

GRADUATING INDEPENDENT WOMEN SINCE 1937



# COURSE CATALOG

2023 - 2024





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## GRADUATION REQUIREMENTS

### REGENTS DIPLOMA

Religious Studies	4 units	
English	4 units	<b>plus</b> the English Language Arts Regents Examination
Social Studies	4 units	<b>plus</b> the Global History & Geography Regents Examination <b>plus</b> the United States History & Government Regents Examination
Mathematics	3 units	<b>plus</b> the Algebra 1 Regents Examination
Science	3 units	<b>plus</b> one Regents Examination in Science
World Language	3 units	
Fine Arts	1 unit	
Health	½ unit	
Physical Education	2 units	
Elective Courses	5 units	

### ADVANCED REGENTS DIPLOMA

Religion	4 units	
English	4 units	<b>plus</b> the English Language Arts Regents Examination
Social Studies	4 units	<b>plus</b> the Global History & Geography Regents Examination <b>plus</b> the United States History & Government Regents Examination
Mathematics	3 units	<b>plus</b> the Algebra 1 Regents Examination <b>plus</b> the Geometry Regents Examination <b>plus</b> the Algebra 2 Regents Examination
Science	3 units	<b>plus</b> the Living Environment Regents Examination <b>plus</b> at least one Regents Examination in: <ul style="list-style-type: none"> <li>· Physical Setting: Chemistry</li> <li>· Physical Setting: Earth Science</li> <li>· Physical Setting: Physics</li> </ul>
World Language	3 units	<b>plus</b> the Alternate World Language Examination
Fine Arts	1 unit	
Health	½ unit	
Physical Education	2 units	
Elective Courses	5 units	

## **STEM DIPLOMA**

All requirements for Regents or Advanced Regents Diploma *plus*

Mathematics	1 additional unit
Science	1 additional unit
*Plus one of the following course sequences:	
Computer Science Concentration	Computer Science I and AP Computer Science Principles (beginning in 10th or 11th grade)
Science Research Concentration	Science Research, Intermediate Science Research, and Advanced Science Research (beginning in 10th grade)
Engineering Concentration	Brown Engineering, Engineering Capstone 1, and Engineering Capstone 2 (beginning in 10th grade)

## **HONORS STEM DIPLOMA**

All requirements for Regents or Advanced Regents Diploma *plus*

Mathematics	1 additional unit (3 units at Honors or AP level)
Science	1 additional unit (3 units at Honors or AP level)
*Plus one of the following course sequences:	
Computer Science Concentration	Computer Science I and AP Computer Science Principles (beginning in 10th or 11th grade)
Science Research Concentration	Science Research, Intermediate Science Research, and Advanced Science Research (beginning in 10th grade)
Engineering Concentration	Brown Engineering, Engineering Capstone 1, and Engineering Capstone 2 (beginning in 10th grade)

## **ADVANCED STEM DIPLOMA**

All requirements for Regents or Advanced Regents Diploma *plus*

Mathematics	1 additional unit (3 units at Honors or AP level)
Science	1 additional unit (3 units at AP level)
*Plus one of the following course sequences:	
Computer Science Concentration	Computer Science I and AP Computer Science Principles (beginning in 10th or 11th grade)
Science Research Concentration	Science Research, Intermediate Science Research, and Advanced Science Research (beginning in 10th grade)
Engineering Concentration	Brown Engineering, Engineering Capstone 1, and Engineering Capstone 2 (beginning in 10th grade)

## REQUIREMENTS BY GRADE LEVEL

<p style="text-align: center;"><b><u>9<sup>th</sup> Grade</u></b></p> <p>Religion – 1 unit            English – 1 unit            Social Studies – 1 unit            Mathematics – 1 unit            Science – 1 unit            World Language – 1 unit            Fine Arts – 1 unit            Physical Education – ½ unit</p> <p>Total – 7½ units</p>	<p style="text-align: center;"><b><u>10<sup>th</sup> Grade</u></b></p> <p>Religion – 1 unit            English – 1 unit            Social Studies – 1 unit            Mathematics – 1 unit            Science – 1 unit            World Language – 1½ unit            Elective Courses – minimum of ½ unit            Physical Education – ½ unit</p> <p>Total – minimum of 7½ units</p>
<p style="text-align: center;"><b><u>11<sup>th</sup> Grade</u></b></p> <p>Religion – 1 unit            English – 1 unit            Social Studies – 1 unit            Mathematics – 1 unit            Science – 1 unit            World Language – 1 unit            Health – ½ unit            Elective Courses – minimum of ½ unit            Physical Education – ½ unit</p> <p>Total – minimum of 7½ units</p>	<p style="text-align: center;"><b><u>12<sup>th</sup> Grade</u></b></p> <p>Religion – 1 unit            English – 1 unit            Social Studies – 1 unit            Elective Courses – minimum of 4 units            Physical Education – ½ unit</p> <p>Total – minimum of 7½ units</p>

## OTHER COURSES

### AP Capstone Program

AP Capstone is a 2-year sequence of courses where students can earn a nationally recognized AP Capstone Diploma. The program is designed to allow students to immerse themselves in topics that matter to them while developing the analytic, research, problem-solving, and communication skills that colleges seek in their applicants. These courses equip students with the independent research, collaborative teamwork, and interpersonal communication skills that are increasingly valued by colleges. It cultivates curious, collaborative, and independent scholars, preparing them to make logical, evidence-based decisions.

All students who complete the program will receive a certificate at graduation. Students who earn scores of 3 or higher in **AP Seminar and AP Research** will be granted an official College Board AP Seminar and Research Certificate. If a student scores 3 or higher on four additional (non-Capstone) AP exams, she will earn the nationally recognized College Board AP Capstone Diploma.

**The AP Exam and AP Tasks are mandatory for each course during the May AP Exam period in the year that the course is taken.**

#### AP Seminar

**Grade 10, 11**

**091**

In this course, students investigate real-world topics from multiple perspectives; carefully analyze information, write evidence-based arguments, and effectively communicate them; work independently and with a team to research a topic, develop a written report and deliver a presentation, and defend their decisions. In addition to the mandatory AP exam, students are also evaluated based on two performance tasks: a team project and presentation, and an individual essay and presentation. This is the first year of a two-year sequence, and students who enroll in 11<sup>th</sup> grade must take AP Research in 12<sup>th</sup> grade.

**An application is required.**

Credit: 1

#### AP Research

**Grade 11, 12**

**092**

In this course, students build on the skills developed in AP Seminar to design, plan, and conduct a year-long mentored, research-based investigation; apply research methods and practices to address a real-world topic selected by the student; write a college-level research paper; present and orally defend research findings and methodology. In lieu of an AP exam, students are evaluated on an academic paper, presentation, and oral defense. This is the second year of a two-year sequence.

**Prerequisite: AP Seminar**

Credit: 1

#### Online Course (Proposal Required)

Taking an online course in high school offers students the opportunity to develop habits in time management, self-pacing, and responsibility while learning new content and skills. In addition, students have the flexibility to select from a wide range of courses.

11<sup>th</sup> or 12<sup>th</sup> grade students interested in studying a topic not currently offered at Fontbonne may complete a proposal to take an online course. Students should begin by reviewing the catalog of courses available at <https://www.fueleducation.com/curriculum/find-a-course> and complete a course proposal, available in the main office.

Credit: Varies by course.

**Mindfulness****Grade 9****920**

All grade 9 students take a mindfulness course, based on strategies targeted for adolescents. Students will learn about aspects of mindfulness, social-emotional skills, and coping strategies to respond to stress.

Credit: 0

**College and Career Readiness Seminar****Grade 10**

In the third quarter (or fourth quarter), grade 10 students will be taking part in a college and career readiness seminar. It is within this seminar that students will have the opportunity to learn how to navigate College Board and Naviance. They will be taking part in aptitude tests and assessments that will give them further insight into where they see themselves post-graduation.

**College and Career Readiness Seminar****Grade 11**

In the third quarter, grade 11 students will be focusing on college and career readiness in one section of their religion course. Within this seminar, the students will be discussing important aspects of the college process such as College essays, teacher recommendations, transcripts, and brag sheets. In addition, they will be given the opportunity to have an overview of college applications and begin their common application.

**Career and Financial Literacy Seminar****Grade 12****680**

All grade 12 students take this course as they begin their transition out of high school. The first quarter focuses on the college admissions process. The school counselors assist students with completing their college applications and searching for scholarships. The second quarter focuses on helping students understand the impact of individual choices on occupational goals and future earnings potential. Using simulations, students will experience real-world scenarios and use strategies to help make sound financial decisions. Students design personal and household budgets, simulate use of savings and checking accounts, and demonstrate knowledge of debt, credit management, insurance, taxes, and investing.

Credit: 0

## **COLLEGE BRIDGE PROGRAMS**

Fontbonne Hall has collaborative agreements with three colleges and universities which offer dual credit programs. Credits earned through these programs are transferable to many other colleges and universities. In addition, FH has an articulation agreement with Long Island University leading to a BS degree in Health Sciences from their School of Health Professions.

### **St. John's University College Advantage Program**

#### **Eligibility Requirements**

For Grade 12 students, a minimum cumulative average of 80 in each of the five major subjects including English, World Language, Mathematics, Science, and Social Studies is required with a combined Math and Critical Reading SAT score of 1080, or a minimum ACT score of 21 OR a minimum average of 85 in the five subjects without standardized test scores.

For Grade 11 students, a minimum cumulative average of 85 in each of the five major subjects including English, World Language, Mathematics, Science, and Social Studies is required with a combined Math and Critical Reading P/SAT score of 108/1080, or a minimum ACT score of 21 OR a minimum average of 90 in the five subjects without standardized test scores.

#### **Eligible Courses\***

- AP Calculus AB
- AP Chemistry
- English 12
- Pre-Calculus Honors
- Religion 12

*\*All courses subject to change*

### **St. Francis College High School Bridge Program Plus**

#### **Eligibility Requirements**

A minimum cumulative average of 80.

#### **Eligible Courses\***

- English 12
- Introduction to Business (Fall Semester: Business Management; Spring Semester: Marketing)
- Entrepreneurship (*Prerequisite is Introduction to Business*)
- Introduction to Anatomy & Physiology
- SFC Nursing Program is offered through St. Francis College for 0 credit at no cost.

*\*All courses subject to change*

## **St. Joseph's College SJC@FH**

Students must have a minimum cumulative average of 80.

### **Eligible Courses for SJC@FH Child Study Path \***

- Pre-Calculus Honors
- AP Calculus AB
- AP United States History
- Religion 12

*\*All courses subject to change*

## **COLLEGE ADVISEMENT AND STUDENT SERVICES**

The goal of the College Advisement and Student Support Services office is to assist our students in having the most successful and rewarding school experience, academically, socially, and spiritually.

This role supports our belief that a well-rounded education encourages academic curiosity, personal creativity, intellectual risk-taking, and cultural awareness, leading to a spirit of lifelong learning. The department respects the individuality of each student while attempting to help the student understand and use her intellect and talents.

In collaboration with teachers, parents, and the community, we offer academic counseling in all grade levels to enhance the ability of the students to identify and utilize the appropriate resources and course selections needed for academic success.

Personal counseling is also available either by teacher or parent referral or by the interest of the individual student.

## ENGLISH DEPARTMENT

### English 9

Grade 9

110

English 9 is a ninth-year course which stresses the development of reading, writing, speech, vocabulary and listening/note taking skills. Students are introduced to, and practice, essay writing. Basic literary analysis and elementary research methods are introduced. Preparation for the ELA Common Core Regents exam is an important part of the course.

Credit: 1

### English 9 Honors

Grade 9

115

This course is an advanced ninth-year course. This is a rigorously paced class that focuses on evidence-based responses in MLA format, connecting literature to society, and close analysis of literary works. Students should demonstrate advanced analytical reasoning and excellent writing skills. Admission is based on TACHS scores, elementary/intermediate school records, and a placement exam administered by the English Department.

Credit: 1

### English 10

Grade 10

120

English 10 is a tenth-year course which stresses further development of the language skills introduced in English 9. Special emphasis is placed on reading comprehension and literary appreciation. This year-long course will also include the continued development of the research paper. Preparation for the ELA Common Core Regents is included.

Credit: 1

### English 10 Honors

Grade 10

125

This is an advanced tenth-year course. This rigorously paced class focuses on more advanced writing techniques and adheres to MLA format. Students should be able to independently develop ideas and make connections within the texts. This class will cover more difficult topics than English 10. This class is comprised of students who have demonstrated excellent language skills, analytical skills, and a love of reading.

**Prerequisite: Teacher recommendation and grade of 85 or better.**

Credit: 1

### English 11

Grade 11

130

This full-year course focuses on the various genres encompassed in American literature. Each unit of work features writing by American authors in line with historical events covered in U.S. History. Further development of the skills taught in Grades 9 and 10 continues. Regents preparation is taught in preparation for the ELA Common Core exam, which is mandatory.

Credit: 1

### English 11 Honors

Grade 11

135

This is an advanced eleventh-year course. This rigorously paced class focuses on the various genres encompassed in American literature. Each unit of work features writing by American authors in line with historical events covered in U.S. History. Regents preparation is taught in preparation for the ELA Common Core exam, which is mandatory.

**Prerequisite: Teacher recommendation and grade of 85 or better.**

Credit: 1

**Advanced Placement English Language and Composition**      **Grade 11**      **147**  
This year-long course prepares the student to take the Advanced Placement test in English given in May of each year. This exam tests both writing ability and knowledge of various rhetorical modes. Students study how a writer's choice of words, sentence length, sentence structure, and other elements affect his or her style. The student's fluency in a variety of different writing modes will be expected. **The AP Exam and the ELA Regents Exam are mandatory.**  
**Prerequisite: Teacher recommendation and grade of 90 or better.**  
Credit: 1

**English 12**      **Grade 12**      **142**  
This is a survey course focusing on different genres of Western literature and the writing process. Students write papers of literary analysis, engage in discussions of literary works, prepare for the SAT and study vocabulary. Particular attention will be paid to examining the structure and methods authors use in their arguments. Students will be exposed to various styles of conversations and ways to appropriately respond with college-level writing and analysis.  
**Qualifying students may take this course for St. John's University and Saint Francis College credit.**  
Credit: 1

**Advanced Placement English Literature and Composition**      **Grade 12**      **146**  
This year-long course prepares the student to take the Advanced Placement test in English given in May of each year. To this end, the students study many representative works of proven literary worth from several genres and periods. In addition, they concentrate on the concise and effective use of language in their written assignments.  
**The AP Exam is mandatory.**  
**Prerequisite: Teacher recommendation and grade of 90 or better.**  
Credit: 1

## **ELECTIVE OFFERING**

**Journalism I**      **Grade 11, 12**      **153**  
The focus of the class will be on the fundamental basis of journalism. The course will cover the history of journalism, the fundamentals of AP style, and the basics of journalistic writing. Students will also study and discuss topics such as objectivity, bias, and disinformation. Students must write for *the Folio* as part of their grade. Through use of the Maria Bartiromo Broadcast Studio, students will also develop skills in news writing, videography, editing, and visual storytelling. Through hands-on experience, students will create video content to stream online.  
Credit: 1

**Journalism II**      **Grade 12**      **154**  
Seniors who have already taken Journalism I can take Journalism II by the journalism teacher's recommendation. There they will serve as leaders and mentors to the other students in Journalism I. They will have a managerial role in producing filmed segments. They will contribute to *the Folio* in an editorial capacity. And they will write more in-depth, feature-length articles for the school newspaper."  
Credit: 1

# FINE AND PRACTICAL ARTS DEPARTMENT

## ART

### Visual Perception

Grade 9

610

Visual Perception is designed to introduce and engage students in history, foundations, new technology, and self-expression of visual art. Students will experience a variety of materials that will bring them from representational to more abstract expressions. Through studying various artists and learning about their lives and sources of inspiration, we will build on cultivating our own artistic voices.

*Approximate Cost: \$50*

Credit: ½

The Major Art courses are recommended to any student who wishes to enter a creative field. There are many college major programs besides visual arts that require applicants to submit an art portfolio, including Apparel Design, Architecture, Film, Interior Design, and Writing (for programs focused on poetry, fiction writing, or screenwriting.) **For students entering 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade, admission to a Major Art course is based on a portfolio of at least 5 artworks and an interview.**

### Major Art 1

Grade 10

620

Major Art 1 builds upon the art appreciation instilled from Visual Perception with an emphasis on more advanced concepts and skills in projects. Students will focus on each specific element of art in each project, gaining proficiency in each individually. Through this process, students will develop a more sophisticated understanding of creating and critiquing visual arts while exploring advanced art making media.

*Approximate cost of supplies: \$50*

Credit: 1

### Major Art 2

Grade 11

630

Major Art 2 shifts the focus of topics to students' personal interests. This curriculum will explore advanced drawing, painting, printmaking, and multimedia art-making techniques with topics malleable to the artist. Working with a variety of objective or abstract concepts, students will be able to explore their own interests and creativity while learning more about contemporary art.

*Approximate Cost: \$100*

Credit: 1

### Major Art 3

Grade 12

640

Major Art 3 is an advanced course designed to allow the senior art student freedom in exploring personal style and art-making techniques. Students will develop a professional art portfolio. Originality is stressed so as to build quality work for college interviews and admission. Working at their own pace, students develop autonomy over their projects while building skills in time management and self-efficacy.

*Approximate Cost: \$100*

Credit: 1

### Digital Media and Photography

Grade 11, 12

642

The Digital Media and Photography course is designed for students to explore making digital artwork. Students will gain experience in photography, editing, and graphic design before diving into the FabLab, where they will use 3D printers, vinyl cutters, lasers, and routers to actualize digital designs.

Credit: 1

## **BUSINESS**

### **Introduction to Business: Business Management & Marketing Grade 11, 12 272**

Students will be introduced to financial accounting and its principals, balance sheets, income statements, statements of cash flows, valuation of inventories, the time value of money, and depreciation. The management component will focus on the managerial process and its techniques, leadership, motivation and teamwork, organizational structures and designs, globalization and international business, diversity, ethics and social responsibility. Students will also learn marketing concepts and research methods, product development, segmentation and target marketing, advertising, retailing, competitive intelligence and social and political marketing.

**Qualifying students may take this course for St. Francis College credit.**

Credit: 1

### **Introduction to Entrepreneurship Grade 12 275**

This course is designed to introduce students to the different types of entrepreneurship that exist, and the excitement and challenges of building one's own business. It focuses on identifying and evaluating entrepreneurial opportunities, as well as identifying what it takes to get a new venture off the ground. The course is enriched with real-life examples, including personal stories from local entrepreneurs and case studies of start-ups. It emphasizes active, hands-on learning, and student teams will get a taste for starting and running a company via a team start-up project.

**Qualifying students may take this course for St. Francis College credit.**

**Prerequisite: Introduction to Business and successful completion of an internship during the summer between junior and senior year.**

Credit: 1

## **COMPUTER SCIENCE**

### **Computer Science 1 Grade 10, 11, 12 808**

In this introductory course, students will learn the basics of computer programming, the basics of computer science, computational thinking, and problem solving. Students will learn to code using Python, including commands for calculations, loops, functions, and manipulating text. Students will also learn to create graphics and work with arrays.

Credit: 1

### **AP Computer Science Principles Grade 10, 11, 12 809**

This course will introduce students to the foundational concepts of computer science and explore the impact computing and technology have on our society. The course covers a broad range of foundational topics including: programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. Students will learn basic programming skills in two different languages, including a visual-based language and a text-based language. Teamwork and collaboration will be key in completing several projects throughout the course.

**The AP Exam is mandatory.**

Credit: 1

# HEALTH

## Health

**Grades 10, 11**

**433**

This course is aimed at making health personally and socially relevant to the student. Basic health principles are taught in the areas of substance abuse and sexuality. The student examines her own values and is given skills for intelligent decision-making. In following the New York State guidelines, hand-only CPR is also taught. **This class is required for 10<sup>th</sup> & 11<sup>th</sup> graders.**

Credit: ½

## First Aid and CPR

**Grade 11, 12**

**420**

Students will learn the American Heart Association basic lifesaving and First Aid resulting in certification. The course will meet once each cycle for a semester. The class size will be limited to 18 students.

Credit: ½

# MUSIC

## Music Appreciation

**Grade 9**

**655**

This course studies all of the major musical time periods, music theory, and music production. Students will engage in varied activities including listening and analyzing music, producing and composing music, studying the elements of music, comparing musical genres and time periods, and more. Students will explore the acoustics of sound through instrument-making and will develop an awareness and appreciation of music through project-based learning.

Credit: ½

## Concert Chorus

**Grade 9, 10, 11, 12**

**670**

This is an auditioned ensemble that focuses on building a foundation of vocal development and technique. This course is for developing singers, prior experience is not required. The Concert Chorus sings in conjunction with the Chamber Choir at community events, school liturgies, concerts, and more.

**Prerequisite: Audition.**

Credit: 1

## Chamber Choir

**Grade 10, 11, 12**

**672**

This course is for students with advanced musical ability and previous choral experience. In this course, major emphasis is placed on vocal development, music comprehension, and the study of varied choral repertoire. Students perform at concerts, community events, and school liturgies. In this course, students will sing with proper technique, diction, and expression, and will have an artistic understanding of the music presented.

**Prerequisite: Audition.**

Credit: 1

## Piano I

**Grade 10, 11, 12**

**644**

This course is designed to teach the concepts and fundamentals of the keyboard. This course will develop musical understanding beyond just reading notes by teaching students a vocabulary of chords and keys, accompaniment patterns, and improvisational techniques. Students will play melodies in several positions and have the opportunity to participate in ensemble playing. Students will develop good practice habits and learn techniques to increase the muscular agility and flexibility of their hands. Students will perform in various school events and will perform a solo piece in the spring piano recital as the culminating final of the course. This course will be limited to 10 students.

**Prerequisite: Audition**

Credit: ½

## Piano II

**Grade 10\*, 11, 12**

**664.1**

This course is designed to build upon the skills and knowledge learned in the Piano I. Students will play melodies in several positions and have the opportunity to participate in ensemble playing. Students will continue to develop good practice habits and learn techniques to further increase their agility and accuracy. Students will gain more facility in reading standard music notation and chord charts. Students will perform a solo piece in the spring piano recital as the culminating final of the course. This course will be limited to 10 students.

**Prerequisite: Completion of Piano I \*(May test out of Piano I with audition)**

Credit: ½

**Piano III****Grade 11, 12****684.1**

This course is designed to teach more advanced concepts of the keyboard. This course will build upon the skills and knowledge learned in the Piano I and Piano II. Students will continue to develop good practice habits and learn techniques to increase the muscular agility and flexibility of their hands. Students will focus on a broader spectrum of playing in multiple positions, more advanced concepts of harmony, and from varying time periods with greater emphasis on performance practice. Students will learn music from the standard classical piano repertoire and will prepare two musical selections for the spring piano recital as the culminating final of the course. This course will be limited to 10 students.

**Prerequisite: Completion of Piano II**

Credit: ½

## **PHYSICAL EDUCATION**

### **Physical Education 9**

**Grade 9**

**710**

This course is designed to give each student an exposure to different sports. The year begins with conditioning. The class then moves on to beginning volleyball, and basic tumbling. The students will then learn soccer and participate in lead-up games. Basic self-defense techniques will be presented.

Credit: ½

### **Physical Education 10**

**Grade 10**

**720**

In Physical Education 10 the students will learn cooperative games, basketball and badminton.

Credit: ½

### **Physical Education 11**

**Grade 11**

**730**

The students will start the year with cardiovascular activities. The students will learn two hand touch, folk and square dances as well as New York City Street Games.

Credit: ½

### **Physical Education 12**

**Grade 12**

**740**

Students will learn fitness and nutrition. This will be followed by aerobics. The year will culminate with the fundamentals of social dance.

Credit: ½

### **Leaders in Physical Education**

**Grade 12**

**741**

This course is for those students who in the opinion of the instructors have the ability and knowledge to assist in Physical Education 9 and 10 classes. The leaders are taught how to write a lesson plan, officiate various sports and to lead group activities if and when requested to do so. These students are to set an example for Physical Education classes as well as for the rest of the school in appearance, manner and decorum.

**Prerequisite: By teacher invitation only.**

Credit: ½

## MATHEMATICS DEPARTMENT

### Algebra 1

Grade 9

518

This course follows the New York State Syllabus for Algebra 1 and includes topics such as relationships between quantities and reasoning with equations and their graphs, descriptive statistics, linear and exponential functions, polynomial and quadratic expressions, equations and functions, and synthesis of modeling with equations. The Algebra 1 Regents Examination will be taken in June.

Credit: 1

### Algebra 1 Honors

Grade 9

519

This course follows the New York State Syllabus for Algebra 1 and includes topics such as relationships between quantities and reasoning with equations and their graphs, descriptive statistics, linear and exponential functions, polynomial and quadratic expressions, equations and functions, and synthesis of modeling with equations. This course will be taught at an accelerated pace with an emphasis on challenging problems. The Algebra 1 Regents Examination will be taken in June.

**Admission is based on TACHS scores, elementary/intermediate school records, and a placement exam administered by the Mathematics Department.**

Credit: 1

### Geometry

Grade 10

524

This course follows the New York State Syllabus for Geometry and includes topics on congruence in terms of rigid motions, similarity, proving geometric theorems, making geometric constructions, problems involving trigonometric ratios, coordinate geometry proofs, circles, and applying geometric concepts in modeling situations. The Geometry Regents Examination will be taken in June.

Credit: 1

### Geometry Honors

Grade 9, 10

526

This course follows the New York State Syllabus for Geometry and includes topics on congruence in terms of rigid motions, similarity, proving geometric theorems, making geometric constructions, problems involving trigonometric ratios, coordinate geometry proofs, circles, and applying geometric concepts in modeling situations. This course will be taught at an accelerated pace with emphasis on challenging problems. The Geometry Regents Examination will be taken in June.

**Prerequisite for Grade 9: Admission is based on a grade of 85 or higher on the Algebra 1 Regents Exam and a placement exam administered by the Mathematics Department.**

**Prerequisite for Grade 10: A grade of 85 or higher in Algebra 1 Honors and teacher recommendation or a grade of 90 or higher in Algebra 1 and teacher recommendation.**

Credit: 1

### Algebra 2

Grade 10, 11

531

This course follows the New York State Syllabus for Algebra 2 and includes topics in functions, probability, statistics, logarithms, and trigonometry. The Algebra 2 Regents Examination will be taken in June.

Credit: 1

**Algebra 2 Honors****Grade 10, 11****541**

This course follows the New York State Syllabus for Algebra 2 and includes topics in functions, probability, statistics, logarithms, and trigonometry. This course will be taught at an accelerated pace with emphasis on challenging problems. The Algebra 2 Regents Examination will be taken in June.

**Prerequisite: A grade of 85 or higher in Geometry Honors and teacher recommendation or a grade of 90 or higher in Geometry and teacher recommendation.**

Credit: 1

**Pre-Calculus****Grade 11, 12****535**

Topics in this course will include linear relations and functions, linear programming, theory of equations, matrices, the circular functions and trigonometry, sequences and series, polar coordinates and graphs of polar equations, limits, the natural logarithm, and conics. This course will prepare the student for a first course in Calculus. A summer assignment is to be completed and submitted on the first day of class.

**Prerequisite: Algebra 2 Regents and teacher recommendation.**

Credit: 1

**Pre-Calculus Honors****Grade 11, 12****548**

Topics in this course will include linear relations and functions, linear programming, theory of equations, matrices, the circular functions and trigonometry, sequences and series, polar coordinates and graphs of polar equations, limits, the natural logarithm, and conics. This course will prepare the student for a first course in Calculus and will be taught at an accelerated pace with emphasis on challenging problems. A summer assignment is to be completed and submitted on the first day of class. **Qualifying students may take the first semester of this course for St. John's University credit. Students pursuing the St. Joseph's College Child Study Pathway can take this class for college credit.**

**Prerequisite: A grade of 85 or higher in Algebra 2 Honors and teacher recommendation or a grade of 90 or higher in Algebra 2 and teacher recommendation.**

Credit: 1

**College Algebra****Grade 12****541**

This course focuses on an in-depth study of the structure of the real number system, computational skills, equations solving, and functional analysis including polynomial, rational, algebraic, exponential, and logarithmic functions.

**Prerequisite: Algebra 2 and teacher recommendation.**

Credit: 1

**Advanced Placement Calculus AB****Grade 11, 12****543**

This is a critical analysis of the theories and foundations of Calculus. Topics include the basic concepts and applications of limits and functions, differentiation, and integration. The object of this course is to give exceptional math students the opportunity to study college Calculus while still in high school. A summer assignment is to be completed and submitted on the first day of class.

**The AP Exam is mandatory. Qualifying students may take this course for St. John's University credit or St. Joseph's University credit.**

**Prerequisite: A grade of 85 or higher in Pre-Calculus Honors and teacher recommendation or 11<sup>th</sup> graders in Algebra 2 Honors with a grade of 90 or higher and teacher recommendation.**

Credit: 1

## RELIGIOUS STUDIES DEPARTMENT

### Religion 9

Grade 9

015

This is a full-year course, which includes:

#### **Hebrew Scriptures – Quarter I and II**

The students will be instructed in methods of bible study and key themes in the major books of the Hebrew Scriptures.

#### **Christian Scriptures – Quarter III and IV**

The students will be introduced to the New Testament, focusing on the gospels. Key themes in the preaching of Jesus will be considered in detail.

Credit: 1

### Religion 10

Grade 10

020

This course is divided into two sections. The first section of this course will be covered during the first and second quarters and will consist of an overview of Catholic Theology. The second section of this course will be covered during the third and fourth quarters and will focus on Catholic Moral Theology.

Credit: 1

### Religion 11

Grade 11

030

#### **Social Justice & Catholic Social Teaching – Quarters 1 and 2**

This course explores the social dimension of Christian faith. Students will explore the essential characteristics of Christian vision of social justice. Through social analysis and theological reflection, they will explore the Christian challenge to truly live Gospel values. Modern Catholic social teaching (CST) has been articulated through a tradition of papal, conciliar, and episcopal documents, and these documents shed light on how to build a just society and live lives of holiness in modern society (“SCST: United States Catholic Conference, Sharing Catholic Social Teaching: Challenges and Directions,” p.4). Some of the questions addressed in this class include but are not limited to the following: What is “Christian” social justice? What do personal moral character and social justice have to do with one another? What are the seven themes of CST? What should we (collectively and individually) think/say/do about systemic problems of racism, sexism, economic disparity, and ecological destruction? This class will give students a foundation for entering into critical thought and dialogue about these questions. The course culminates in a project that integrates their service work done throughout the year and with their critical reflection on the demands of the Gospel.

#### **World Religion – Quarters 3 and 4**

This one-semester course will explore the major world religions. This exploration will be done through the lens of Catholic teaching on ecumenism and inter-religious dialogue. Students will be given a foundation in Catholic doctrine on revelation and ecclesiology, and the ability to identify similarities and differences in a variety of faith traditions. In line with the CSJ charism, this course seeks to foster dialogue and unity in our society.

Credit: 1

### Religion 12

Grade 12

040

This course will provide a broad overview of the academic study of Christian theology and its expression within the Catholic tradition that includes an introduction to Christianity highlighting scripture, creedal statements, rites, theological writings, artistic expressions, and other discourses manifesting and expressing the Christian faith in its various traditions. This course is offered for dual credit with both St. John’s University (Theology 1000C—Perspectives on Christianity: A Catholic Approach) and St. Joseph’s University (Religious Studies-131—Jesus the Christ).

Credit: 1

## SCIENCE DEPARTMENT

### Living Environment

Grade 9

425

This course concentrates on the Living Environment curriculum, which examines the interaction of species with the environment at the ecological level and the study of modern genetics. Scientific inquiry and laboratory experiences are central to this course. Students will take the NYS Regents examination in Living Environment in June.

Credit: 1

### Biology Honors

Grade 9

428

This course approaches the Living Environment curriculum from a more advanced level. Students will examine the interaction of species with the environment at the ecological level and the study of modern genetics. Scientific inquiry and laboratory experiences are central to this course. Students will take the NYS Regents examination in Living Environment in June.

**Pre-requisite: TACHS score, middle school score record**

Credit: 1

### Chemistry

Grade 9, 10, 11

430

Chemistry is the quantitative and qualitative study of matter and energy. Included is an overview of kinetics, atomic theory, organic chemistry and modern applications. This course follows the New York State Regents syllabus and incorporates required laboratory exercises. Students will take the NYS Regents examination in Physical Setting/Chemistry in June.

**Prerequisites: Living Environment Regents Exam for grades 10 and 11**

**Living Environment Regents Exam with a grade of 80+ for grade 9**

Credit: 1

### Chemistry Honors

Grade 10, 11

438

This advanced Chemistry course focuses on the quantitative and qualitative study of matter and energy. Included is an in-depth study of kinetics, atomic theory, organic chemistry, and modern applications. This course follows the New York State Regents syllabus and incorporates laboratory exercises. In addition to taking the NYS Regents examination, students will be encouraged to take the SAT II in Chemistry.

**Pre-requisites: Living Environment Regents Exam and teacher recommendation**

Credit: 1

### Physics

Grade 10, 11, 12

440

This course presents a modern view of physics with a concentration on fundamental theories and laboratory investigations. The Physics program covers the following areas: mechanics, wave phenomena, electricity, magnetism, solid state physics, and atomic and nuclear physics. This course follows the New York State Syllabus and allows for Regents credit through the Regents examination and required laboratory exercises.

**Prerequisite: Teacher recommendation**

**Co-requisite: Students must concurrently take Algebra 2 or an equivalent course.**

Credit: 1

**Physics Honors****Grade 10, 11, 12****447**

This advanced course presents an in-depth study of physics with a concentration on fundamental theories and laboratory investigations. This program studies topics in mechanics, wave phenomena, electricity, magnetism, solid state physics, and atomic and nuclear physics. Mastery of mathematical applications is required. This course follows the NYS Regents syllabus. In addition to taking the NYS Regents examination, students will be encouraged to take the SAT II in Physics.

**Prerequisite: Teacher recommendation.****Co-requisite: Students must concurrently take Algebra 2 or an equivalent course**

Credit: 1

**Earth Science****Grade 11, 12****405**

This course is designed to give students an overview of Earth Systems through the study of Geology, Meteorology, Astronomy, and Oceanography. During the year, a wide variety of topics and engaging laboratories will be introduced to the class. This course follows the New York State Syllabus and allows for Regents credit through the Regents examination and required laboratory exercises.

**Prerequisite: Teacher recommendation**

Credit: 1

**Advanced Placement Biology****Grade 11, 12****465**

This course is the equivalent of a required first-year college Biology course with a curriculum set by the College Board. Topics include cell chemistry, bioenergetics, plant and animal physiology, cell structure and reproduction, and modern genetics. Included are mandatory laboratory units.

**The AP Exam is mandatory.****Prerequisite: Living Environment Regents Examination****Chemistry Regents Examination****Physics Regents Examination****Teacher recommendation**

Credit: 1

**Advanced Placement Chemistry****Grade 11, 12****475**

This is the equivalent of a required first-year college Chemistry course with a curriculum set by the College Board. This course will cover topics such as the arrangement of atoms, chemical and physical properties of materials, changes in matter, rates of chemical reactions, and laws of thermodynamics. Included are mandatory laboratory units.

**The AP Exam is mandatory.****Qualifying students may take this course for St. John's University credit.****Prerequisite: Living Environment Regents Examination****Chemistry Regents Examination****Physics Regents Examination****Teacher recommendation**

Credit: 1

**Advanced Placement Physics 1****Grades 11, 12****477**

This course focuses on the interconnections between the various strands and units contained in the course syllabus and how each contributes to the "Big Ideas" that provide a core foundation for this science course. Problem solving techniques and strategies are fine-tuned throughout the year, and students are continually asked with connecting physics applications learned in different units to synthesize solutions to complex problems. The emphasis is on theoretical topics, critical thinking, and problem solving all of which makes this class challenging. Mathematics is used to

illuminate physical situations, and so students must be strong in both math and science to be successful in this course. Conceptual understanding of the material is a requirement for success. Students will be expected to write justifications and explanations of physics concepts. Students have the opportunity to work cooperatively to solve challenging problems and to present their solutions to the class.

**The AP Exam is mandatory.**

**Prerequisite: Living Environment Regents Examination  
Chemistry Regents Examination  
Physics Regents Examination  
Teacher recommendation**

**Co-requisite: Students must concurrently take Algebra 2 or an equivalent course.**

Credit: 1

### **Advanced Placement Environmental Science**

**Grade 12**

**487**

This course will help students identify and analyze environmental problems and their effects. Students will evaluate the effectiveness of proposed solutions. They will learn to think like environmental scientists as they make predictions based on observation. Students will write hypotheses, design and complete field studies and experiences, and reach conclusions based on the analysis of resulting data.

**The AP Exam is mandatory.**

**Prerequisite: Living Environment Regents Examination  
Chemistry Regents Examination  
Physics Regents Examination  
Teacher recommendation**

Credit: 1

### **Introduction to Anatomy and Physiology**

**Grade 11, 12**

**455**

This course includes the study of the functions of systems of the human body. In addition, a laboratory component that focuses on learning common medical/nursing terminology and the study of diseases is required. This course is recommended for students interested in the fields of nursing, physical therapy, sports medicine, occupational therapy, and related disciplines.

**Qualifying students may take this course for St. Francis College credit.**

**Pre-requisite: Living Environment Regents Examination  
Chemistry Regents Examination**

**Co-requisite: Physics (for juniors who took chemistry as sophomores)**

Credit: 1

### **Forensics**

**Grade 11, 12**

**481**

Forensics is the integration of science and the law. Students will learn to incorporate scientific and laboratory techniques to solve simulated legal problems.

**Qualifying students may take this course for St. Francis College credit.**

**Pre-requisite: Living Environment Regents Examination  
Chemistry Regents Examination**

**Co-requisite: Physics (for juniors who took chemistry as sophomores)**

Credit: 1

## **SOCIAL STUDIES DEPARTMENT**

### **Global History & Geography 9**

**Grade 9**

**210**

This chronological approach to global history begins with the Paleolithic Era and the first civilizations, continues with an examination of classical societies and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems in society. Students will be exploring history through the use of both primary and secondary sources.

Credit: 1

### **Global History & Geography 9 Honors**

**Grade 9**

**211**

This course examines global history from the Paleolithic period through Ancient Civilizations to the Age of Absolutism. Students will be required to read in-depth primary sources, as well as tackle historical thinking skills on a deeper level. This course will prepare students for the rigors of the Advanced Placement World History: Modern course offered in sophomore year. Students will be accepted into the course based on their NYS scores, the TACHS exam, and the FH English placement exam.

Credit: 1

### **Global History & Geography 10**

**Grade 10**

**220**

This course begins with a brief focus on the early 1700's and 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 New York State Regents examination is required.**

Credit: 1

### **Advanced Placement World History: Modern**

**Grade 10**

**250**

This course will begin in 1200 CE with a study of the civilizations in Africa, the Americas, and Asia that are foundational to the modern era. The course content is structured around the investigation of five course themes in different chronological periods. Students will use critical and interpretive skills, as well as examine and analyze historical issues from a "big picture" perspective.

**Prerequisite: Teacher recommendation. Must exhibit strong academic performance and work ethic. The AP Exam and Regents Exam are mandatory.**

Credit: 1

### **United States History & Government**

**Grade 11**

**230**

This course begins with the colonial and constitutional foundations of the United States and explores the government structure and functions provided 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 20<sup>th</sup> century, and the Cold War. Students explore the expansion of the federal government, evolving social beliefs and behaviors, and the nation's place in an increasingly globalized and interconnected world.

**The New York State Regents examination is required.**

Credit: 1

**Advanced Placement United States History****Grade 11****240**

This Advanced Placement course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. The course is in line with college and university United States History survey courses. Students are required to take the Advanced Placement exam in May and the United States History and Government Regents in June. A summer assignment is to be completed and submitted on the first day of class.

**Prerequisite: Teacher recommendation. Must exhibit strong academic performance and work ethic. The AP exam and Regents exam are mandatory. St. Joseph's Credit Available.**

Credit: 1

**Introduction to Economics****Grade 12****248**

This course examines the principles of the United States free market economy and its history within a global context. Students will analyze the role of supply and demand in determining the prices individuals and businesses face in the product and factor markets. Students will explore the role of entrepreneurs in our economy and participate in an interactive project, using Google Apps for Education. Students will also explore the challenges facing the United States free market economy and various policy-making opportunities available to government to address these challenges through discussion of current events as they relate to economic theory. Students will examine their individual responsibility for managing their personal finances.

Credit: ½

**Participation in Government and Civics****Grade 12****246**

This course examines the foundations of our American democracy, calling attention to the importance of voting and other methods of participation in government and civic life. All levels of government are encompassed within the course affording the opportunity to utilize local resources. It is designed to give students the understanding of how and why certain actions are taken and the impact of these actions on their personal lives.

Credit: ½

**Street Law and Modern Politics****Grade 12****244**

Students will explore the topics of law that are particularly relevant to their lives and examine the current political landscape. The Street Law section of the course introduces students to the basics of the legal system, ethics, criminal law and juvenile justice, torts, consumer and housing law, family law and individual rights and liberties. Modern Politics will discuss the history, thought and debate of contemporary politics, preparing them for a more active and educated citizenship.

Credit: 1

## **Advanced Placement Psychology**

**Grade 12**

**241**

This course introduces students to the systematic and scientific study of human behavior and mental processes. Students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological basis of behavior, sensation, and perception. They will also consider learning and cognition, motivation, testing, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

**Prerequisite: Teacher recommendation. Must exhibit strong academic performance and work ethic. The AP Exam is mandatory.**

Credit: 1

## WORLD LANGUAGE DEPARTMENT

Fontbonne Hall requires 3 years of study in a Language Other Than English (LOTE). However, a fourth year of study is strongly recommended.

**Level 1 – Italian** **Grade 9** **312**

**Level 1 – Spanish** **314**

Level 1 of a language is designed to give the beginning student pronunciation, grammar, syntax, and listening comprehension in the target language. Basic everyday conversation, requesting and providing information related to daily life are practiced. Grammar will stress verbal conjugations enabling students to express information in the present, past and future tenses. A basic cultural awareness of the target language is inaugurated.

Credit: 1

**Level 2 – Italian** **Grade 10** **322**

**Level 2 – Spanish** **324**

In these courses more complex structural patterns are offered with continued emphasis on pronunciation and comprehension. Reading, writing, and conversational skills are further developed through the use of brief stories and compositions and assigned topics concerned with everyday situations. Verbal conjugation is expanded to include the descriptive past. Cultural awareness is continued.

**Prerequisite: Level 1**

Credit: 1

**Introduction to Latin (Elective)** **Grade 10** **316**

This is a one-year course for beginners in Latin which provides the basic knowledge of the essential Latin forms, grammar, syntax, and vocabulary from which so many English words derive. This aspect of the course will lead to an increased understanding of how Latin and English function, and therefore help our students prepare for the SAT and ACT. Also, in a highly interactive learning setting the course offers a general introduction to Roman history and culture through text analyses by classical authors.

Credit: ½

**Level 3H – Italian** **Grade 10** **333**

**Level 3H – Spanish** **335**

This is an accelerated course that covers topics in preparation for the Alternate Language Exam that students will take in June. The course offers more complex grammatical and conversational patterns. Students will practice more advanced listening, speaking, reading and writing skills.

**Prerequisite: Teacher recommendation.**

Credit: 1

**Level 3 – Italian** **Grade 11** **332**

**Level 3 – Spanish** **334**

Students learn to use the conditional and subjunctive as well as grammatical structures studied previously for:

1. Reading comprehension for information as well as pleasure.
2. Impromptu conversation using listening and speaking skills.
3. Original written expression in the form of compositions.
4. Alternate Language Exam preparation.

Cultural study is continued in a multi-media approach.

Credit: 1

<b><u>Level 4H – Italian</u></b>	<b>Grade 11</b>	<b>343</b>
<b><u>Level 4H – Spanish</u></b>		<b>354</b>

Students will further strengthen their foundation in grammar and syntax. Readings, conversations and written assignments will be based on some of the major language authors. Students will use appropriate vocabulary and learn ways to address different audiences. The successful completion of the course will lead students into college-level study in senior year. Students are required to complete a summer reading assignment.

**Prerequisite: Teacher recommendation.**

Credit: 1

<b><u>Level 4 – Adv. Italian Conversation &amp; Culture</u></b>	<b>Grade 12</b>	<b>342</b>
<b><u>Level 4 – Adv. Spanish Conversation &amp; Culture</u></b>		<b>344</b>

This course is an advanced conversation and composition course designed for students who wish to perfect their language skills. Grammar, conversation, written assignment, and reading based on the works of several major authors from Italy, Spain and Latin America.

**Qualifying students may take the course for St. John’s University credit.**

**Students pursuing the St. Joseph’s College Child Study Pathway can take this class for college credit, (Spanish only)**

Credit: 1

<b><u>AP Italian</u></b>	<b>Grade 12</b>	<b>352</b>
<b><u>AP Spanish</u></b>		<b>364</b>

The aim of this course is the perfection of all the skills requisite to the mastery of the target language, namely reading, writing, listening and speaking. The course is conducted in the target language. Students gain in depth knowledge of the language with regards to grammar, literature, culture and current events through a wide spectrum of classroom activities. Furthermore, students will be encouraged to interpret within the appropriate cultural context spoken and written communication by examining movies, texts, radio and television broadcasts and speeches. Students are required to complete a summer reading assignment.

**The AP Exam is mandatory.**

**Prerequisite: Teacher recommendation.**

Credit: 1