State examinations (passing all of the following with a grade of at least 65):

The English Language Arts Common Core Regents Examination

Global History and Geography Regents Examination

U.S. History and Government Regents Examination

A Regents Examination in Mathematics

A Regents Examination in Science

For an Advanced Regents Diploma: (Passing ALL of the following with a grade of at least 65):

The English Language Arts Common Core Regents Examination

The Global History and Geography Regents Examination

U.S. History and Government Regents Examination

Three Regents examinations in Mathematics (Algebra I CC, Geometry CC, Algebra 2 CC)

Two Regents examinations in Science (Living Environment and one Physical Setting)

A Comprehensive Examination in a Language Other Than English – Checkpoint B

Senior Graduation Requirements:

- All Seniors must pass each course taken in order 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 progress report has been issued.
- 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 will 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) will not be permitted to participate in graduation ceremonies.

Program of Studies

Ninth Grade:

- Theology I or Theology I Honors
- English 9 or English 9 Honors
- Global Studies I or Global Studies I Honors
- Algebra I or Geometry
- Biology, Biology Honors, or Freshman AP Biology, or Earth Science
- Spanish I or II, or Latin I, or Italian I or II

▪Physical Education ▪ One of the following: Art & Music Appreciation, Studio Art, Chorus*, Band*, String Ensemble*, Art/Music History, 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 or Theology II Honors
- English 10 or English 10 Honors
- Global Studies II or Global Studies II Honors
- Geometry, Geometry Honors, Algebra 2, or Algebra 2 Honors
- Chemistry or Chemistry Honors
- Spanish II or II Honors, III or III Honors, or Latin II, or Italian II or III
- PSAT Prep
- Physical Education
- Optional: Art, Chorus, Band, String Ensemble

Eleventh Grade:

- Theology III or Theology III Honors
- English 11 or AP English Language
- U.S. History & Government or AP U.S. History
- Algebra 2, 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
- Speech
- Writing Seminar or College Writing
- Optional: Art, Chorus, Band, String Ensemble

Twelfth Grade:

- Theology IV or Advanced Theology
- English 12 or AP English Literature
- Civics Government & Economics, AP U.S. Government & Politics, AP Comparative Government, or AP Macroeconomics
- College Algebra, Pre-Calculus, Calculus, or AP Calculus AB
- AP Biology, AP Environmental Science, College Chemistry, or Applied Physics (Required for any student who has not taken Physics or AP Physics)
- Physical Education
- Optional: Art, Chorus, Band, String Ensemble
- One or more of the following (minimum 3 credits):

AP Biology, AP Environmental Science, AP Psychology, AP Italian, AP Spanish, AP Latin, AP Computer Science Principles, AP U.S. Government & Politics, AP Comparative Government, AP Macroeconomics, College Chemistry, Biotechnology, Statistics, Intro to Ceramics, Spreading the Word through Art, Drama, Chorus*, Band*, String Ensemble*, 3D Computer Modeling (1 semester – 1.5 credits), Robotics (1 semester – 1.5 credits), Medical Technology (1 semester – 1.5 credits), Forensics (1 semester course – 1.5 credits), Advanced Writing and Research (1 semester – 1.5 credits), General Education College Preparation (1 semester – 1.5 credits)

*If a homeroom elective is chosen, students will be required to choose a second elective from this list

Courses may be subject to change / deletion depending upon faculty availability, budgeting concerns, student interest 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 with each course offering an honors class, which covers the same material on a deeper level and maintains a higher standard of grading.

9th Grade - Theology I and Theology I H

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 and Theology II H

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 and Theology III H

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 - History of the Catholic Church

The purpose of this course is to present a catechesis of the Church and the Body of Christ in history: its nature and meaning, images, marks, life and ministry, guide to moral life, and the role of prayer. The aim of this course is to supply the students with a general knowledge of the Church's history from apostolic times to the present. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him throughout history through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today and, as such, has both divine and human elements. In this course, students will learn about the Church's 2,000 years of history and about how the Church is led and governed by the successors of the Apostles.

Advanced Theology

These courses are open to those seniors who meet the qualifications of St. John's University Advantage Program. In order to be admitted to these courses, students must have a minimum GPA of 85 and be recommended by their current Theology teacher. With the successful completion of both courses students may earn up to six college credits.

Course I - Perspectives in Christianity: A Catholic Approach (SJU 1000c)

The introduction to Catholic Theology, highlighting belief statements, practices, scripture, rites, theological writings, artistic expressions, and other discourses manifesting and expressing the Catholic Faith in its various traditions through its development. (3 credits)

Course II - Reading the New Testament (SJU 2010) – **Prerequisite for this course is SJU 1000c**

An advanced survey of the New Testament, with attention to its historical and literary context and its theological significance. This course explores the literary, historical and contemporary development of the New Testament. It introduces to students the fundamental theology of the New Testament. The course will help students interpret the central themes of the New Testament and its value to today's reader. (3 credits)

ENGLISH DEPARTMENT

English 9 R:

This course is designed to develop reading, writing, and critical thinking skills through the exploration of various literary genres. Students will read and analyze 5 to 7 full length classics as well as poetry, short stories, and non-fiction pieces. As students write, they will hone vocabulary and grammar skills.

English 9 Honors:

Prerequisites: exceptional work in 8th grade, high achievement on the TACHS test, Department approval. This Honors level course will enhance students' reading, writing, critical thinking, and oral communication skills. Material is selected to challenge and inspire highly motivated students. .

English 10 R:

Prerequisite: English 9.

This course surveys classic literary works from around the world. A sampling from different cultures and time periods gives students the opportunity to respond in various forms of written and oral expression, with emphasis on vocabulary and grammatical choices. Students will be required to read a number of major full-length works in addition to selections from other genres. In June students will take the Common Core English Regents, which they must pass to graduate.

English 10 Honors:

Prerequisites: exceptional work and effort in English 9, strong writing skills, and Department approval.

A survey course of classic literary works from around the world, this course extends the reading and writing curriculum from English 10-R and provides a challenge for the advanced reader and writer. Students will learn to respond to literature using a variety of written modes. An introduction to rhetoric, both written and oral, is integrated into the curriculum. An emphasis on literary analysis and essay writing is combined with vocabulary and grammar studies appropriate for the advanced high-school writer. In June students will take the Common Core English Regents, which they must pass to graduate.

English 11 R:

Prerequisite: English 10.

This course focuses on the life, times and writings of America's literary greats from pre-colonialism through the 21st century. Students will read a number of major literary works and respond through discussion and writing. In the second semester, a full-length research paper will be required.

Advanced Placement English 11 (Language and Composition):

Prerequisites: exceptional work and effort in English 10, strong writing skills, and Department approval.

The A.P. exam is taken in May. Exam fee is \$100.

This is a reading and writing intensive course designed to enable students to read complex texts with understanding and to experience the process of composing prose in a variety of forms – narrative, exploratory, expository and argumentative. Students are expected to accomplish college level reading and extensive writing.

English 12 R:

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.

Advanced Placement English 12 (Literature and Composition):

The A.P. exam is taken in May. Exam fee is \$100.

College credit available through St. John's University.

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.

Speech:

In this Junior level course students will learn about the history and technique of public speaking. Coursework includes topic selection, a speech's rhetorical purpose, audience analysis, active listening, nonverbal delivery, choice of appropriate diction, management of speech anxiety, use of audiovisual aids, and review of model speeches. Students will work on improving their delivery and developing self-confidence as they present informative, persuasive, and special occasion speeches.

Writing:

In this course students will enhance their skills through process writing instruction and practice in the various genres of writing. Topics include various types of writing (expository, narrative, persuasive, comparative, news article, reviews, and op-ed), writing strategies for college entrance exams, research and source evaluation, peer response, and cover letters / resumes.

College Writing:

Prerequisites: exceptional work and effort in English 10, strong writing skills, and Department approval.

Students must be Juniors with a minimum 85 GPA

College credit available through St. John's University.

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 which 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. This course fulfills the KCHS 11th grade writing requirement.

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. 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.

SOCIAL STUDIES DEPARTMENT

9th and 10th Grade – Global History and Geography I and II:

These courses cover the history of the world from the beginning of civilizations until the present day. Global I (grade 9) covers from approximately 8000 BC to 1500 AD. Global II (grade 10) covers from about 1500 to the current day. In these courses, students explore events in various regions and civilizations and investigate issues and themes in our world's history. In addition, students are taught essay skills for document-based questions and thematic essays, both of which appear on the NY State Regents Exam in Global History and Geography, which is given at the end of 10th grade. In accordance with NY State standards, students must pass this Regents exam in order to graduate.

9th Grade – Global History and Geography I Honors:

This course follows the general curriculum for Global I, but it is taught at a higher level, involving a more complex, in-depth study of the materials. Students will also be given additional writing assignments, in order to sharpen their writing and analytical skills.

10th grade – Global History and Geography II Honors:

This course follows the general curriculum for Global II, but it is taught at a much higher level than the regular Global II sections. Students in this course are expected to work more independently than those in the regular sections. Students are also instructed in writing analytical essays, which is particularly important for those who will take advanced placement courses in social studies in later years. Class size is limited. Students are selected based on their performance in their current year's history course.

11th Grade – U.S. History and Government:

This course focuses on the history of the United States from the Revolution forward, as well as on the structure of the United States government. In addition, writing continues to be emphasized. This course ends with the Regents Exam in U.S. History and Government. In accordance with New York State standards, all students must pass this test to graduate.

11th Grade – Advanced Placement U.S. History:

Prerequisite: Approval from current history teacher and department chair approval.

The A.P. exam fee is \$100.

SUNY Albany college credit is available

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 with regard to 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. Students also take the United States History and Government Regents Exam in June, which they must pass in order to graduate. 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.

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. This is a state mandated course for graduation.

12th Grade –Advanced Placement U.S. Government and Politics:

Prerequisite: Approval from current history teacher and department chair approval.

The A.P. exam fee is \$100.

Iona College credit is available

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. Class size is limited. This course has a college level curriculum. Students are expected to put in the effort required for a college course. Students are selected on the basis of prior academic performance. For more information, students should consult the College Board website.

12 Grade – Advanced Placement Comparative Government and Politics:

Prerequisite: Approval from current history teacher and department chair approval.

The A.P. exam fee is \$100.

The AP Course in Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. In addition to covering the major concepts that are used to organize and interpret what we know about political phenomena and relationships, the course covers specific countries and their governments. Six countries form the core of the AP Comparative Government and Politics course: China, Great Britain, Iran, Mexico, Nigeria, and Russia. For more information, students should consult the College Board website.

12th Grade – Advanced Placement Macroeconomics:

Prerequisite: Approval from current history teacher and department chair approval.

The A.P. exam fee is \$100.

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 also 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.

12th Grade – Advance Placement Psychology:

Prerequisite: Approval from Social Studies department chair.

The A.P. exam fee is \$100.

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.

MATH DEPARTMENT

Algebra 1 R:

The June Common Core Algebra 1 Regents exam is required. The TI-84 Plus graphing calculator is required.

This course focuses on the relationships between quantities and reasoning using equations and their graphs; descriptive statistics; linear and exponential functions; polynomial and quadratic expressions, equations, and functions; modeling with equations and functions.

Geometry R:**Prerequisite:** Algebra 1**The June Common Core Geometry Regents exam is required. The TI-84 Plus graphing calculator is required.**

This course focuses on congruence, proof, and constructions; similarity, proof, and trigonometry; three dimensions; connections between algebra and geometry through coordinates; circles with and without coordinates.

Algebra 2 R:**Prerequisite:** Successful completion of Geometry.**The June Common Core Algebra 2 Regents exam is required. The TI-84 Plus graphing calculator is required.**

This course focuses on polynomial, rational, and radical relationships; trigonometric and other functions; inferences and conclusions from data .

Geometry H:**Prerequisite:** Algebra 1 and department approval.**The June Common Core Geometry Regents exam is required. The TI-84 Plus graphing calculator is required.**

This course is an accelerated approach to Geometry. In addition to enrichment topics, an extended study of topics in Geometry is made.

Algebra 2 H:**Prerequisites:** Geometry Honors or Geometry and department approval.**The June Common Core Algebra 2 Regents exam is required. The TI-84 Plus graphing calculator is required.**

This course is an accelerated approach to Algebra 2. In addition to enrichment topics, an extended study of the topics in Algebra 2 is made.

Pre-calculus:**Prerequisite:** Alg 2 Honors or Algebra 2 and a passing score on CC Algebra 2 Regents.**The TI-84 Plus graphing calculator is required.**

This course focuses on extensive curve sketching and function analysis, parametric equations, polar coordinate systems, analytic trigonometry and applications (including vectors), matrices and conic sections. Sequences and series are studied, along with an introduction to inductive reasoning. Limit notation is used as appropriate throughout the year, and the course finishes with an exploration of derivatives, providing an introduction to subsequent calculus course. The course moves thematically through applications, while building numerical, symbolic, and graphical analytic skills.

Pre-calculus Honors:**Prerequisite:** Algebra 2 Honors in sophomore year and a passing score on CC Algebra 2 Regents**SUNY Albany college credit available spring semester only****A graphing calculator (TI-84 Plus) is required.**

An enriched pre-calculus course designed for students with the highest aptitude and achievement in prior math courses. This course is an integrated approach to pre-calculus and calculus. Elements of algebra and analytic geometry necessary to study calculus of one variable will be studied. Topics include functions, limits, continuity, differentiation of algebraic functions, and applications of differentiation.

Calculus:

Prerequisite: Pre-calculus Honors, Pre-calculus or CC Algebra 2 Honors and department approval

The TI-84 Plus graphing calculator is required.

This course focuses on functions, limits and continuity, derivatives, derivatives of trigonometric functions, applications of derivatives, definite integrals, volume, area, differential equations and modeling, and applications of definite integrals.

Advanced Placement Calculus AB:

Prerequisite: Algebra 2 Honors in junior year or Pre-calculus Honors and department approval

A.P. exam fee is \$100.

College credit available through St. John's University.

A graphing calculator (TI-84 plus).

Topics covered include differentiation and integration of functions: polynomial, rational, trigonometric, exponential and logarithmic. Application of these processes is strongly emphasized. AB syllabus outlined by ETS is followed. This course is for students with the highest aptitude and achievement in prior math courses.

College Algebra:

Prerequisite: Algebra 2 (Students who have passed the CC Algebra 2 Regents are not eligible for College Algebra.)

The TI-84 Plus graphing calculator is required.

The first phase of this course will focus on strengthening and expanding knowledge of trigonometric, exponential, and logarithmic functions. Probability, statistics, sequences and series will also be studied. The second phase of the course is designed to provide a firm foundation for college mathematics including: maximizing/minimizing, polynomial functions of a higher degree, systems and matrices, and significant advanced applications of exponential, logarithmic, and trigonometric relationships. The course moves thematically through applications, while building numerical, symbolic, and graphical analytic skills.

Statistics:

Prerequisite: Algebra 2 or Algebra 2 Honors

This course is a senior elective, and must be taken in conjunction with another math course.

The TI-84 plus graphing calculator is required.

This course will introduce the student to the use of statistics and probability in the context of the real world. The student will explore 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

Physical Setting – 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. The course is a Regents course. Minimum laboratory time is 1200 minutes. An acceptable written report is required for each laboratory investigation. Prior to the written portion of the Regents examination, students will be required to complete a laboratory performance test. The final exam is a Regents exam.

The Living Environment – Biology:

This course will give the students an understanding of the living environment. The student will apply scientific concepts, principles and theories pertaining to the living environment and recognize the historical development of these ideas. 1200 minutes of laboratory work plus a satisfactory written report of each laboratory investigation are required prior to being admitted to the Regents exam in June. 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. The final exam is a Regents Exam.

Physical Setting – Chemistry:

The Regents Chemistry course is designed for the student who has an interest in modern Chemistry and the effect that it has on his/her 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. The Chemistry student is required to complete a minimum of 1200 minutes of lab and have an acceptable written report on file for each laboratory investigation before being admitted to the Regents examination.

Physical Setting - Physics:

Prerequisites: Approval of current science teacher, successful completion of the Regents Chemistry course, a passing grade on the Regents Chemistry exam, and be in (or have completed) Algebra 2 / Trigonometry.

This course covers the concepts of motion, light and sound waves, electricity and magnetism, and modern physics. Emphasis is on mathematical analysis. Laboratory includes use of PASCO technology. A minimum of 1200 minutes of lab and an acceptable written report on each laboratory investigation are required for admission to the Regents examination. Students must take the Regents exam in June. **Students who master this course should consider taking the SAT Subject Test in Physics in early June.**

Advanced Placement Physics 1:

Prerequisites: Students should have completed geometry and be concurrently taking Algebra II/ Trig. Department approval necessary.

AP Exam fee is \$100

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; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. The course prepares students for the 3 hour A.P. Physics 1 examination taken in May. The course follows the Advanced Placement curriculum established by the College Board. **Students must take the Physics Regents exam in June. In addition, students are encouraged to take the SAT Subject Test in Physics in early June.**

Honors Courses – Biology Honors and Chemistry Honors:

Prerequisite: Department approval.

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

Advanced Placement Biology:

Prerequisite: AP Physics or Physical Setting - Physics accompanied by department approval.

AP Exam fee is \$100

St. John's University college credit available

This is an advanced elective course offered to students who have completed Regents Biology and Chemistry with an average of 90 or above. The AP course is designed to be the equivalent of a college introductory Biology course taken by Biology majors. Areas covered are cells, genetics, evolution, ecology, and plant and animal form and function. Lab work with acceptable reports is required. The student who does best in this course loves Biology and has a strong work ethic.

Advanced Placement Environmental Science:

Prerequisite: Physical Setting – Physics or AP Physics. Department approval is required.

AP Exam fee is \$100

This is an advanced elective 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 regular lab work, which will require write-ups.

Applied Physics:

This course is required for any senior who has not taken Physical Setting – 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. This is not a Regents course, so no lab work will be required. Instead, students will be assigned quarter projects.

College Chemistry:

Prerequisite: AP Physics or Physical Setting - Physics accompanied by department approval.

Departmental approval is required.

St. John's University college credit available

This is an advanced two-semester course offered to seniors. This college-level course is designed to explore the fundamental laws and principles of chemistry. Concepts of chemistry that are covered include stoichiometry, atomic and molecular structure, properties of matter, inorganic chemical reactions, kinetics and equilibrium, electrochemistry, and acids and bases. Laboratory exercises will further demonstrate course topics and help develop appropriate lab techniques.

Medical Technology (Online):

Prerequisite: Department approval.

This course is a 1 semester course and must be paired with another 1 semester course (typically Forensic Science).

This one semester course is an introduction to the field of medical technology with emphasis on medical physics. Topics to be covered include: both diagnostic and therapeutic techniques, imaging systems (CT, PET, ultrasound, MRI, laser), nuclear medicine, effect of radiation on the human body, safe handling of nuclear materials and radiation-generating equipment.

Forensic Science (Online):

Prerequisite: Department approval.

This course is a 1 semester course and must be paired with another 1 semester course (typically Medical Technology).

This course is a one- semester elective that introduces students to various topics in the Forensic Sciences. It will provide the student with a general understanding of the major concepts of Locard's Principle of Exchange, Forensic Pathology (including basic anatomy), Latent prints, Forensic DNA Analysis,

Toxicology, Blood Pattern Analysis, and various lab techniques. The concepts are further enforced with case studies such as Brandon Mayfield and the Madrid Bombings of 2004. Students will be assigned a virtual autopsy project.

3D Computer Modeling (Online):

This course is a 1 semester course and must be paired with another 1 semester course (typically Robotics/Comp. Programming)

The purpose of this course is to teach the principles of polygon modeling in Maya, as well as the basics of texturing, animation, rigging, lighting, and rendering.

Students will begin by learning the Maya interface and user settings, as well as good work habits. Students will then go on to discuss the difference between NURBS and polygons, and the advantages/ disadvantages to both. 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). They will also discuss animation, texturing, lighting, and rendering. Through projects students will create various models and images that will utilize skills learned.

Robotics/Comp. Programming

This course is a 1 semester course and must be paired with another 1 semester course (typically 3D Computer Modeling).

The goal of this class is to learn how to program the NAO robot. Using Choreography, students will learn how to program the NAO robot through storyboarding and programming with python. Through various hands on projects students will work with NAO's various capabilities which include Voice recognition and speaking, moving and walking, tactile sensors, facial recognition and object recognition. The functionality of these senses will also be discussed. The course will also instruct students in the principles and uses of 3D printer systems and 3D modeling.

Biotechnology (Online):

This course is designed to provide an introduction and overview of the basic principles of molecular biology and learn about the applications that can be derived from these principles and their uses in research, industry, and medicine. The course will provide instruction about the basic biological and chemical processes taking place in cells, tissues, and organisms. They will also learn the historical experiments that led to the central dogma of molecular biology and understand the basic processes of DNA replication, transcription and translation. Students will also gain an understanding of and exposure to assorted topics/concepts in biotechnology including; bioethics, bioinformatics, cloning, DNA synthesis, DNA sequencing, gene expression, gene regulation, PCR, transgenic animal technology, PCR, and virology.

AP Computer Science Principles (Online):

Prerequisites: High school algebra and the ability to use a Cartesian (x,y) coordinate system to represent points on a plane.

AP Exam Fee \$100

Computer Science Principles introduces students to the central idea of computer science in order to develop computational thinking across multiple disciplines. Students will design and implement innovative solutions using an iterative process in order to bring ideas to life. Students will be encouraged to apply creative processes and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. Students will

need to have a computer with Internet access for use outside of the computers at Kennedy. The modality of course delivery will be a hybrid format with the majority of the course learning enabled in an online format, coupled with occasional “in-house” classes with the instructor.

LANGUAGES OTHER THAN ENGLISH DEPARTMENT

*Language offerings are Spanish, Latin, and Italian. Comprehensive Regents Equivalent Examinations are given at the end of the 3rd year of successful language study. Students are required to take a minimum of three years of LOTE and are encouraged to take a fourth year.

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: The improvement of the basic skills acquired in the target language will be stressed. Emphasis will be placed on reading and listening skills. **Prerequisite:** Successful completion of a Level I language.

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.

Latin III students eligible for college credit - St. John's University

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. A basic interest in the target language and culture is necessary for success in this Regents level course.

Spanish III Honors/AP Language:

Prerequisite: Teacher recommendation.

AP Exam fee \$100

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/AP Language 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. Students will take the AP Spanish Language and Culture Exam in May.

Italian IV A.P.:

Prerequisites: Teacher recommendation.

AP Exam fee \$100

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. Students must take the AP Italian Language and Culture Exam in May.

Advanced Spanish IV A.P.:

Prerequisite: Successful completion of Spanish III and teacher recommendation

AP Exam fee is \$100

College credit available through St. John's University.

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. Students must take the A.P. Spanish exam in May.

Latin IV A.P.:

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

A.P. Exam fee is \$100.

College credit available through St. John's University.

Students use Vergil's *Aeneid* 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

Concert Band

Fee \$ 500.00

This course is a full year course that rehearses daily during the 40 minute 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 is regular submission of Smart Music and tests/activities to reinforce music theory, concepts, and history.

String Ensemble

Fee \$ 500.00

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.

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 Mrs. Boston's approval to enroll.

This course is a full year course, an instructional choral program for all students (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.

Art/Music Appreciation

This full year course meets 4 out of the 6 day cycle; 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.

Theater/Acting

This full year course meets 4 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. Students in this course are required to participate in some capacity in the spring musical.

Music Theory/History

This full year course meets 4 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 is intended as an extension course for freshmen students in Chorus, Band and String Ensemble.

* Seniors may be admitted with Mrs. Belardo's permission.

Studio Art II - Art History in the Studio

Fee \$ 250.00

This full year course consists of daily homeroom instruction and is open to students in grade 10. Studio Art II is a beginning painting course introducing students to a variety of paint medium and techniques while strengthening drawing and composition skills acquired from the Studio. This course focuses on painting composition, color theory and application while establishing the foundation of personal style. Students' drawing skills are refined through the use of bi-weekly assignments, and upkeep of a visual journal. Historical styles to be discussed in conjunction with assigned projects include but are not limited to Classicism, Romanticism, Realism, and Impressionism. Introduction to 3D design will be determined by instructor.

Advanced Visual Arts

Fee \$ 250.00

This full year 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 KCHS, 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.

Sketchbooks will be employed as a tool for creative problem-solving and visual reference.

NEW: Spreading the Word through Art

Fee \$ 250

Prerequisite: permission of instructor (Mrs. Glembotzky) and accompanied by artwork submission.

This full year course is open to senior students currently enrolled in Advanced Visual Arts.

Coupled with an introduction to Art History, this studio course offers students an opportunity to explore and create devotional artwork through the use of both traditional and contemporary techniques including mosaic, fresco/ icon painting, collage and digital media. Christianity began as a religion of words, not images. Christ's first followers were as deeply imbued as their fellow Jews with a suspicion of the graven images forbidden by Mosaic Law. But when the new Faith spread westward, it found itself in a world teeming with figurative art, and one in which images were a central part of worship.¹ The earliest Christian symbols were familiar components (in pagan art and) of the utmost simplicity, but instilled with new meaning by the faith's converts.

¹*The Conversion of Rome* by Roderick Conway Morris and International Herald Tribune
The New York Times March 3, 2001

NEW: Introduction to Ceramics

Fee \$ 150.00

Full year course, meets 4 out of the 6 day cycle, open to students in grade 12.

This introductory ceramics class introduces students to many different means of working with clay as an artistic medium as well as functional form. Students will learn pinch, slab, and coil methods of construction. They will also experience low-fire and high-fire techniques for finishing or glazing their creations. Hand-built projects may include relief-carved masks, slab-constructed functional forms, and solid-form sculptures. Historical references from Minoan pottery through 20th century Picasso.

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's. 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 1 semester course and must be paired with another 1 semester course, which should be Advanced Writing and Research.