

# **JOHN JAY HIGH SCHOOL**

## **COURSE DESCRIPTION GUIDE 2023 –2024**



Cover by Albert Manes

# **Katonah-Lewisboro School District**

## **John Jay High School**

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Dear John Jay High School Students and Families:

This Course Description Guide will direct you as you create a schedule for the coming school year and beyond. The choices you make with the support of your teachers and your counselor are critical to your success now and in the future.

You will have the opportunity to develop both a short and a long-term educational plan for high school with your counselor. This is a valuable exercise that we recommend to you.

While some courses are required for graduation, you will have an opportunity to select classes based on your emerging interests and goals. Be sure to engage in conversations with your teachers, counselors, families, and friends as you make your selections. All students are encouraged to take the most rigorous course offerings to ensure college and career readiness.

We look forward to learning about and supporting your choices.

Steven T. Siciliano, Ed.D.  
Principal

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Course: Photo & Filmmaking 4

The Board of Education, its officers, employees and agents, shall not discriminate against any student, employee or applicant on the basis of race, color, creed, gender, national origin, religion, age, economic status, marital status, military status, disability, sexual orientation (actual or perceived), gender identity, or genetic predisposition or carrier status in its educational programs or employment practices.

# GRADUATION REQUIREMENTS

The Board of Education awards a diploma based upon the successful completion of an approved course of study.

## DISTRIBUTION OF CREDITS

English	4.0
Social Studies Distributed as follows:	4.0
• US History (1)	
• Participation in Government (1/2)	
• Economics (1/2)	
• Other (2)	
○ Students entering grade 9 in 2016 must earn 2 credits in Global History and Geography	
Science Distribution as follows:	3.0
• Life Science (1)	
• Physical Science (1)	
• Life Science or Physical Science (1)	
Mathematics	3.0
Language Other than English (LOTE)	1.0*
Visual Art, Music, Dance, and / or Theater	1.0
Physical Education	2.0
Health	0.50
Electives	<u>3.50</u>
Total Credits	22.00

\*Students with disabilities may be exempt from the LOTE required credit if so indicated on their IEP.

- A student must earn a minimum of 22 high school credits in order to receive a diploma.
- Physical education is required at each grade level and counts as 0.50 credit each year of high school.
- Each student is expected to carry a minimum of 5 courses each semester plus physical education.
- A student, who pursues an accelerated course of study, which enables him or her to complete high school level work prior to entering ninth grade, will be granted high school credit.

## Regents Examinations:

The New York State Education Department requires that students successfully pass certain Regents examinations in order to graduate from high school with a Regents Diploma. Most students at John Jay High School will take the following Regents Exams:

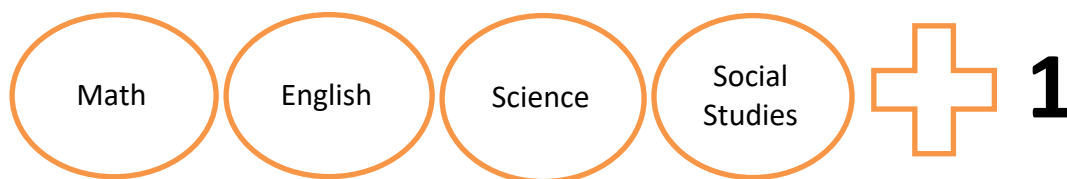
- English Language Arts (11<sup>th</sup> grade)
- Algebra 1 (8<sup>th</sup> or 9<sup>th</sup> grade)
- Geometry (9<sup>th</sup> or 10<sup>th</sup> grade)
- Global History and Geography (10<sup>th</sup> grade)
- United States History (11<sup>th</sup> grade)
- Earth Science (8<sup>th</sup> or 9<sup>th</sup> grade)

## Multi-Pathways to Graduation

In January of 2015, the Board of Regents approved regulations establishing multiple, comparably rigorous assessment pathways to graduation for all students. Under the new “4+1” pathway assessment option, students must take and pass four required Regents exams or department approved alternative assessments (one in each of the following subjects: English math, science and social studies) and a comparably rigorous assessment for the fifth required exam to graduate. The fifth assessment required for graduation may include one additional Regents examination in a different course in mathematics, science, or social studies.

### **PATHWAYS 4 + 1**

All students must pass 4 required Regents Examinations:  
One in each discipline:



### **Pathways:**

Science Regents

Social Studies Regents

Math Regents

CTE

### **Local / Regents Diploma - Appeal**

Students who have taken and passed certain courses in preparation to take a Regents examination and have a 65 course average, but whose highest score on the Regents examination is below but within five points of the 65 passing score (60-64), may appeal to graduate with a local or Regents diploma using this lower score. Students who are granted one appeal from their local school district under this provision shall earn a Regents diploma. Students who are granted two appeals under this provision shall earn a local diploma. Through this appeal, the student seeks a waiver of the graduation assessment requirement in this subject area.

#### **ALL STUDENTS - APPEAL**

<b>Regents Exam or passing score on a Dept. App. Alt.</b>	<b># of Exams</b>	<b>Passing Score</b>
English Language Arts (ELA)	1	2 exams with a score of 60-64 for which an appeal has been granted by the district and all other required exams with a 65 or greater
Math	1	
Science	1	
Social Studies	1	
Pathway	1 or CDOS	
Compensatory Safety Net	Not Applicable	

## Students with a Disability - Appeal

Students with disabilities, who have taken and passed courses in preparation to take a Regents examination and have a 65 course average, but whose highest score on the Regents examination is below but within three points of 55 passing score (52-54), may appeal to graduate with a local diploma using this lower score. Through this appeal, the student seeks a waiver of the graduation assessment requirement in this subject area.

### STUDENTS WITH A DISABILITY – LOW PASS SAFETY NETS - APPEAL

Regents Exam or passing score on a Depart. App. Alt.	# of Exams	Passing Score
English Language Arts (ELA)	1	55*
Math	1	55*
Science	1	55*
Social Studies	1	55*
Pathway	1 or CDOS	55* (if Regents exam)
Compensatory Safety Net	Scores of 45-54 on any required Regents exam (except ELA and Mathematics) can be compensated by a score of 65 or above on another required Regents exam including ELA and Mathematics.	

\*Students with a disability seeking the local diploma through the low pass safety-net may appeal scores of 52-54 on up to two (2) Regents Examinations.

# **COURSE DESCRIPTION OVERVIEW**

The information on the following pages briefly describes the courses that will be offered for the next school year. This should help you in selecting courses and planning your program for next year. All students are required to carry five courses plus physical education each marking period. Each course description will list the basic heading, course title, grade level, prerequisites, and credit. The availability of a course is conditional on enrollment and budgetary considerations.

## **Advanced Placement**

Advanced Placement classes offer students the opportunity to complete college level work while in high school. Operating internationally, the program is comprised of challenging curricula in several disciplines designed under the direction of The College Board.

The student taking Advanced Placement classes is self-starting, possesses disciplined work habits, evidences promise of success in the subject, and would like to include Advanced Placement work as part of his or her high school record. Students should discuss the Advanced Placement curricula with teachers and counselors in order to develop an appropriate and balanced program. Students registered for AP courses are expected to take the AP exam. Please note: Students who do not take the AP exam will have the course designation changed from AP to Honors.

## **GPA and Weighted Courses**

Honors and Advanced Placement Courses are weighted with an additional five points when factored into the cumulative Grade Point Average. The actual grade earned will appear on the transcript. For example, a 90 in an honors or Advanced Placement Course will show as a 90 but will be counted in the overall GPA as a 95.

## **College Affiliated Courses**

Students who complete the requirements for Science Research Honors or AP Environmental Science may be able to earn college credit through the University in the High School Program at SUNY Albany. Students who complete coursework in Filmmaking and Animation may be able to receive college credit through Westchester Community College. Students who complete course work in Latin 4H, may be able to receive credit through Syracuse University Project Advance. Students who complete course work in BOCES New Visions in their senior year may be able to receive credit through Westchester Community College, Syracuse University, or Mercy College.

## **Alternate Ways of Earning Credit**

Students have the option of earning up to 6 ½ credits (of the 22 credits required) without completing a specific course of study if:

- a) The student achieves 85% or better on state-developed exams and passes an oral examination or completes a special project, as approved by the Principal.
- b) In the areas of science and occupational education, where credit is through examination, laboratory requirements will be met through special projects that are approved by the Principal.

Art and music credit may be earned through participation in a performing group (e.g. band, chorus, orchestra, dance group, theater group, etc.) or by participating in an advanced, out-of-school art or music activity as approved by the district. Under certain circumstances, students may receive credit for completing on-line coursework. The Principal must approve on-line study prior to enrollment in any on-line course.

## **Course Add / Drop Dates – 2022 - 2023 School Year:**

- The last day to add a full year course is: September 21<sup>th</sup>
- The last day to drop a full year course is: December 1<sup>st</sup>
- The last day to add a ½ year fall course is: September 14<sup>th</sup>
- The last day to drop a ½ year fall course is: October 14<sup>th</sup>
- The last day to drop a ½ year spring course is: March 10<sup>th</sup>

# **SENIOR INDEPENDENT EXPERIENCE**

## **(SIE)**

### **Senior Independent Experience (SIE)**

The John Jay Senior Internship / Independent Experience is an exciting program that facilitates independent learning experiences for our students in the last 4 or 5 weeks of senior year. These opportunities will include “full-time” (25 hrs/wk) internships and volunteer work overseen by site supervisors and JJHS Senior Experience advisors. Beginning as early as fall of their senior year, students will develop an idea for an internship or other opportunity and apply for the program beginning in December. In early spring, all applications and internship opportunities will be finalized. Senior Independent Experiences will begin on or around the second week in May. All SIE interns will meet weekly with their JJHS Senior Experience advisors. The culminating activity is a mandatory participation in the Senior Independent Experience Fair in mid-June.

Internship Experiences will be graded separately from academic classes using a P/F system.

# ART

Art skills are acquired; everyone can learn to draw, paint, sculpt, animate, and shoot films or photographs. The Art program offers hands-on studio experience, closely aligned to the NYS Art Standards, where students learn to express themselves creatively, solve problems and become inventive thinkers. Each art class offers students the opportunity to develop skills and knowledge in art making, art criticism, aesthetics, and art history. These valuable skills can be applied to other disciplines and fields of study.

Studio Art and Design fulfills the fine arts credit requirement for graduation and introduces students to a wide range of materials, including traditional and media technology. It is suggested that students take this class in 9th grade. Students may choose to continue this work in Studio Projects.

The four-year Fine Arts sequence is comprised of Studio Art and Design, Drawing and Painting 1, Drawing and Painting Pre AP, and Advanced Drawing/AP Drawing.

The four-year Photography and Filmmaking sequence includes Photography and Film 1-5 and AP Photography (AP 2D Art and Design). These classes offer students the opportunity to use technology to develop their creative skills, including filmmaking, animation, 35mm film, darkroom and digital photography.

The three-year Ceramics and Sculpture sequence includes Ceramics and Sculpture 1-3 and Ceramics and Sculpture 4 or AP Ceramics and Sculpture (AP 3D Art and Design).

*Each sequence prepares students with an art portfolio, which may be used for college applications in both art related and non-art related majors.*

## **Studio Art and Design (9-12)**

**1 yr 1 cr**

This is an introductory full year course for students who want experience with a variety of visual art projects and materials. Students experiment and problem-solve through hands-on choice-based projects. Topics include design, sculpture, ceramics, collage, painting and drawing techniques, and an introduction to digital media, including animation, and photography. Students learn new ways to understand and use visual language to communicate with others and express ideas. This course introduces students to a wide range of approaches to art making that are offered for further study in the Art Department. **This course fulfills the fine arts credit requirement for graduation.**

## **Studio Projects (9-12)**

**½ yr ½ cr or 1 yr 1 cr**

In this course, students learn the materials and techniques used in art studios to create original artwork in the medium of their choosing. Students develop a body of artwork based on individual interests and research. An authentic studio art experience is central to this course as students choose the materials, subjects and themes for their work.

Media choices can include painting, drawing, sculpture, ceramics, digital photography, printmaking, sewing, filmmaking, and animation. Work may be developed for a portfolio. This course does not fulfill the fine arts requirement for graduation.

### **Drawing and Painting 1 (10-12)**

**1 yr 1 cr**

Drawing and Painting 1 is a class for all interested students--from beginners to students who already have drawing confidence. Students learn skills that allow them to see the way artists see. This skill is useful in our visual world. A variety of media (colored pencil, acrylic paint, graphite, and pastels) are used to explore drawing and painting in a personal, expressive way. Emphasis is placed on individual growth and developing skills in observation along with idea generation. **Prerequisite: Credit in Studio Art and Design or Design and Draw for Production**

### **Drawing and Painting Pre-AP (11-12)**

**1 yr 1 cr**

This advanced course is for students who are interested in further exploring drawing and painting techniques. Young artists explore a variety of drawing and painting media: graphite, colored pencil and watercolor. Students will develop a personal portfolio based on inquiry while addressing the elements and principles of design, preparing students for completing an AP portfolio. Students, in discussion with the teacher may opt to prepare an AP Portfolio for the 2D Studio Art and Design exam and have the class designation changed. Art history is part of this class. **Portfolios are developed to show personal artistic growth, for applications to art school or as a supplement to college applications. Prerequisite: Credit in Drawing and Painting 1 or Architecture**

### **Adv. Drawing/Honors Drawing/AP Drawing (12)**

**1 yr 1 cr**

This course completes the fine arts sequence and builds on concepts and skills from Drawing and Painting Pre-AP. Students make work focused on creative concerns. They develop personal themes as part of an overall portfolio. Additionally, students gain experience in a wide range of compositional, conceptual and technical aspects of art making. Portfolios are for personal artistic growth and can be used for the Advanced Placement Studio Art Drawing Portfolio Review, for applications to art schools, and/or as a supplement to other college and university applications. This course has a summer assignment that includes thumbnails, drawings, journals, and research.

There are three options for this course:

**AP Drawing:** AP designation, credit. Submission for the College Board portfolio review in May is required. Teacher recommendation for the AP Art Portfolio Review is based on the student earning an 85 average in the prerequisite Drawing and Painting Two or after a discussion with student, parent / guardian, and teacher.

**Honors Drawing:** Portfolio Development - Honors designation, weighted grading

**Advanced Drawing:** Portfolio Development - A further study in drawing that emphasizes personal expression. **Prerequisite for any option: Drawing and Painting Pre AP**

### **Photography and Filmmaking 1 (9-12)**

**½ yr ½ cr**

In our world of smart phones and social media, technology and imaging play important

roles in our daily lives. In this class students will explore the medium of their choosing, including 35mm film and darkroom photography, digital photography, filmmaking and animation. They will learn to express themselves creatively using Adobe Photoshop, Lightroom, Adobe Premiere Pro and Animate and develop skills that can be applied to a wide range of professional fields. Open to all levels of experience.

### **Photography and Filmmaking 2 (9-12)**

**½ yr ½ cr**

Students further develop their skills in the medium of their choosing, including 35mm film and darkroom photography, digital photography, filmmaking and animation. Emphasis is placed on creativity and self-expression through personal projects. Students may choose to create individual websites and develop portfolios.

**Prerequisite: Credit in Photography and Filmmaking 1**

### **Photography and Filmmaking 3 (10-12)**

**1 yr 1 cr**

Students further develop their skills in the medium of their choosing, including 35mm film and darkroom photography, digital photography, filmmaking and animation. Emphasis is placed on creativity and self-expression through personal projects. Students may choose to create individual websites and develop portfolios.

**Prerequisite: Credit in Photography and Filmmaking 2**

### **Photography and Filmmaking 4, 5, AP Photography (AP 2D Art and Design) (11-12)**

**1 yr 1 cr**

**Photography and Filmmaking 4:** Students continue to pursue advanced independent work, further their technical skills and develop their personal vision and style. Students pursue individual interests and themes and develop portfolios as a means for personal artistic growth, for applications to art schools and/or as a supplement to college and university applications. Students may choose to create personal websites.

**Prerequisite: Credit in Photography and Filmmaking 3**

**AP Photography (AP 2D Art and Design):** AP designation, credit. This course is a year-long, college level exploration of photography and the principles of design. Submission to the College Board portfolio review in May is required. This course has a summer assignment that includes shooting photographic images, journal writing and research.

**Prerequisite: Credit in Photography and Filmmaking 3**

**Photography and Filmmaking 5:** Students continue to pursue advanced independent work, further their technical skills and develop their personal vision and style. Students pursue individual interests and themes and develop portfolios as a means for personal artistic growth, for applications to art schools and/or as a supplement to college and university applications. Students may choose to create personal websites.

**Prerequisite: Photography and Filmmaking 4 or AP Photography**

**Ceramics and Sculpture 1 (10-12)****½ yr ½ cr**

This course offers an opportunity for students to create three-dimensional art. Students use design principles and solve visual problems to create both useful and sculptural forms in clay. They learn ceramic techniques such as coil, slab, pinch, hand building and throwing on the pottery wheel. Students learn about contemporary ceramic and sculpture artists.

**Ceramics and Sculpture 2 (10-12)****½ yr ½ cr**

Students further develop skills and techniques to create three-dimensional forms and may choose from a variety of media including clay, wood, plaster, wire, fiber, chip board and found objects. Students learn about contemporary sculptors and ceramic artists.

**Prerequisite: Credit in Ceramics and Sculpture 1**

**Ceramics & Sculpture 3 (11-12)****1 yr 1 cr**

Students in this course pursue advanced, independent work. They develop a deeper understanding of the elements and principles of design and explore a variety of techniques, concepts and approaches to creating three-dimensional artworks. Students design their own projects and are encouraged to develop their individual visions. Students may choose to work on college portfolios.

**Prerequisite: Credit in Ceramics and Sculpture 2**

**Ceramics and Sculpture 4/AP Ceramics and Sculpture (AP 3D Art and Design) (12)****1 yr 1 cr**

In the final course in the sequence students continue to pursue advanced, independent work. Students have the option to take this course either as Ceramics and Sculpture 4 or AP Ceramics and Sculpture (AP 3D Art and Design).

**Ceramics and Sculpture 4**

Students explore three-dimensional forms and design principles through a variety of techniques and approaches. Students further their skills in developing concepts, creating strong compositions and executing their designs and ideas. Students pursue individual interests and themes as part of an overall portfolio. They develop portfolios as a means for personal artistic growth, for applications to art schools and/or as a supplement to college and university applications. Students learn about contemporary sculpture and ceramics and develop their critique skills.

**AP Ceramics and Sculpture (AP 3D Art and Design)** AP designation credit

This course is a year-long, college level exploration of three-dimensional art and the principles of design. Submission to the College Board portfolio review in May is required. This course has a summer assignment that includes 3D projects, journal writing and research.

**Prerequisite for either option: Credit in Ceramics and Sculpture 3**

# ART

**Studio Art & Design**  
**9-12**  
**Fulfills Fine Arts**

Ceramics and  
Sculpture 1  
Ceramics and  
Sculpture 2  
10-12

Drawing and  
Painting  
1  
10-12

Ceramics and  
Sculpture 3  
11-12

Drawing and  
Painting  
Pre AP  
AP 2D Art  
11-12

Ceramics and  
Sculpture  
4/AP 3D  
Ceramics and  
Sculpture  
12

Advanced  
Drawing /  
AP Drawing  
12

Studio Projects  
1  
Studio Projects  
2  
9-12

Studio Projects  
3  
Studio Projects  
4  
11-12

Photography and  
Filmmaking 1  
Photography and  
Filmmaking 2  
9-12

Photography and  
Filmmaking 3  
10-12

Photography and  
Filmmaking  
4/5/AP  
11-12

*Other pathways may be possible. Please discuss all options with your Art teacher or school counselor.*

# **BUSINESS & TECHNOLOGY**

The Business and Technology Education program provides significant hands-on learning experiences that offer a glimpse of the world of work. Each course integrates computer technology in ways that are authentic to the area of study.

## **BUSINESS**

### **Business Dynamics (9-12)**

**1 yr 1 cr**

Business Dynamics is an introductory course which explores the topics of advertising, consumer purchasing, and entrepreneurship. Students learn financial management skills with topics that include budgeting, credit cards, and investing through hands-on projects and business simulations. Real-world case studies that focus on famous entrepreneurs and current business trends are also explored.

### **Business Law (10-12)**

**1 yr 1 cr**

This course applies the law to our everyday lives and business activities. Topics include different courts, court procedures, legal rights, and obligations. It covers contract law as it pertains to sales, employment, using loans, starting a business, and looking toward the future. Emphasis is on consumer protection, how to avoid legal entanglements and developing strategies for a winning verdict.

### **Accounting (10-12)**

**1 yr 1 cr**

This course is recommended for students pursuing a major in any business field (Accounting, Marketing, Finance, or Business Administration). Past graduates have reported that this course helped prepare them for their college courses in business. This introductory accounting course focuses on current business and accounting practices including the preparation, interpretation, and use of financial information.

### **Marketing 1 (11-12)**

**½ yr ½ cr**

This course introduces the basic principles of marketing through hands-on projects and simulations. Starting with the retail industry, you will use simulations and authentic projects to learn the four P's of marketing (Product, Price, Place and Promotion). You will learn why stores are located where they are, how stores decide to price products and when to use different promotional/marketing strategies while managing a grocery store, a sporting goods store, and an electronics store. Each type of retail business highlights different products and types of selling that will make your business profitable. Next, you will apply these business skills to marketing in the fashion industry and learn all the aspects of fashion marketing as it pertains to the fashion industry. Topics include how to use trend research and how to apply design strategies to create and merchandise in a fashion retail store while also learning about the exciting world of fashion.

**Marketing 2 (11-12)****½ yr ½ cr**

This course is a continuation of Marketing 1. The focus of this semester is to learn about the Sports and Entertainment industry and then apply your knowledge as you become an entrepreneur in a business of your choice. Using the skills learned in Marketing 1, you will learn the hard business decisions that go into providing sports and entertainment to the public. This includes creating promotions, pricing tickets and concessions for different events, stadium operations and staffing. As a culminating project, you will become an entrepreneur in a business of your choosing. You will learn how to get funding from investors and banks and pitch your idea to your classmates as you start and run your own business.

**Prerequisite: Marketing 1**

**TECHNOLOGY****Computer Science 1 (9-12)****½ yr ½ cr**

Today, learning computer science is more important than ever. In any career you decide to pursue, you will encounter computer science in some way. This course is designed for students who want to learn how to program in an engaging environment. You will learn problem-solving strategies, software design, and the foundations of computer science using the Python programming language. After students learn the basics of programming, engaging programming projects are completed to reinforce the skills learned. Computer Science 1 is designed as an exploratory course for students interested in computer science, math, or engineering careers.

**Computer Science 2 (9-12)****½ yr ½ cr**

This course is a continuation of Computer Science 1, where you will learn more advanced programming topics in Python. At the end of this course, you will be prepared to take on the challenge of a more advanced computer science course. You will learn how to think like a scientist and solve real-world problems by gaining skills that are important to every 21st-century citizen. Computer Science 2 is designed as an intermediate course in programming for those interested in computer science, math, or engineering careers.

**Prerequisite: Computer Science 1**

**AP Computer Science Principles (10-12)****1 yr 1 cr**

Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drives the world. This course introduces foundational concepts of computer science and explores how computing and technology can impact the world. The focus of this course is on creative problem solving and real-world applications. As part of the AP requirement, students complete one performance task during the year and complete the AP Computer Science Principles Exam in May.

**Pre-requisite: Successful Completion of Algebra 1.**

**AP Computer Science A (11-12)****1 yr 1 cr**

This course uses the Java programming language to teach advanced computer science topics. The topics emphasize object-oriented programming methodology with an emphasis on problem solving, algorithm development, data structures and abstraction. This course is equivalent to a first semester college course in computer science. Students will take the AP Computer Science A Exam in May.

**Pre-requisite: Completed or Enrolled in Algebra 2.**

**Recommended: Computer 2 or AP Computer Science Principles or permission from instructor.**

**Design and Drawing for Production (9-12)****1 yr 1 cr**

Design and Drawing for Production encourages visual problem solving using a common graphic language to describe forms in the man-made environment. This course teaches students how to analyze, creatively design, and critically evaluate these forms. Students will be given different design problems whereby they will present a solution through design, drawing and modeling exercises. Students will learn different design and drawing methods that are implemented for worldwide industrial communication and how it is an integral step in the process toward product design and production. Students will learn how to draw using drafting tools as well as computer aided design (CAD) and modeling software. Model building will also be explored to help students develop an ability to analyze and demonstrate an understanding of three-dimensional forms in space. **This full year course can be used to fulfill the fine arts credit requirement for graduation.**

**Architecture 1 (10-12)****½ yr ½ cr**

Architecture I is an introductory course for students who want to learn about drawing and planning the design of buildings. In this project-based course, students will work with drawing boards, T-squares, and CAD (computer aided design) software to learn the fundamentals and rudiments of design, such as drawing plans and elevations at a chosen scale.

**Architecture 2 (10-12)****½ yr ½ cr**

Architecture II is a follow up and continuation of Architecture I. Students learn about famous architects and what they brought to the field of architecture. They will practice drawing floor plans, elevations, perspectives, site plans and sections of simple structures. **Prerequisite: Credit in Architecture 1.**

**Architecture 3 (11-12)****1 yr 1 cr**

Third level architecture students will learn how to read and construct a drawing set. Students design a full set of original house plans consisting of a cover sheet, site plan, floor plans, roof plan, and exterior elevations. **Prerequisite: Credit in Architecture 1 & 2.**

**Architecture 4 (11-12)****1 yr 1 cr**

Completing the sequence, the fourth-year student will extend their portfolio into CAD, design, cost, architectural styles, and construction. This course is for the serious architecture or engineering student who needs to produce an exit portfolio to enter higher education or seek employment. This portfolio will consist of their 3-year Architectural body of work and include a written reflection of their experiences. Prerequisite: Credit in Architecture 1, 2 & 3.

**Principles of Engineering (10-12)****1 yr 1 cr**

Principles of Engineering is an elective course that will explore engineering and sustainability concepts using hands-on projects. Students will apply science and math concepts utilizing the engineering design process in projects focused on the fields of mechanical, electrical, and sustainability engineering. An example might include designing and building a hydroponic system to grow produce year-round. Students will develop skills in 3D CAD, soldering, electrical circuitry, 3D printing and laser cutting.

**Entrepreneurship in Robotics 1 (11-12)****1 yr 1 cr**

This course is offered to students interested in pursuing careers in software development, engineering, and product marketing. Emphasis will be placed on developing 21<sup>st</sup> century skills of teamwork, problem solving, project management and communication. During the 1<sup>st</sup> half of the year, students will design, build, and program a robot to compete in the US First Technology Challenge making them eligible to receive scholarships from a pool of \$30,000,000 from 200 different colleges and Universities. During the 2<sup>nd</sup> half of the year, students will complete a manufacturing engineering project requiring the use of a commercially available CAD package, write programs to control an autonomous robot, invent a product that requires automation, and investigate sources to fund a robotics development effort.

**Entrepreneurship in Robotics 2 (12)****1 yr 1 cr**

This course is offered to students interested in the fields of software development, engineering, robotics, and automation who have already taken Entrepreneurship 1. Students will delve deeper into the field of robotics and automation.

# BUSINESS & TECHNOLOGY

## 9-12

### Business Education Electives

Business Dynamics  
9-12

Accounting  
10-12

Business  
Law  
10-12

Marketing  
1 & 2  
11-12

### Technology Education Electives

Computer  
Science  
1 & 2  
9-12

AP Computer  
Science  
Principles  
10-12

AP Computer  
Science A  
11-12

Design & Drawing for  
Production  
9-12

Architecture  
1 & 2  
10-12

Architecture  
3  
11-12

Architecture  
4  
11-12

Principles  
Of  
Engineering  
10-12

Entrepreneurship  
In Robotics 1  
11-12

Entrepreneurship  
In Robotics 2  
12

# **ENGLISH**

The English Program requires the successful completion of concentrated study in language, literature, composition, and communication. Students are required to pass the State Regents Examination in order to earn a JJHS diploma. Students who have not passed this exam upon entering their senior year will be offered Academic Intervention Services (AIS) to help them prepare for the exam.

## **9<sup>th</sup> GRADE ENGLISH**

### **English 9**

**1 yr 1 cr**

English 9 integrates the strands of reading, writing, speaking, and listening. The course explores varied genres of literature from around the world. Throughout the year, interdisciplinary approaches are incorporated, and students engage in the reading of literature that connects with the Social Studies 9 study of world history pre-1750. Students are challenged to find meaning through the reading of texts and use a variety of speaking forums to demonstrate learning. Writing is explored in all its modes: reflective, narrative, expository, and creative. Reading and discussion are essential to the course.

## **10<sup>th</sup> GRADE ENGLISH**

### **English 10**

**1 yr 1 cr**

This course continues the study of World Literature focusing on our individual role in the global community. Students will continue to read varied genres of literature, often connected to world history or relevant themes from 1750 to present. The aim of this study is to examine the writer as a social critic in order to increase social awareness of revolution, resistance, complicity, and cultural awareness. The course introduces students to rhetoric and the art of persuasion. Students will use a variety of discussion forums to respond to literature and each other's ideas. Formal and informal writing will be used in a variety of reflective, narrative, expository, argumentative and creative forms.

## **11<sup>th</sup> GRADE ENGLISH**

### **21-11 The English Experience in the 21<sup>st</sup> Century**

**1 yr 1 cr**

21-11: The English Experience is a class that offers integrated, experiential learning for both College-bound and Honors/AP students. The class is anchored in critical inquiry where students address questions such as: "What is the nature of evil?" "Why do humans engage in war?" "How does one form a personal identity?" "What is happiness?" "How is the future shaped by the past and the present?" Although 21-11 has a traditional focus on reading and writing skills, the class emphasizes independent choices and independent research supported by exploratory learning and project-based, interdisciplinary study. All students investigate each unit's essential question and share

some common learning experiences; however, as students explore each essential question, they make choices to complement and enhance their learning: choices of novels, plays, poetry, short fiction, and nonfiction. Assessments include not only the traditional essay work required of an 11th grader, but also frequent presentations and opportunities for other creative assessments of understanding (film making, script writing, web design, for example). Students enrolled in 21-11 can opt for an Honors designation (21-11 Honors) by completing additional reading and writing assignments. **Students will be required to take the New York State English Regents in June.**

### **English 11: Journalism and the Art of the Narrative**

**1 yr 1 cr**

Understanding narrative – both fictional and nonfictional – is a cornerstone of student literacy. This English course explores fiction, and expository and narrative nonfiction, including film, in order to deepen students' ability to read, analyze, and write with accuracy, clarity and coherence. In addition to examining full-length fictional works, students will read and analyze works of nonfiction, including award-winning journalism and new and evolving media. While they will strengthen their ability to write academic essays, students also will learn to frame ideas, and develop fluency in, and understanding of, a variety of nonfiction forms, including traditional news, profiles, features and opinion. The course will address such essential questions as: How do you tell a true war story? What are the responsibilities of bearing witness? How is writing deepened when the author is immersed in someone else's world? How does nonfiction read like fiction? How do writers use the art of fictional storytelling and reported fact to create great nonfiction? Students enrolled in this course can opt for an Honors designation by completing additional reading and writing assignments in class and showing a commitment to writing outside of class, i.e., writing for the school newspaper. **Students will be required to take the New York State English Regents in June.**

### **Advanced Placement English Literature & Composition (11-12) 1 yr 1 cr**

The goal in AP English Literature and Composition is to create an environment in which students engage in challenging reading, thoughtful analysis, critical debate, and informed, analytical writing. Starting with early literature and moving through such greats as Homer, Sophocles, Shakespeare, Milton, Dickens, and Dostoevsky to contemporary literature, our focus will include study of works of recognized literary merit from various genres and time periods. The essential questions guiding our work for the year will be to consider how artists (in this case, authors) use their medium (texts) to engage readers in "conversations" about human nature, about our societies and social constructs, and, ultimately, about our place and role in the universe. Successful AP students are usually self-motivated and disciplined and usually have the recommendation of their current 10th grade teacher and at least a 90 average in the class. **Students will be required to take the New York State English Regents in June.**

## 12<sup>TH</sup> GRADE ENGLISH

All students in grade 12 are required to take one full credit of English. The following guidelines may be helpful as you make your choices:

- Some students will want to enroll in two of the semester-length courses being offered. These courses are designed to appeal to the interests of seniors while at the same time providing the kinds of college preparatory experiences that are essential for seniors.
- The AP Literature and Composition and AP Language and Composition courses are offered to those students wishing to study at the college level.
- Modern American Culture and Senior Research Seminar in Environmental Education offer students the opportunity to explore contemporary culture (MAC) and issues related to the environment (Research Seminar) in two ways. Both courses are comprised of academic study and internships and field research. A student seeking a combination of college level reading and writing and hands-on experiences may find that one of these courses fits his or her needs.

The opportunity to enroll in more than one credit of English in grade 12 will be contingent upon enrollment and available staff.

### **English 12: Social and Theoretical Criticism in the Serial Narrative 1 yr 1 cr (The Series)**

Since the eighteenth century, the serialization of stories has changed the context and contours of how we tell our tales. Today, websites like Netflix, Hulu, and HBO Go have also contributed their piece to the experience by placing the narratives neatly into our very palms. This senior elective will examine how the series reflects, shapes, and impacts our perspectives, our values, and our fears. In short, we will strive to understand what these narratives say to us about us. We will examine and analyze cinematic and narrative techniques, and also evaluate how, thematically, stories comment on our culture identities. Students will be responsible for writing two formal responses per quarter and must be active participants in student-led discussions. .

### **Facing History and Ourselves: Achieving Social Justice in 1 yr 2 cr the 21<sup>st</sup> Century (1 credit in Social Studies and 1 credit in English)**

The goal of this course is to engage students of diverse backgrounds in an examination of racism, prejudice, and antisemitism in order to promote the development of a more humane and informed citizenry. Students will explore issues facing 21st century America through engaging discussion and meaningful analysis of primary documents, literature, and contemporary media. Topics will focus on historically marginalized groups and systems of oppression. The course invites a range of informed perspectives. As a senior, your internship will reflect engagement in a range of civic action. This elective is team-

taught by members of the Social Studies and English departments. Students enrolled in Facing History can opt for an Honors designation (Facing History Honors) by completing additional reading and writing assignments. **This course also meets the New York State Participation in Government requirement for seniors.**

### **Modern American Culture (English & Social Studies) 1 yr 2 cr**

Modern American Culture is an interdisciplinary course designed to explore contemporary American life. Students investigate this topic through readings in fiction and nonfiction, film, analysis of popular media, research and field experience, exploring possible answers to these guiding questions: What does it mean to be an American today? Who succeeds in America? Who doesn't succeed in America? In addition, the course includes two shadowing days, and a senior internship requirement to be completed in the spring semester. The course allows students to explore areas of their own interest, as well as the common themes addressed by the entire class. Students are encouraged to seek new ways of obtaining information, including off-campus research assignments. Because of the tremendous responsibility involved, the best candidate for the course is the student who has no difficulty working independently, or in a group and is enthusiastic about contributing to an exciting learning environment. This course emphasizes lifelong intellectual development. Participants in the course extend their skills in reading, writing, listening, and speaking, as they identify and address cultural topics and issues in assignments designed for the individual and the group. While the content of the course is driven by specific guiding questions, participants are required to contribute to the academic life of the course by taking active part in discussions about the direction of the curriculum and related topics. Students enrolled in MAC can opt for an Honors designation (MAC Honors) by completing additional reading and writing assignments. **This course has a required summer assignment and meets the state Participation in Government requirement.**

### **Advanced Placement English Literature & Composition (11-12) 1 yr 1 cr**

The goal in AP English Literature and Composition is to create an environment in which students engage in challenging reading, thoughtful analysis, critical debate, and informed, analytical writing. Starting with early literature and moving through such greats as Homer, Sophocles, Shakespeare, Milton, Dickens, and Dostoevsky to contemporary literature, our focus will include study of works of recognized literary merit from various genres and time periods. The essential questions guiding our work for the year will be to consider how artists (in this case, authors) use their medium (texts) to engage readers in "conversations" about human nature, about our societies and social constructs, and, ultimately, about our place and role in the universe. Successful AP students are usually self-motivated and disciplined and usually have the recommendation of their current 11th grade teacher and at least a 90 in the class.

### **Advanced Placement English Language & Composition (seniors only)**

**1 yr 1 cr**

Rhetoric is the art of influence, friendship, and eloquence, of ready wit and irrefutable logic. And it harnesses the most powerful of social forces, argument. Argument surrounds you and rhetoric serves as argument's decoder (Jay Heinrichs). An AP English

Language and Composition course engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. The writing and reading should make students aware of the interactions among a writer's purpose(s), audience expectations and subjects as well as the methods used to convey effectiveness. The purpose of this course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers.

Students will:

- Be expected to be active participants in the shaping of the knowledge produced by the class. Conducted as a seminar course, it will be a classroom in which we can argue freely and come to our own conclusions; in which we will encourage creativity and imagination; and in which we will set no high priority on conformity of thinking or reaching consensus.
- Analyze and interpret a range of American literature and shorter articles, identifying and exploring an author's use of rhetorical strategies and techniques.
- Apply effective strategies and techniques in their own writing while synthesizing various sources to craft an informed and logical argument.

### **English 21-12:**

**1 yr 1 cr**

English 21-12 is an exploration of who we are, what we value, what we aspire to be. It is a course that will use texts from multiple media, voices, cultures, and genres to challenge us to grow as writers and readers of the world. This is a course for the restless. It is for those who seek to question and challenge. It is for those who have always loved English class. And it is a place for those who have never found anything in an English class worth their time, even though they suspect it is integral to their success outside of JJHS. Here, we will work collaboratively to create an experience worth coming to every single day—an experience relevant and enriching. So, therefore, titles TBD is based upon who walks through that door. Sign up for English 12 to learn independence and the value of building something great with others.

### **English 12: Literary Analysis and Creative Writing**

**1yr 1 cr**

With the goal of producing high-quality creative pieces, students in this course will study four genres of writing: short fiction, poetry, creative non-fiction, and screenwriting. Starting with the earliest oral storytelling, folktales, and mythic traditions, we explore the unifying structures of storytelling to write and direct a film that retells an old story through a modern lens. We read poets from Sappho to Wallace Stevens to Tracey K Smith to the consider the power of a well-chosen word, build a toolkit full of poetic devices, and ultimately produce our own poetry chap books. Our short story unit explores the work of canonical greats like Anton Chekov and Flannery O'Conner, as well as contemporary writers like Alice Munro, George Saunders, and Ken Lui. Our creative non-fiction unit starts with Joan Didion and ends with popular celebrity memoir, as models for how to tell stories about our own experiences. For the final project, students

choose their own genre: writing and directing a short play, writing songs for an album, or returning to their favorite genres from our studies. By the end of the year, students will have a portfolio of writing that memorializes their creative life during their senior year. Students who opt for this course should be aware that they will be expected to participate in class discussions about published texts, to participate in workshop sessions for classmates' writing, and to submit their own pieces for feedback in the workshop. Students will be evaluated on the quality of their contributions to the workshop, as well as their creative work. Students enrolled in this course can opt for an Honors designation by completing additional reading and writing assignments.

### **Senior Research Seminar in Environmental Studies (Wilderness) 1 yr 1 cr**

(English 1 credit and Social Studies 1 credits)

Senior Research Seminar in Environmental Studies is an interdisciplinary course offering credits in Social Studies and English. The primary theme of this course is the restoration of our relationship to land. Through regular fieldwork and hiking at the Ward Pound Ridge Reservation, students will experience the outdoors and study the historical impact of human habitation on their natural surroundings. They will learn about local history, flora & fauna as well as many wilderness skills such as herbal medicine and edible plants, how to make pine bark containers and willow branch baskets, & primal fire making. We spend most of our class time drawing on the wisdom of both indigenous and scientific knowledge to determine the best path towards sustainability. Throughout the year, students will refine their academic skills and deepen their understanding of the environment through a process of guided readings, research, writing, presentations, and seminar discussions intended to develop both creative and scholarly thinking. This course meets the state Participation in Government requirement and is for seniors only.

## **Humanities Research Program**

### **Humanities Research 1 (Honors)**

**1 yr 1 cr**

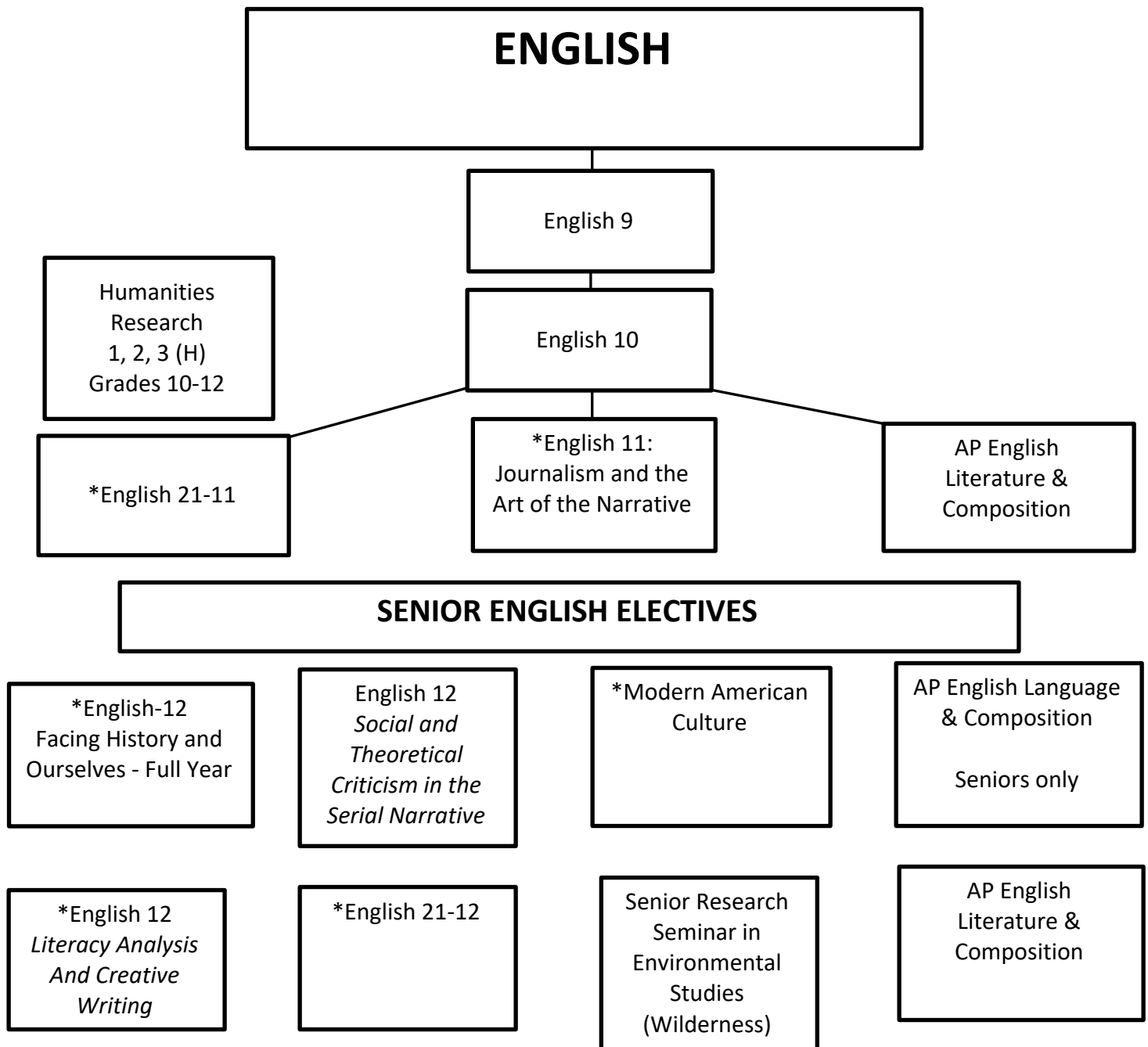
Humanities Research is a two-to-three year course sequence designed for students who are interested in the world around them and who have a strong desire to investigate ideas in politics, history, the arts, cultural anthropology, philosophy, and law. In Humanities Research I, students read and do research in these multiple "avenues" of the humanities. During each humanities unit, students first learn together, with the teacher facilitating the study; students then move to independent investigations of related topics, the mastery of which they are expected to share with the group through presentations. In addition to formal class presentations, demonstrations of learning in HR I include analyses of published articles and writing full-length essays. At the end of year one, students develop a research question and begin their independent research in earnest. HR is designed for academically strong students who are excellent readers and writers, and who are highly disciplined and self-motivated workers. Because of the demands of the independent work in HR, there is substantial summer work that prepares students for each upcoming semester. This course is open to both 10<sup>th</sup> and 11<sup>th</sup> grade students.

**Humanities Research 2 (Honors)****1 yr 1 cr**

Humanities Research is a two-to-three year course sequence designed for students who are interested in the world around them and who have a strong desire to investigate ideas in politics, history, the arts, cultural anthropology, philosophy, and law. During year two, students continue research on their independent projects. Students are expected to find mentors at an appropriate point in their research and work towards completion of their projects which might take the form of a full-length essay (25-50 pp), a collection of short essays, a film, a play, a website, or other artifact that demonstrates the student's research and analysis.

**Humanities Research 3 (Honors)****1 yr 1 cr or ½ yr ½ cr**

Humanities Research III offers students another semester or full year to complete and/or publish their projects. HR III also facilitates internship possibilities in the student's area of study once project work has been completed.



**\*COURSES WITH AN HONORS OPTION**

# **HEALTH / PHYSICAL EDUCATION**

## **Health - Alternating days (10)**

**1 yr    ½ cr**

The Health Education Course is scheduled during the 10th grade year and is designed to meet the New York State mandated requirement for high school graduation. Areas covered include alcohol, vaping, tobacco, and other drug resistance, human growth, development, and an abstinence+ sexuality curriculum. The skills of decision making, time management, stress management, and goal achieving will be constant learning objectives throughout the year. Additionally, wellness, mental health, nutrition, sports science, and other emerging health topics will be covered. We have worked with our school psychologists to integrate our DBT Curriculum into our classes for our students to learn skills of emotional regulation, mindfulness, distress tolerance, and interpersonal effectiveness. Students will be surveyed throughout the year to help understand and meet the local health needs of our community. Students will be assessed on a wide variety of individual and group assignments, activities, and projects that integrate community resources and advocacy components.

## **Physical Education - Alternating days (9-12)**

**1yr    ½ cr**

The Physical Education Courses are grouped for grades 9/10 and 11/12. Curriculum was developed in compliance with the New York State Education Department mandates.

- The 9/10 curriculum focuses on mini team sports units, net/racquet sports, and introductory fitness concepts.
- The foundation of the 11/12 program is based on the concepts of “Functional Fitness” training principals utilizing our state-of-the-art fitness center. Various training components such as strength, endurance, flexibility, core, plyometrics, speed, and agility will be implemented. Students will develop individualized training programs designed to meet their individual goals. In addition, students will participate in a designated racquets sports unit that will include badminton, pickleball, and tennis.
- All students, grades 9-12, will be trained in Compression Only CPR and AED utilization.

## **Varsity Option in Physical Education**

Varsity option is a privilege which may be awarded to varsity student-athletes in good standing in physical education. Athletes in 10th grade are allowed to apply for one sports season, 11th and 12th graders may apply for three sport seasons.

***Athletes in 9<sup>th</sup> grade are not eligible for Varsity Option as per NYSED Regulation 135.4(c)(2)(ii)(c)***

Applications will be available in the Athletic office - athletes must complete the appropriate paperwork, meet all the published Varsity Option expectations and be in good standing with the physical education department.

Failure to return to your regularly scheduled physical education class immediately following the conclusion of your sport season will result in the student-athlete being ineligible for Varsity Option in their next eligible season.

### **Physical Education Independent Study Program Overview**

The independent study in physical education is an option offered by the Physical Education Department designed specifically for the student who participates in a rigorous activity that offers individual instruction by a qualified instructor. The Physical Education staff anticipates that the athlete would spend **at least 10 hours** per week in the activity in addition to mandatory participation in competitions and/or performances. Students must submit weekly training logs, signed by their instructor/coach to maintain eligibility.

***Failure to submit signed weekly logs every Monday will result in the student/athlete returning to their regularly scheduled Physical Education class.***

Students must complete an application for independent study and schedule a meeting with the Director of Health, Physical Education, Athletics and Wellness. All applications will be judged on an individual basis. Qualified instructors must be approved by the Board of Education and be advised by the physical education staff. Qualified **11<sup>th</sup> and 12<sup>th</sup> graders** only will be eligible.

# MATHEMATICS

The following are some important aspects of the math program:

- Three credits in math are required to receive a high school diploma, while four years are strongly recommended for college preparatory students.
- Passing a math Regents exam is required in order for students to receive a high school diploma.

## **Algebra 1**

**1 yr 1 cr**

This course follows the NYS Math Standards offering students the study of algebraic concepts and processes. Successful completion of this course prepares students for the NYS Algebra 1 Regents Exam in June. A *TI-83 Plus* or *TI-84* graphing calculator is required.

**Students are recommended for this course by their 8th grade mathematics teacher.**

## **Algebra 1 Extended**

**1 yr 1 cr**

This course follows the NYS Math Standards offering students the study of algebraic concepts and processes. Successful completion of this course prepares students for the NYS Algebra 1 Regents Exam in June. This course provides additional time through a second-class period scheduled every other day. A *TI-83 Plus* or *TI-84* graphing calculator is required.

**Students are recommended for this course by their 8th grade mathematics teacher.**

## **Geometry**

**1 yr 1 cr**

This course follows the NYS Math Standards and prepares students for the NYS Geometry Regents Exam in June. It employs an integrated approach to the study of geometric relationships. Through a consideration of Euclidean, transformational and coordinate approaches, students will investigate situations in order to justify geometric relationships and properties of geometric figures. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum course grade of 80% in Algebra 1 or 90% in Algebra 1 Extended. Prerequisite: Credit in Algebra 1 or Algebra 1 Extended.**

## **Geometry Honors**

**1 yr 1 cr**

This course follows the NYS Math Standards and prepares students for the NYS Geometry Regents Exam in June. This challenging course is designed for students with a strong interest and skill in mathematics. Geometric concepts are approached from the Euclidean, coordinate, and transformational viewpoints. Algebraic skills are regularly reinforced. Problem solving techniques and precise written and oral work are also stressed. Enrichment is provided in class and through extended projects, some of which

will incorporate the use of important mathematics software such as the Geometer's Sketchpad or GeoGebra. A *TI-83 Plus* or *TI-84* graphing calculator is required.

**Recommendation: A minimum assessment average of 92% in Algebra 1.**

**Prerequisite: Credit in Algebra 1 and a passing grade on the NYS Algebra 1 Regents Exam.**

### **Geometry Extended**

**1 yr 1 cr**

This course follows the NYS Math Standards, employing an integrated approach to the study of geometric relationships. Through a consideration of Euclidean, transformational and coordinate approaches, students will investigate situations in order to justify geometric relationships and properties of geometric figures. This course provides additional time through a second-class period scheduled every other day. A *TI-83 Plus* or *TI-84* graphing calculator is required.

**Prerequisite: Credit in Algebra 1 or Algebra 1 Extended and a passing grade on the NYS Algebra 1 Regents Exam.**

### **Geometry /Algebra 2 / Pre-Calculus (Part 1)**

**1 yr 1 cr**

This course is for sophomores who have completed the Algebra 1 course and would like the opportunity to take Calculus during their senior year. This two-year course encompasses the major topics of Geometry, Algebra 2 and Pre-Calculus with an emphasis on interrelated topics. The Geometry portion of the course will employ an integrated approach to discovering geometric relationships, study of Euclidean, transformational, and coordinate topics. Algebra 2 explores linear, polynomial, exponential, rational, logarithmic, and trigonometric functions with an emphasis on advanced algebra. Since this course includes content from three courses in two years, students will be challenged to work at a more rigorous pace. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 90% in Algebra 1. Prerequisite: Credit in Algebra 1 and a passing grade on the NYS Algebra Regents Exam.**

### **Geometry /Algebra 2 / Pre-Calculus (Part 2)**

**1 yr 1 cr**

This course is for juniors who have completed the Geometry/Algebra 2/Pre-Calculus Part 1 course and would like the opportunity to take Calculus during their senior year. This two-year course encompasses the major topics of Geometry, Algebra 2 and Pre-Calculus with an emphasis on interrelated topics. The Algebra 2 portion explores linear, polynomial, exponential, rational, logarithmic, and trigonometric functions with an emphasis on advanced algebra. The Pre-Calculus portion of the course will focus on mathematical analysis and prepare students for further mathematical studies in Calculus. Since this course includes content from three courses in two years, students will be challenged to work at a more rigorous pace. This course provides additional time through a second-class period scheduled every other day. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of**

**85% in Geometry / Algebra 2 / Pre-Calculus (Part 1). Prerequisite: Credit in Geometry/Algebra 2/Pre-Calculus (Part 1).**

## **Algebra 2**

**1 yr 1 cr**

This course follows the NYS Math Standards adopted by NYS Education Department, and builds upon the concepts from Algebra 1 and Geometry cumulative. It is designed to prepare the students for further study in Precalculus and Calculus. The course explores radical, rational, polynomial, exponential, logarithmic, trigonometric functions, probability, and statistics with an emphasis on word problems and advanced algebra. A *TI-83 Plus* or *TI-84* graphing calculator is required. Recommendation: A minimum grade of 80% in Geometry and Algebra 1. **A minimum assessment average of 80% in Geometry Extended and Algebra 1 Extended. Prerequisite: Credit in Geometry or Geometry Extended and a passing grade on the NYS Algebra Regents Exam.**

## **Algebra 2 H**

**1yr 1cr**

This course follows the NYS Math Standards and is designed for students with a strong interest and ability in mathematics. This course enriches topic in Algebra 2 (see above) by investigating each in greater depth. Students are expected to prepare and review prerequisite knowledge outside of class. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 92% in Geometry and Algebra 1, or 85% Geometry Honors and a 92% in Algebra 1, Prerequisite: Credit in Geometry or Geometry Honors.**

## **Algebra 2 Extended**

**1 yr 1 cr**

This course follows the NYS Math Standards and builds upon the concepts developed in Algebra 1 and Geometry. It explores radical, rational, polynomial, exponential, logarithmic, trigonometric functions, probability, and statistics with an emphasis on word problems and advanced algebra. The class is intended for students who desire to study math at a college preparatory level, yet need more time to achieve success. The additional time is provided through a second-class period scheduled every other day. A *TI-83 Plus* or *TI-84* graphing calculator is required.

**Recommendation: A minimum assessment average of 75% in Geometry or Geometry Extended. Prerequisite: Credit in Geometry or Geometry Extended.**

## **Precalculus**

**1 yr 1 cr**

This course follows the NYS Math Standards involving mathematical analysis for students who have shown a decided interest and have demonstrated skill in the content areas of algebra, geometry, and trigonometry. This course will prepare students for further study in Calculus. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 90% in Algebra 2 Extended or 80% in Algebra 2 or Algebra 2 H. Prerequisite: Credit in Algebra 2 Extended, Algebra 2, or Algebra 2 H.**

### **Precalculus Honors AB**

**1 yr 1 cr**

This rigorous course prepares students for further study in AP Calculus AB. Students investigate real-world applications of mathematical concepts. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 87% in Algebra 2 or 85% in Algebra 2 H. Prerequisite: Credit in Algebra 2 or Algebra 2H.**

### **Precalculus Honors BC**

**1 yr 1 cr**

This rigorous course prepares students for further study in AP Calculus BC or AP Calculus AB. Students explore Precalculus concepts in the first semester and then move to topics typically offered in the first semester of college Calculus. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 87% in Algebra 2 or 85% in Algebra 2 H. Prerequisite: Credit in Algebra 2 or Algebra 2 H.**

### **Calculus**

**1 yr 1 cr**

This course explores differential and integral calculus and its applications. Emphasis will be placed on collaborative learning, project development, and all necessary technical components of Calculus. A *TI-83 Plus* or *TI-84* graphing calculator is required. **Recommendation: A minimum assessment average of 75% in Precalculus or 80% in Precalculus Honors AB/BC. Prerequisite: Credit in Precalculus or Precalculus Honors AB/BC.**

### **Advanced Placement Calculus AB**

**1 yr 1 cr**

In this college-level course in differential and integral calculus, students will prepare for and take the Calculus AB Advanced Placement exam. (Refer to the AP Policy.) A *TI-83 Plus* or *TI-84* graphing calculator is required. This course has a required summer assignment. **Recommendation: A minimum assessment average of 95% in Precalculus or 90% in Precalculus Honors AB/BC. Prerequisite: Credit in Precalculus or Precalculus Honors AB/BC.**

### **Advanced Placement Calculus BC**

**1 yr 1 cr**

AP Calculus BC is a college-level course which, in addition to addressing the topics in AP Calculus AB more thoroughly, covers L'Hopital's Rule, Improper Integrals, Partial Fractions, Infinite Series, Parametric Functions, Vector Functions, and Polar Functions. Students will prepare for and take the Calculus BC Advanced Placement exam (Refer to the AP Policy). A *TI-83 Plus* or *TI-84* graphing calculator is required. This course has a required summer assignment. **Recommendation: A minimum grade of 90% in Precalculus Honors BC. Prerequisite: Credit in Precalculus Honors BC.**

### **Advanced Placement Statistics**

**1 yr 1 cr**

AP Statistics is a college level course that introduces students to concepts and tools for collecting, analyzing and drawing conclusions from data. Students will learn about these concepts through the investigation of four major conceptual themes: exploring data, experimentation, anticipating patterns, and statistical inference. Students will learn and

use computer-based statistical software and graphing calculator applications to complete a variety of statistical analyses and communicate their findings in writing. Students will prepare for and take the Advanced Placement Statistics exam (Refer to the AP Policy). A series of projects will be required for all students after the administration of the AP exam. A TI-83 Plus or TI-84 graphing calculator is required. Recommendation: **A minimum assessment average of 85% in GAP 2, Algebra 2 (any course level).** This course has a required summer assignment. **Prerequisite: Credit GAP 2 or Algebra 2 (any course level).**

### **Discrete Mathematics**

**1 yr 1 cr**

Discrete mathematics is a rapidly growing and increasingly popular area of mathematics with many practical and relevant applications. Topics studied include graph theory (networks), fair division, matrices, recursion, logic, number theory, systems, finance, and other topics as time allows. This branch of mathematics allows students to explore problem situations that are not directly or easily approachable through traditional algebraic techniques. Students will study problems from the social sciences, business, science, and politics. Many topics rely heavily on graphing calculator applications, so a *TI-83 Plus* or *TI-84* graphing calculator is required. **Prerequisite: Credit in Algebra 2 (any course level).**

### **Statistics (Fall)**

**½ yr ½ cr**

Statistics will provide an interesting and hands-on introduction to statistics. The course will emphasize the following topics: descriptive statistics and statistical graphs; sampling and designing studies; correlation and regressions; continuous distributions; and statistical inference. The course would involve significant activity and project-based student experiences using computer and calculator technology. This course is NCAA approved. A *TI-83 Plus* or *TI-84* graphing calculator is required. *Seniors will be given priority in enrollment in this course.* **Prerequisite: Credit in Algebra 1 (any course level).**

### **Probability (Spring)**

**½ yr ½ cr**

Probability will provide an interesting and hands-on approach to probabilities in the real world. Topics include: experimental probabilities and law of large numbers; discrete probabilities, binomial and geometric probabilities; counting methods; probability distributions and expected values; and Markov chains and steady state behaviors. The course would involve significant activity and project-based student experiences using computer and calculator technology. This course is NCAA approved. A *TI-83 Plus* or *TI-84* graphing calculator is required. *Seniors will be given priority in enrollment in this course.* **Prerequisite: Credit in Algebra 1 (any course level).**

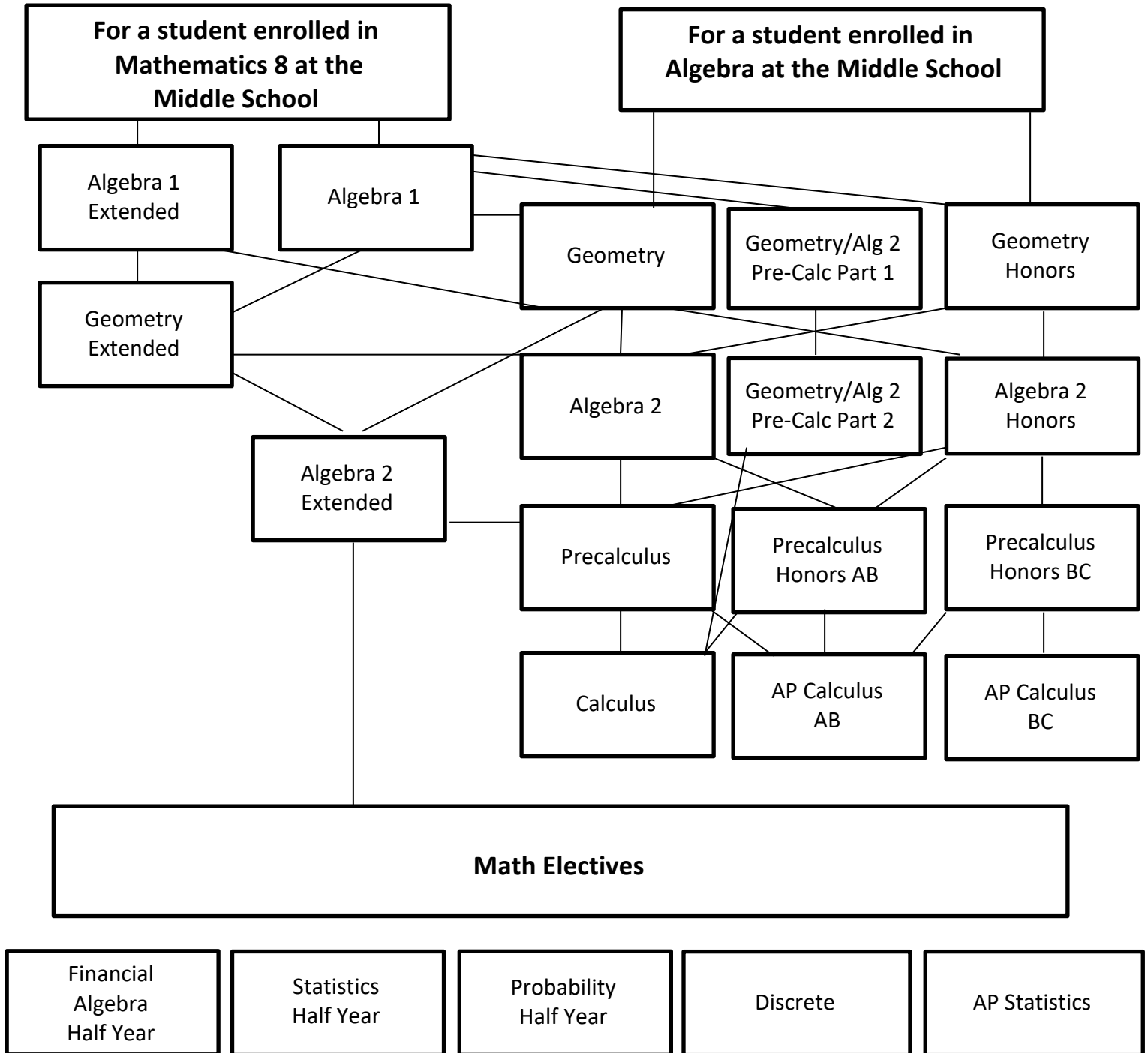
### **Financial Algebra**

**½ yr ½ cr**

Did you ever ask, “When are we ever going to use this?” in math class? In Financial Algebra, we will explore real-world financial applications such as insurance, investing, loans, budgeting, automobile ownership, home ownership, taxes, salaries and earning commissions, credit cards, and pensions, applying many of the functions that you

learned about in previous courses. A *TI-83 Plus* or *TI-84* graphing calculator is required.  
*Seniors will be given priority in enrollment in this course.*  
**Prerequisite: Credit in Algebra 1 (any course level).**

# MATHEMATICS



# **PERFORMING ARTS**

The John Jay Performing Arts Department is a place where students express their creativity as they perform in a number of different ways. There is one choral ensemble, two bands and one orchestra in the ensemble program and we offer a four-year sequence in Actor training. Our General Music curriculum offers courses in Theory, History, Composition and Music Technology.

**All music courses fulfill the fine arts credit for graduation.**

## **John Jay Vocal Jazz (9-12)**

**1 yr 1 cr**

**(½ cr option with permission of the choral director)**

Singers and instrumentalists will rehearse and perform vocal music from the jazz, contemporary (pop) & musical theater style repertoire. Emphasis will be on developing musicianship and ensemble singing with the goal of understanding these musical styles and experiencing the joy of public performance.

## **Concert Band (9)**

**1 yr 1 cr**

**(½ cr option with permission of the band director)**

This course will introduce students to the band program and focus on developing individual skills and ensemble techniques through rehearsal with consistent feedback. This group performs a minimum of twice annually. This group will be comprised of 9<sup>th</sup> grade students and there is no audition required to register. *Group lessons are part of the curriculum and meet on a rotating basis throughout the year.*

## **Symphonic Band (10-12)**

**1 yr 1 cr**

**(½ cr option with permission of the band director)**

Symphonic Band will include band students in 10<sup>th</sup> – 12<sup>th</sup> grades. No audition is required to register. This course will build on the performance and rehearsal skills introduced in Concert Band. This group performs a minimum of twice annually. *Group lessons are part of the curriculum and meet on a rotating basis throughout the year.*

## **Wind Ensemble (9-12)**

**1 yr 1 cr**

**(½ cr option with permission of the band director)**

This group is the most advanced band available to students at the high school and is the premiere wind and percussion ensemble of the school. The focus is on advanced literature, ensemble techniques, and individual development through rehearsal, performance, and small group instruction. Home practice expectations are significantly above average. This group has performed and competed at many festivals from Florida to Lincoln Center. *Group lessons are part of the curriculum and meet throughout the year on a rotating basis.* **Audition required prior to registering for this course. No ½ credit option for this class.**

**Orchestra (9-12)****1 yr 1 cr****(½ cr option with permission of the orchestra director)**

The John Jay Orchestra is a string ensemble offered to high school students grades 9-12. Repertoire includes works of the great master composers in both original and transcribed arrangements. This ensemble performs at two concerts per year, as well as at other optional performance opportunities throughout the school year. *Group lessons are a part of the curriculum and meet throughout the year on a rotating basis.*

**Music History and Theory (9-12)****1 yr 1 cr**

This course, held in the Mac music lab, trains students in reading, writing, and understanding music in a hands-on learning environment. In addition to learning basic music theory, within a historical context, the course progresses to include complex and creative tasks such as melodic and harmonic dictation, composition and arranging, as well as analysis and discussion of musical styles. Learning is focused on the use of technology where students will gain experience using software programs such as *Finale, Garage Band, Logic, Ableton Live, and FL Studio*. This course will help students express their creativity through independent and collaborative work throughout the year. **This course is a prerequisite for students wishing to enroll in Music Technology and AP Music Theory.**

**Advanced Placement Music Theory (11-12)****1 yr 1 cr**

Students in AP Music Theory will follow a curriculum created by the staff and adopted by the College Board. Additional areas of study may include composition and arranging. **Prerequisite: Music History and Theory or permission of the instructor.**

**Music Technology (10-12)****1 yr 1 cr**

A creatively driven course, students will learn the basics of MIDI and the history of Electronic Music to create their own music compositions. Film Scoring, Sonata writing, Remixing, and other electronic music forms will be explored in this fun and engaging Mac music lab environment. This project-based course, will allow students to write music using software programs such as: *Finale, Garage Band, Logic, Ableton Live and FL Studio*. In addition, our Sound Recording component will teach students how to record live performances using our newly acquired recording equipment, sound booth and *Pro Tools* software. This course allows students to think independently and express themselves freely through the creative process. **Prerequisite: Completion of the Music History and Theory course or permission of the instructor.**

**Advanced Study in Music Technology (11-12)****1 yr 1 cr**

Students who have completed at least one year of Music Technology may enroll again to pursue advanced, independent work in preparation for college and/or career readiness, which includes the creation of a comprehensive music portfolio.

**Introduction to Theatre 1 (Meets Every Other Day) (9-12)****1 yr ½ cr**

Introduction to Theater 1 is the introductory course for students interested in studying Theater at John Jay High School, or who want a basic introduction to Theater. Intro 1 is

a hands-on course that starts with a focus at first on theater games, ensemble building, improvisation, and character development, then moves onto the essentials of working with text, including the basics of textual analysis and acting. Introduction to Theater I is a prerequisite for Intro 2. **Completing both Introduction to Theater 1 and 2 fulfills the fine arts credit requirement for graduation.**

**Introduction to Theatre 2 (Meets Every Other Day) (10-12)      1 yr    ½ cr**

Introduction to Theater 2 is the second course in John Jay High School's four-year Theater curriculum. Intro 2 is available to students who have completed Intro 1, or by permissions of the teacher. Intro 2 continues the work of Intro 1, but takes a more project-based approach than the first course focusing on playwriting, designing for the theater, voice and speech, text analysis and acting. **Completing both Introduction to Theater 1 and 2 courses fulfills the fine arts credit requirement for graduation.**

**Advanced Acting (Meets Every Other Day) (11-12)      1 yr    ½ cr**

This course builds upon the skills developed in Acting. While the basics of good acting will continue to get attention, the actor approaching the writers and periods of Advanced Acting must be prepared to deal with extraordinary demands in the areas of text analysis, language and vocal production. We will focus on plays from these periods: Elizabethan and Jacobean (Shakespeare, Webster, Ford), Restoration and 18th Century (Wycherly, Sheridan, Goldsmith), Late 19th Century (Wilde, Shaw, Chekhov) and mid-20th Century "Theater of the Absurd" (Beckett, Ionesco, Pinter, Albee). The curriculum is project based and requires independent study. Students will design and complete projects in stage presentations with the emphasis on all aspects of preparation for performance. **Prerequisite: Acting or permission of the instructor.**

**The Actor's Studio (Meets Every Other Day) (12)      1 yr    ½ cr**

Seniors who have completed the Acting curricula can take this course. The curriculum is project based and set up in an independent study format. Students will design and complete projects in stage presentations with the emphasis on all aspects of preparation for performance, with a focus on directing, design and playwriting. A public performance is required and will serve as the primary assessment tool for the course. Involvement in the productions of the John Jay Theatre Workshop is required.

**Prerequisite: Advanced Acting or permission of the instructor.**

# **SCIENCE**

Three credits in science are required to receive a high school diploma (while four years of study are still recommended for college preparatory students). Regents, College Preparatory, Honors, and most AP levels have a laboratory requirement and meet for an extra instructional period, every other day. All AP and elective courses must have minimum enrollments, or they will not be run.

## **Earth Science Regents**

**1 yr 1 cr**

Earth Science Regents provides the student with a basic understanding of our planet, its origin, its geological processes, and its position in space. Some topics considered are minerals and rocks, the environment, energy in the Earth's processes, geologic history, weather, the solar system, space travel, and the origin of the Earth. Upon completion of the course, students will have a better understanding and appreciation of their home, Planet Earth, and the many forces constantly at work changing and modifying the planet. This course will prepare students for the Physical Setting: Earth Science Regents Examination in June.

## **College Preparatory Biology**

**1 yr 1 cr**

This is a college preparatory course in general biology. Fundamental concepts of biology, including cell structure and function, biochemistry, genetics, evolution, animal physiology, plant physiology, reproduction and development, and ecology are studied. Students will be engaged in multiple lab experiences as well as independent research studies that will enhance the learning process. The goal is to provide an authentic scientific investigative experience that will make students better logical thinkers and problem solvers. **Prerequisite: Credit in Earth Science**

## **College Preparatory Biology Honors**

**1 yr 1 cr**

This course is appropriate for those students who are prepared to commit to a more challenging course of study in biology. Each topic will be completed in greater depth and at a rapid pace. An extensive laboratory program supports and enhances higher-level learning. Students must be highly motivated, able to write well and work independently, and have strong math and computer skills. Proficiency in ELA skills are critical to success in this course. Students will work collaboratively to investigate scientific phenomenon and explore engineering design in biological systems.

**Recommendation: A 92% in Earth Science Regents. Prerequisite: Credit in Earth Science Regents and a passing grade on the Physical Setting: Earth Science Regents exam.**

## **College Preparatory Chemistry**

**1 yr 1 cr**

This is a college preparatory course in general chemistry based in experimental evidence from which fundamental laws of chemistry are derived. Topics include atomic structure, chemical bonding, chemical reactions, solids-liquids-gases, acid-base theories, electrochemistry, kinetics and equilibrium, and nuclear chemistry. This course requires

laboratory work involving inquiry-based explorations. **Recommendation: A minimum grade of 75% in CP Biology H or 80% in CP Biology and 85% in Algebra 1 or 80% in Geometry. Prerequisites: Credit in Biology and Algebra 1 and concurrent enrollment in Geometry, GAP1, GAP 2 or Algebra 2.**

### **College Preparatory Chemistry Honors**

**1 yr 1 cr**

Chemistry Honors is a college preparatory course designed for those students who have demonstrated outstanding interest, ability and performance in previous science and math courses. Each topic will be completed in greater depth and at a rapid pace. Enrichment extends through laboratories activities, culminating in a laboratory portfolio evidencing student understanding of scientific inquiry. Greater emphasis is placed on problem solving; applications to current research are explored. **Recommendation: A minimum grade of 92% in CP Biology or 85% in CP Biology Honors and 90% in Algebra 1 or 85% in Geometry. Prerequisites: Credit in CP Biology or CP Biology H and concurrent enrollment in Geometry, GAP1, GAP2, or Algebra 2.**

### **Chemistry for the Real World 1 and 2**

**1 yr 1 cr ½ yr ½ cr**

In this course students will explore the essential concepts of chemistry as they work to find solutions to problems confronting our lives, our community and the world. The course will explore chemistry topics in the everyday world: household chemicals, nuclear and organic chemistry, medicine, construction materials, fuels, and energy sources. **Prerequisite: Credit in Biology and Earth Science; credit in Chemistry 1 is required for enrollment in Chemistry 2.**

### **College Preparatory Physics**

**1 yr 1 cr**

College Preparatory Physics is designed to meet the curricular needs of college-bound students and to prepare them to be successful in college science. This course is an in-depth introduction to the basic concepts of physics and aims to encourage awareness and interest in the important role physics plays in our daily lives. The course emphasizes active student construction of knowledge in an interactive learning community. Students do a variety of hands-on, inquiry-based laboratory work and engineering design projects to learn to model the physical world and to apply those models to new and different situations. Topics of study may include motion, forces, energy, electricity, magnetism, waves, sound, light, and modern physics.

**Prerequisite: Credit in Algebra 1 and CP Chemistry, CP Chemistry Honors, or both Chem 1 and 2.**

### **Environmental Physics: A Citizen's Guide to the Planet**

**1 yr 1 cr**

While exploring the physics underlying geology, chemistry, astronomy and meteorology, students in this course examine the universe and their place in it. Collaboratively, students identify the social, personal, political, and economic implications of various problems and solutions, pursuing such questions as "What can I do to make a difference now?" and "How might what we know about the earth affect our treatment of our planet?" As students gain experience and deepen their conceptual understanding of physical laws, they will use mathematical expressions of these concepts to model

problems and solutions for issues such as pollution and energy dependence. They also gain essential skills and experience which will serve them as citizens and architects of the future of our planet. Projects will include the Thermodynamics of survival scenarios and designing a passive house among other authentic and practical assessments.

**Prerequisites: Credit in Algebra, Geometry, or GAP1 and CP Chemistry.**

## **Advanced Placement Courses**

### **Advanced Placement Biology**

**1 yr 1 cr**

AP Biology is equivalent to a two-semester college introductory biology course. AP Biology focuses on enduring, conceptual understandings and the content and practices that supports those understandings as they explore the following topics: evolution, cellular processes – energy and communication, genetics, information transfer, ecology, and interactions. This approach enables students to focus on practice driven work and problem solving around essential concepts, helping students to develop the reasoning skills necessary to engage in the science practices. Through labs, projects and classwork, AP Biology will foster the development of advanced inquiry and reasoning skills, including designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. Students will leave with a strong foundation in the practices of science, more scientifically literate and ready for the study of advanced topics in subsequent science courses. **Recommendation: A minimum grade of 85% in CP Chemistry and Geometry or GAP1 or 85% in CP Chemistry H and Geometry H. Prerequisites: Credit in CP Biology, CP Chemistry and Geometry. A required summer assignment is part of the course.**

### **Advanced Placement Chemistry**

**1 yr 1 cr**

The Advanced Placement Chemistry course is the equivalent of a college general chemistry course. Topics covered include those in first year chemistry, but in greater depth and with greater emphasis on chemical calculations. Additional topics, including equilibrium and thermodynamics, are explored in depth. The laboratory work is extensive and students generally work individually, utilizing equipment and techniques used at the college level. A higher degree of effort is necessary than for most high school level courses and independent study is required. Students will be well prepared to take the AP exam. **Recommendation: A minimum grade of 88% in CP Chemistry and Algebra 2 or 85% in CP Chemistry H and Algebra 2H. Prerequisites: Credit in CP Chemistry, Algebra 2 and Trigonometry, GAP2, or Algebra 2 and Trigonometry H and concurrent enrollment in Precalculus. A required summer assignment from the text is part of the course.**

### **Advanced Placement Environmental Science**

**1 yr 1 cr**

This experiential, inquiry-based course presents the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world and how we, as humans, are connected to it. This involves the study of environmental issues and problems, both natural and human-made (anthropogenic). The evaluation of the relative risks associated with these problems, and the examination of solutions for

resolving or preventing them will be discussed. Among the topics covered are ecology, human population dynamics, renewable and nonrenewable resources, resource management, air, water, and soil pollution and their consequences, global changes and consequences, public policy, and sustainable community development. Natural resources, as well as local and regional sites will be studied through field research, lab activities, and “hands on” exploration. Collection, analysis of water and soil samples, lab and field population studies, discussions of local environmental issues, as well as analysis of real data sets will be done. Full and half-day field experiences will occur in the fall and spring. Students will be well prepared to take the AP Environmental Science exam. **Prerequisites: Credit in CP Biology, CP Chemistry and Algebra 1; Recommendation: credit in Regents Earth Science. A required summer assignment is part of the course. Students may elect to receive college credits for this class through the University in the High School Program at SUNY Albany.**

### **Advanced Placement Physics 1**

**1 yr 1 cr**

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics, rotational motion, energy, momentum, circuits, mechanical waves, and sound. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. A significant amount of instructional time will be spent in hands-on laboratory work that provides students with opportunities to apply science practices. Students will be well prepared to take the AP exam. This course is open to students with or without previous Physics courses.

**Prerequisite: Credit in CP Chemistry or CP Chemistry H, concurrent enrollment in Algebra 2 and Trigonometry, GAP2, Precalculus or Calculus. A required summer assignment from the text is part of the course.**

### **Advanced Placement Physics C: Mechanics**

**1 yr 1 cr**

AP Physics C: Mechanics is a calculus-based, college-level physics course for students planning to specialize or major in one of the physical sciences or engineering. This course assumes a deep curiosity and willingness to work on the part of the students. It emphasizes the power of a small number of fundamental principles to analyze a broad range of phenomena in mechanics: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Students cultivate their understanding of physics through classroom study and activities as well as hands-on, inquiry-based laboratory work. Throughout the year, students write computer programs which generate 3D animations to model the motion of physical systems. Students will be prepared for the "AP Physics C: Mechanics" exam. **Prerequisites: Credit in AP Physics 1 and concurrent enrollment in AP Calculus AB or AP Calculus BC. A required summer assignment is part of the course. There is no separate laboratory period for this course.**

### **Advanced Placement Physics C: Electricity & Magnetism**

**1 yr 1 cr**

AP Physics C: Electricity & Magnetism is a calculus-based, college-level physics course for students planning to specialize or major in one of the physical sciences or engineering. This course assumes a deep curiosity and willingness to work on the part of the students. It emphasizes the power of a small number of fundamental principles to

analyze a broad range of phenomena in electricity and magnetism: electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Students cultivate their understanding of physics through classroom study and activities as well as hands-on, inquiry-based laboratory work. Throughout the year, students write computer programs which generate 3D animations to visualize electric and magnetic fields. Students will be prepared for the "AP Physics C: Electricity and Magnetism" exam. **Prerequisites: Credit in AP Physics 1 and concurrent enrollment in AP Calculus AB or BC. A required summer assignment is part of the course. There is no separate laboratory period for this course.**

**Prerequisites: Credit in AP Physics 1 and concurrent enrollment in AP Calculus AB or AP Calculus BC. A required summer assignment is part of the course. There is no separate laboratory period for this course.**

## ELECTIVES

**Prerequisites for these courses are credit in earth science and biology.**

### **Anatomy & Physiology – Microscopic ½ yr ½ cr**

This course explores the structure and function, and histology (tissues) of some of the human body systems, including skeletal, muscular, and nervous systems, as well as the integumentary system and the special senses. Students will engage in laboratory work that investigates both the normal and pathological (disease) states. This course is designed for students who enjoyed Biology, and wish to continue their study of human health and disease. Students will work collaboratively in lab groups to perform diverse activities including case study analysis, lab work, research and dissections. **Anatomy and Physiology Microscopic and Macroscopic may be taken independently of each other and in any order.**

### **Anatomy & Physiology - Macroscopic ½ yr ½ cr**

The course explores the structure and function of some of the human body systems including the cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems. Students will engage in laboratory work that investigates body systems, emphasizing both the normal and pathological states. This course is designed for students that enjoyed Biology, and wish to continue their study of human health and disease. Students will work collaboratively in lab groups to perform diverse activities including case study analysis, lab work, research, and dissections. **Anatomy and Physiology Microscopic and Macroscopic may be taken independently of each other and in any order.**

### **Astronomy ½ yr ½ cr**

This course examines the position and motions of the Earth in space, and all aspects of our Solar System. Additionally, students will study the life cycles and types of stars, constellations, meteors, comets, asteroids, interstellar dust and gas clouds, galaxies and cosmology. An opportunity to use the telescope is made available through night labs. **Additional Prerequisite: Credit in Algebra or Algebra Extended.**

**Extreme Weather: Violent Meteorology****½ yr ½ cr**

This course will focus on the causes and impacts of severe weather and natural disasters on planet Earth. The course will introduce students to the basic concepts of weather as well as emphasize the fundamental scientific principles and processes related to natural disasters. In addition, the course will address the impact of natural disasters on society and the environment. Topics will include hurricanes, tornadoes, thunderstorms, winter storms, earthquakes, volcanoes, tsunamis, landslides, and flooding.

**Forensic Science****½ yr ½ cr**

Crime scene investigation techniques and the role of forensic science in the legal justice system will be studied in this course; the scientific method will be applied to the law. Topics include detection and analysis of DNA, fingerprints, hair, fibers, glass and paint, firearms, explosives, drug chemistry and toxicology, handwriting, footprint, and tire track analysis. In addition, procedures for chemical analysis of blood for the presence of drugs and poisons will be studied; blood spatter patterns will also be analyzed. The emphasis in this course will be on laboratory activity, student research, and deductive reasoning.

**Marine Biology****½ yr ½ cr**

The ecology of the ocean world will be focused on in this course, as well as the anatomy and physiology of marine organisms. Selected organisms will be dissected. The implications of pollution and global phenomena on the world's food supply that is derived from marine environments will be studied.

**Science Research I, II, and III (Honors) 10-12****1 yr 1 cr**

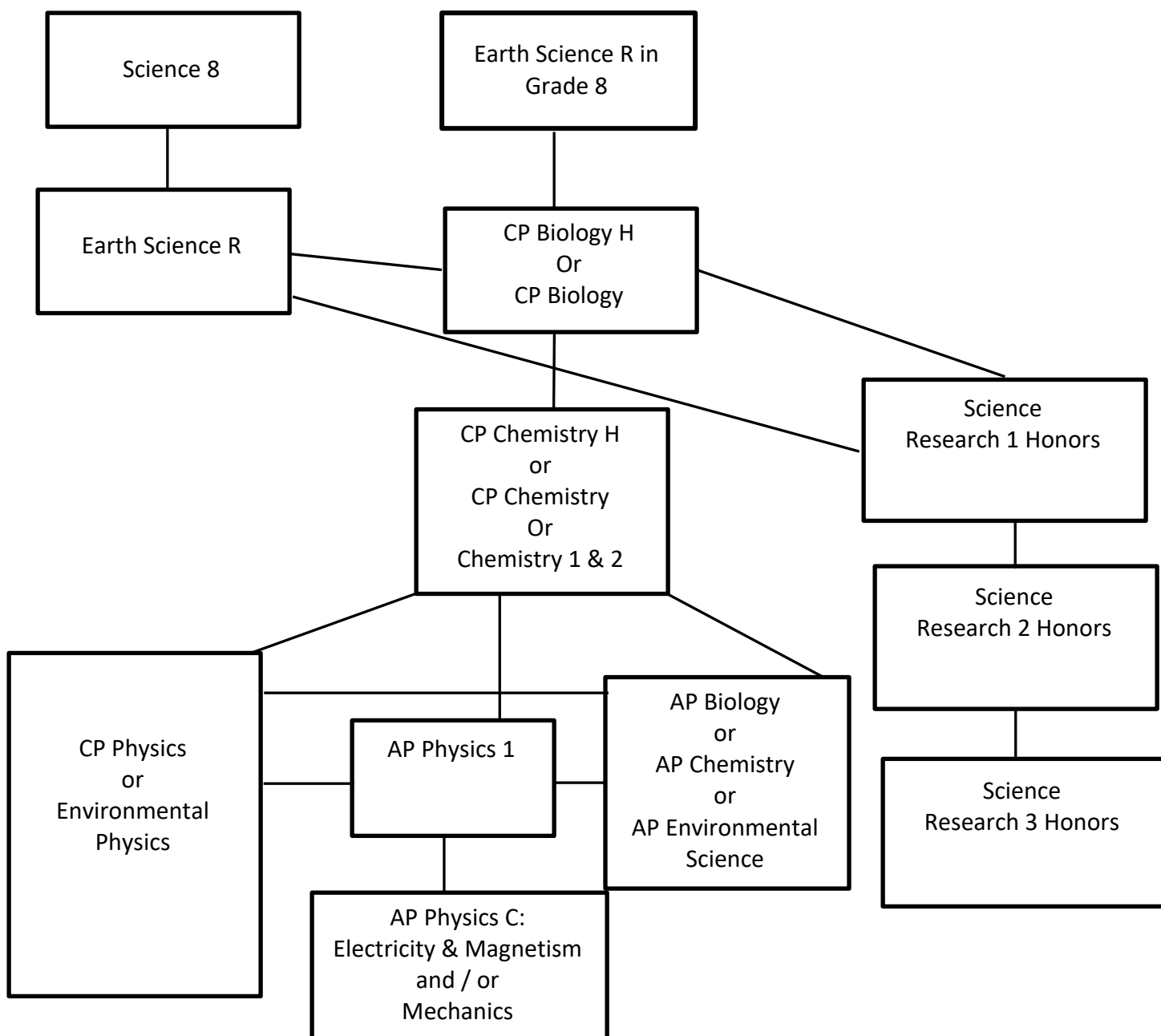
This course provides independent, self-motivated, keenly interested students an opportunity to experience authentic scientific research from start to finish. The sequence is begun in sophomore year and involves a three-year commitment with completion at the end of senior year. During sophomore year students are involved in bibliographic research and narrow down their area of interest. They are introduced to technological on-line searching techniques and to methods for communicating directly with professionals in their chosen area of study. During this first year, they begin learning skills associated with making both oral and poster presentations. During junior year, while working with a professional mentor, students create an experimental design, learn sophisticated laboratory skills while conducting their experiment, and become familiar with statistical techniques during the analysis of data. Senior year is devoted mainly to writing their research paper and preparing for presentations at local, regional, and state science symposia and student research competitions. The course is open to any sophomore who has the interest, motivation, and energy required to complete this rigorous but very rewarding experience. **In order to schedule the required bi-weekly student/teacher conferences, students must have at least one free period during the school day. Students should be prepared to commit to at least 40 hours of work outside of class per quarter, and at least 20 hours during the summers for assignments and data collection. Students may elect to receive college credits for this class through the University in the High School Program at SUNY Albany.**

**Science Laboratory Assistant 9-12****1 yr 1 cr or ½ yr ½ cr**

There are limited positions for students who wish to work with a teacher, assisting in laboratory preparation. Students should have successfully passed at least the Regents / College Prep level of the course in the branch of science in which they desire to assist.

**Students may not enroll as a lab assistant unless they have gained the permission of the teacher with whom they will work.**

# SCIENCE



## SCIENCE ELECTIVES – ½ year

Astronomy	Forensic Science	Anatomy & Physiology: Microscopic
Extreme Weather: Meteorology	Marine Biology	Anatomy & Physiology: Macroscopic

# **SOCIAL STUDIES**

The Social Studies Program explores world and American history and culture through the disciplines of the social, economic and political sciences. The 9<sup>th</sup> grade Global Studies Program integrates social studies and English through interdisciplinary approaches and team teaching. In the 10<sup>th</sup> grade, students may select Global History 10 or AP European History. In 9<sup>th</sup> and 10<sup>th</sup> grade, students may also register for an elective in current events in addition to the required grade level course. In 11<sup>th</sup> grade, students may select Advanced Placement United States History or U.S. History and Government. 11<sup>th</sup> grade students may also register for an 11<sup>th</sup> and 12<sup>th</sup> grade elective but will still need to fulfill the Participation in Government requirement during their senior year. In 12<sup>th</sup> grade, students must take a ½ credit in Economics and fulfill a Participation in Government unit which is available in a number of electives. Current events topics are regularly incorporated into all curricula.

In order to earn a JJHS diploma, students are required to pass the New York State Regents exam at the end of their Global Studies sequence (June, grade 10) as well as the United States History Regents at the end of grade 11. Students who have not passed these exams before entering their senior year will be offered Academic Intervention Services (AIS) to help them pass the exam.

## **9<sup>th</sup> GRADE SOCIAL STUDIES REQUIRED COURSE**

### **Global History and Geography 9**

**1 yr 1 cr**

Global History and Geography 9 begins with pre-history and early civilizations and culminates with the Age of Absolutism. This is an inclusive study that takes in all the major civilizations of the world, with the exception of the United States. The course targets the skills and content that are the focus of the statewide standards and assessments. This course makes interdisciplinary connections with the English program. Higher level thinking skills, problem solving, cooperative learning and public presentation skills are an integral part of Global History 9.

## **10<sup>th</sup> GRADE SOCIAL STUDIES COURSE OFFERINGS**

All students are required to take one credit of Social Studies 10. Tenth grade students will take the Global History and Geography Regents in June of their sophomore year.

### **Global History and Geography 10**

**1 yr 1 cr**

Global History 10 begins with a critical evaluation of the world in 1750 and ends with a unit on the world from 1945 to present. This is an inclusive study that takes in all the major civilizations of the world, with the exception of the United States. The course targets the skills and content that is the focus of the statewide standards and assessments. Higher level thinking, problem solving, cooperative learning, and public presentation skills that are begun in the 9<sup>th</sup> grade are built upon and refined in grade 10.

**After a thorough unit of review, the course culminates with the New York State Global History and Geography II Framework Exam in June.**

### **Advanced Placement European History**

**1 yr 1 cr**

This survey course covers the major periods of European history from the Renaissance through the end of the Cold War. This course is designed for those students who are excited by the challenges of a high-level history course and the raised expectations associated with it. The successful AP student comes to the experience with a background in the major events of European history, a serious interest in using evidence and analyzing complex historical documents and the ability to make connections between different time periods in history. This seminar-based class expects all participants to direct their own learning by raising questions and issues based on their reading. Students who choose to enroll are highly motivated with sufficient time and flexibility to deal with the requirements of this course. Students are required to commit to a significant amount of reading and additional studying and writing. Students will take the Advanced Placement Exam in May as well as the Global History and Geography Regents Exam in June. **It is recommended that students earn a grade of 90 in Global 9.**

## **11<sup>th</sup> GRADE SOCIAL STUDIES COURSE OFFERINGS**

All students are required to take one credit of Social Studies 11. Eleventh grade students will take the U.S. History Regents Examination in June of their junior year.

### **United States History and Government**

**1 yr 1 cr**

In this Regents level college preparatory course, students examine United States history from the Colonial Period to the present using both textbooks and a variety of supplemental materials including digital. This approach will permit students time to absorb relevant information and to interpret it through the lens of essential questions posed by the teacher and considered by the class. Students will improve their skill in reading nonfiction textual material and primary sources. Student writing will focus on improving the expository, persuasive essay form. Current events topics will be incorporated into lessons when applicable. **After a thorough unit of review, the course culminates with the New York State United States History and Government Framework exam in June.**

### **Advanced Placement United States History**

**1 yr 1 cr**

This is a full year program in the study of American history. The approach to the study in history is chronological and thematic, placing emphasis upon those pivotal issues, underlying forces, and intellectual currents that have shaped the historical and cultural development of the United States from the pre-Columbian period to the present. Extensive reading, writing, seminar practice, and the documented based work will be assigned. The successful AP student comes to the experience with a strong background in the major events of American history, a high interest in using evidence, an ability to analyze complex historical documents and the skill to make connections between historical time periods. Students are highly motivated with sufficient time and flexibility

to deal with the requirements of this stimulating and demanding course. Finally, AP students are expected to direct their own learning by raising questions and issues based on their reading. Students engage the teacher in order to extend and deepen their understandings. Students in the course will be expected to take the Advanced Placement Exam in May as well as the United States History and Government Regents Exam in June. **Recommendation: Completion of AP European History, a minimum grade of 90 in Global 10 or teacher recommendation. This course has a required summer assignment.**

## **11<sup>th</sup> and 12<sup>th</sup> GRADE SOCIAL STUDIES ELECTIVE COURSES**

Juniors may elect to take one of the courses below but must also complete another course that fulfills the Participation in Government requirement during their senior year. All seniors must take the equivalent of a full year of social studies. Seniors must take a ½ credit in Economics and choose an elective which fulfills the Participation in Government requirement. Semester courses will be scheduled based on sufficient enrollment and available staff. The opportunity to enroll in more than one credit of social studies in grade 12 will be contingent upon enrollment and available staff.

### **African American Studies**

**½ yr    ½ cr**

American History without Black History is American Mythology. As Americans, our story is not complete without studying Black history, and our relationships cannot be genuine without an understanding of their struggle and their continuing determination for equality. The major purpose of this course is to develop an understanding of the role and contributions of African Americans to the growth and development of the United States from African origins through present times. Units will be taught through the lens of the unique cultural and political experiences of African Americans in the United States. Topics include slavery and resistance to slavery, impact and outcome of the Reconstruction Era, and the African American experience prior to and following the Civil Rights Movement, all of which helps us better understand contemporary social movements. This seminar-based course will approach the subject matter utilizing a variety of primary and secondary sources, both written and visual. Rather than a reliance upon traditional tests and quizzes, student activities in this course will include writing individual response papers, creating small-group presentations, and participating in class discussions based on current events and selected reading assignments.

**This course meets the New York State Participation in Government requirement for seniors.**

### **Law**

**½ yr    ½ cr**

This course examines the criminal and civil justice system in the United States. Topics include crime, the justice system, constitutional rights, search and seizure, interrogations and confessions, sentencing, juvenile justice, and lawsuits. The use of “legal reasoning” is emphasized throughout the course. **This course meets the New York State Participation in Government requirement for seniors.**

### **The History of New York City**

**½ yr ½ cr**

This is an introductory course to the history of one of the greatest urban centers in the world, New York City. Students will explore the time period spanning from the early Dutch settlements in the 1600's until modern day. Students will develop an appreciation for and a solid foundation of knowledge of New York City. Students will analyze the amazing ethnic diversity found in New York City with a focus on the vastly different urban, rural and suburban settings in which New Yorkers have lived and worked. With these particular goals in mind students would be encouraged to explore and cultivate areas of interest on their own, such as; New York City's role as a fashion capital, how the "melting pot" atmosphere has contributed to New York City's reputation as a culinary mecca, and how the infrastructure of the city has adjusted to the needs of the modern world. This investigation is explored through a variety of resources including texts, films and discussions. Participants in the course extend their skills in reading, writing, listening, and speaking, as they identify and address relevant topics and issues in assignments designed for the individual and the group. **Participation in field trips is strongly encouraged as they enhance the experience of the course. This course meets the New York State Participation in Government requirement for seniors.**

### **Sports and American Society**

**½ yr ½ cr**

This course will examine the impact that sports have on American society. This course will examine sports at all levels: youth, high school, college, and professional, and analyze their significance within America's social fabric. Students will explore how social trends impact the sports world as well as how sports have affected American history and changed the culture. Topics will include issues regarding race, sexual orientation, performance enhancing drugs, funding of sports for both sexes, payment of college athletes, government financial support and cultural winning. **This course meets the New York State Participation in Government requirement for seniors.**

### **Psychology**

**½ yr ½ cr**

This is an introductory course that broadly covers a few topics within the study of Psychology. The course will provide an overview of Psychology as a science and a profession. Units in this one semester course may include but are not limited to: differing approaches to human behavior, research methods, stages in childhood and adolescence, nature versus nurture, influences on personality, factors which impact memory, how groups influence behavior, and psychological disorders. Each unit will introduce major terminology, theories and research. Students will learn how to define and apply psychological principles to their own lives by engaging in discussions, reading case studies and articles, completing papers and projects and viewing relevant films. This course can serve as an introduction to AP Psychology or as a stand-alone unit of study.

### **The World at War**

**½ yr ½ cr**

This class will cover the time period of 1914-1945 in both World and United States History. The class will focus on the political and military aspects of the world wars as

well as the social and economic implications on the home front. Students will also learn about the diplomatic relationships between the major powers of the world between World War I and World War II. Students will be required to complete research related to curriculum topics, participate in seminar discussions related to critical military and political issues, deliver presentations on topics of interest as well as produce argumentative essays. The wars covered in the class may also include the Korean War, Vietnam War and the Wars in Iraq and Afghanistan. **This course meets the New York State Participation in Government requirement for seniors.**

### **Advanced Placement Psychology**

**1 yr 1 cr**

AP Psychology meets every day for the full year. This course examines the science of psychology through a rigorous program of reading and interpretative discussion and writing. This course considers the fundamentals of learning, experimental design, sensation, and perception, social psychology, abnormal psychology and treatments, states of consciousness and cognition. There is also a science and math component to the course with biological basis of behavior and statistics. Students taking this course are expected to sit for the Advanced Placement exam. Juniors may request this course. However, seniors will have priority in scheduling. **This course has a required summer reading assignment. It is recommended that students earn a grade of 90 in 10<sup>th</sup> or 11<sup>th</sup> grade Social Studies.**

## **12<sup>th</sup> GRADE SOCIAL STUDIES ECONOMICS COURSES**

### **Economics**

**½ yr ½ cr**

In today's complex world, it is important to understand how an economic system has an increasing impact on individual lives. It becomes more important that we understand the pricing systems for food, shelter and clothing, the ups and downs of the stock market, the banking system, and taxation policies. The focus of the course is on contemporary economics with historic foundations provided as appropriate. Students will learn and apply their understanding of the concept of supply and demand, the role of government in the economy and the principles of personal finance such as budgeting, debt and credit. **This course meets the New York State Economics requirement.**

### **Advanced Placement Macroeconomics**

**1 yr 1 cr**

This course in Advanced Placement Macroeconomics is placed in the context of American government. Students use their reading about and understanding of principles of government to develop a background in how economics works in a society. The program involves reading interpretation and analysis. Students practice technical writing about economics. Students taking this course are expected to sit for the Advanced Placement test in Macroeconomics. **This course has a required summer reading assignment. This course meets the New York State Economics requirement**

**(ONLY). It is recommended that students earn a grade of 90 in 11<sup>th</sup> grade Social Studies and Mathematics.**

## **12<sup>th</sup> GRADE SOCIAL STUDIES PARTICIPATION IN GOVERNMENT COURSES**

### **Advanced Placement Government/Politics**

**1 yr 1 cr**

This course prepares students for the AP examination in Government and Politics (U.S.) using the Advanced Placement curriculum for Government and Politics (U.S.) in conjunction with the fundamentals of economics in a capitalist market. The Advanced Placement Government and Politics course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitutes U.S. political reality. Students are expected to take the Advanced Placement Examination. **This course has a required summer assignment and meets the New York State Participation in Government requirement for seniors. It is recommended that students earn a grade of 90 in 11<sup>th</sup> grade Social Studies.**

### **Facing History and Ourselves: Achieving Social Justice in the 21<sup>st</sup> Century (1 credit in Social Studies and 1 credit in English)**

**1 yr 2 cr**

The goal of this course is to engage students of diverse backgrounds in an examination of racism, prejudice, and antisemitism in order to promote the development of a more humane and informed citizenry. Students will explore issues facing 21st century America through engaging discussion and meaningful analysis of primary documents, literature, and contemporary media. Topics will focus on historically marginalized groups and systems of oppression. The course invites a range of informed perspectives. As a senior, your internship will reflect engagement in a range of civic action. This elective is team-taught by members of the Social Studies and English departments. Students enrolled in Facing History Honors can opt for an Honors designation (Facing History Honors) by completing additional reading and writing assignments. **This course meets the New York State Participation in Government requirement for seniors.**

### **Modern American Culture**

**1 yr 2 cr**

#### **(1 credit in Social Studies and 1 in credit in English)**

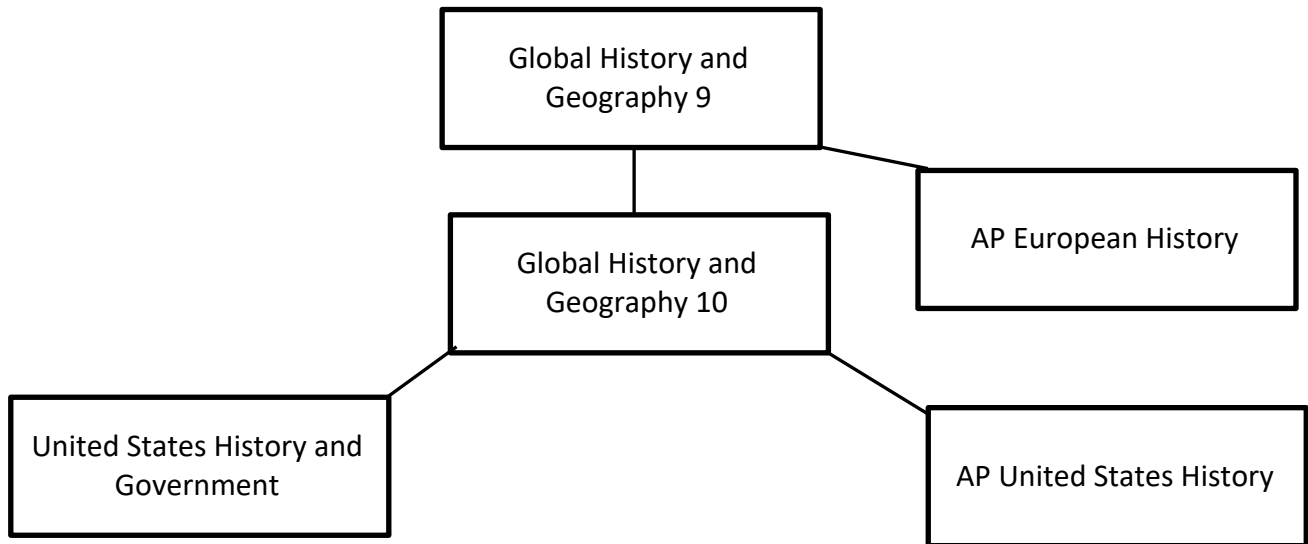
Modern American Culture is an interdisciplinary course designed to explore contemporary American life. Students investigate this topic through readings in fiction and nonfiction, film, analysis of popular media, research and field experience, and by exploring possible answers to these guiding questions: What does it mean to be an American today? Who succeeds in America? Who doesn't succeed in America? In addition, the course includes two shadowing days, and a senior internship requirement to be completed in the spring semester. The course allows students to explore areas of their own interest, as well as the common themes addressed by the entire class.

Students are encouraged to seek new ways of obtaining information, including off-campus research assignments. Because of the tremendous responsibility involved, the best candidate for the course is the student who has no difficulty working independently, or in a group and is enthusiastic about contributing to an exciting learning environment. This course emphasizes lifelong intellectual development. Participants in the course extend their skills in reading, writing, listening, and speaking, as they identify and address cultural topics and issues in assignments designed for the individual and the group. While the content of the course is driven by specific guiding questions, participants are required to contribute to the academic life of the course by taking active part in discussions about the direction of the curriculum and related topics. Students enrolled in MAC can opt for an Honors designation (MAC Honors) by completing additional reading and writing assignments. **This course has a required summer assignment and meets the New York State Participation in Government requirement.**

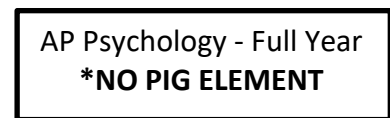
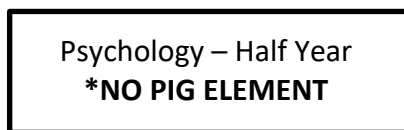
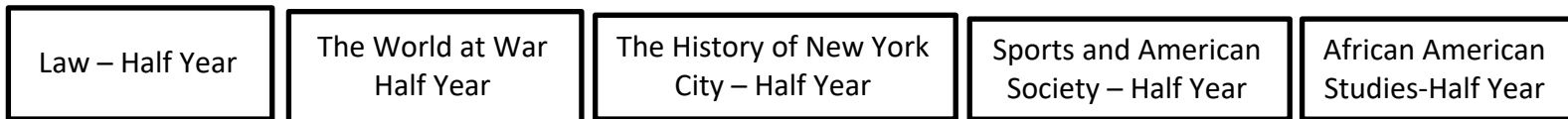
### **Senior Research Seminar in Environmental Studies (Wilderness) 1 yr 1 cr (1 credit in Social Studies and 1 credit in English)**

This interdisciplinary course offers credit in social studies and English. The course is organized around a central theme: environmentalism is not good solely for birds and fish; through environmental awareness we enrich and protect our communities. This theme directs our investigations throughout the year as follows: Through fieldwork at the Ward Pound Ridge Reservation, students experience the outdoors and study the historical impact of human habitation on their natural surroundings. Students refine their academic skills and deepen their understanding of the environment through a process of guided readings, research, writing, and seminar discussions intended to develop both creative and scholarly thinking. Students investigate a potential occupation through participation in two “shadowing day” experiences and a senior internship. Students shadow their mentors and use the relationship to enrich their sensitivity to the world of work and their areas of interest. Students are encouraged to pursue internships in environment-related fields, but may ultimately enter any field of interest. **This course has a required summer assignment and meets the New York State Participation in Government requirement.**

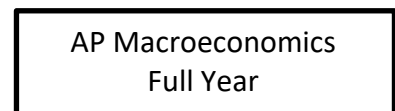
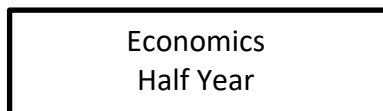
# SOCIAL STUDIES



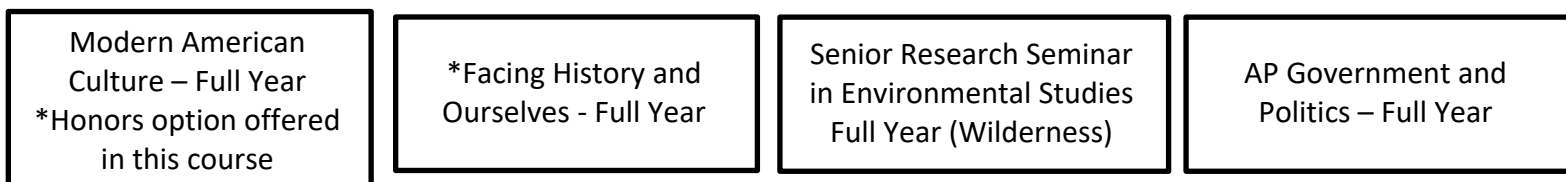
## 11<sup>th</sup> and 12<sup>th</sup> Grade Social Studies Elective Courses with Participation in Government (PIG)



## 12<sup>th</sup> Grade Social Studies Economic Courses



## 12<sup>th</sup> Grade Social Studies Participation in Government Courses (PIG)



**\*Senior year students must take Economics and  
a Participation in Government (PIG) course**

# WORLD LANGUAGE

All courses offered in world language comply with the New York State Standards established by the Board of Regents. Students are advised to continue a sequence in one language rather than two or three years of different languages. The World Language sequence stresses the development of listening, speaking, reading, and writing skills. Throughout the entire sequence, cultural awareness, understanding and acceptance are emphasized, as well as communication in the target language.

As with any high school offering, all non-core elective courses are enrollment dependent.

## **FRENCH**

### **French 2**

**1 yr 1 cr**

The second level moves the student towards greater knowledge of the structure of the language through various listening, speaking, writing and reading activities. Thematic vocabulary and dialogue/discussion are used to improve oral proficiency and cultural understanding. Students explore the culture of the francophone world through fiction and nonfiction, films and projects. This course is conducted primarily in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 8C or teacher placement.**

### **French 3**

**1 yr 1 cr**

In French 3, further emphasis is placed on listening, reading, writing and speaking to enable students to attain greater competency in the French language. By the end of French 3, students will have learned many new grammatical structures and significantly increased their vocabulary. Students explore the culture of the francophone world through readings fiction and nonfiction, films, news media and projects. This course is conducted primarily in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 2.**

### **French 3 Honors**

**1 yr 1 cr**

In this course, students strive to expand their oral and written expression while deepening their reading and listening skills. By the end of French 3 Honors, they will have mastered many advanced grammatical structures and significantly increased their vocabulary. Students explore the culture of the francophone world through film, readings (fiction and nonfiction), news media and projects. This course is conducted entirely in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 2.**

### **French 4**

**1 yr 1 cr**

In French 4, students strengthen confidence in using their French language skills. Students explore and appreciate the culture of the francophone world through readings

(fiction and nonfiction), news media, films, simulations. Real-life language skills are practiced on a daily basis through conversation and discussion. This course is conducted entirely in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 3.**

### **French 4 Honors**

**1 yr 1 cr**

This advanced course is part one of a two-year curriculum that prepares the student for the Advanced Placement French Language & Culture Exam. Students expand oral and written expression and deepen reading and listening skills. They manipulate the language in creative, real-life scenarios and master complex grammatical structures. Students continue to explore and appreciate the culture of the francophone world through readings (fiction and nonfiction), news media, films, and simulations. This course is conducted entirely in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 3 Honors.**

### **French 5**

**1 yr 1 cr**

French 5 is an advanced course in which the focus is a review and refinement of language skills. Students explore and appreciate the culture of the francophone world through news media, readings (fiction and nonfiction), and films. Real-life communicative skills are exercised via conversation, discussion and simulations. This course is conducted entirely in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French 4.**

### **Advanced Placement French 5**

**1 yr 1 cr**

This is the second part of a two-year curriculum. Students prepare for and are expected to take the Advanced Placement French Language & Culture Exam. They do in-depth work speaking, writing, listening to and reading French. Students explore important contemporary and global issues through news media, readings (fiction and nonfiction), films, and simulations. The course has a required summer assignment. This course is conducted entirely in French to allow for learning through language immersion.

**Prerequisite: Successful completion of French Level 4 Honors.**

## **LATIN**

### **Latin 1**

**1 yr 1 cr**

Latin 1 is based on storytelling, imagination, and comprehensible input. The course begins with a focus on the familiar self, family, class, school, and community. Then, ancient Roman topics are explored. Students will develop excellent reading skills, an improved knowledge of their native language's vocabulary and grammar, and they will make connections and comparisons to languages and cultures across time. This is a language course. Students should expect to hear and read Latin for most of class. In this class, *every interaction counts*. Students will be expected to read Latin at home *every day*, often in the form of Latin-language novellas from our classroom library. This class is rigorous, but much more importantly, it is vigorous.

## Latin 2

1 yr 1 cr

This course is a continuation of Latin 1, its themes and methodologies. In Latin 2 students move toward greater knowledge of the structure of Latin through listening, reading, writing, and speaking activities. Thematic vocabulary and dialogue/discussion are used to improve communicative competence as students receive a lot of comprehensible input (reading and listening) and become increasingly confident in generating output (speaking and writing). Students also explore the histories, societies, mythologies, and cultures of the Latin-speaking world (ancient, medieval, Renaissance, and beyond) through readings, performances, and projects. This course is conducted largely in Latin to allow for learning through language immersion.

**Prerequisite:** Successful completion of Latin 8C or Latin 1.

## Latin 3 / 3 Honors

1 yr 1 cr

In Latin 3/ 3 Honors, students will complete, review, and refine a broad and deep grasp of the Latin grammar and morphology required to read unadapted Latin literature. Much of the first two terms are devoted to Caesar (*dē bellō Gallicō*), and Virgil (*Aeneid*). The final two terms are devoted to Ovid (*Amores* and *Metamorphoses*), Martial (), and Latin composition. The cultural focus of this course is a survey of Roman history from the foundation of the city through the Julio-Claudians. Students enrolled in Latin 3 can opt for an Honors designation (Latin 3 Honors) by completing additional assignments. This course is conducted largely in Latin to allow for learning through language immersion.

**Prerequisite:** Successful completion of Latin 2.

## Latin 4 / Honors

1 yr 1cr

Latin Level 4 Honors is a college level course intended for students who have successfully completed three years of high school Latin. Using the modernist approach, students review elementary morphology and syntax and further study of idioms, rhetorical figures, and increasingly complex syntactical constructions, the student continues to transition from reading adapted to unadapted Latin texts. Both medieval and classical texts are studied. In addition to increasing skill in reading Latin texts, students learn about classical Roman culture, and should gain a greater appreciation for the eloquence of Latin prose style. This course is conducted largely in Latin to allow for learning through language immersion.

**Prerequisite:** Successful completion of Latin 3 / 3 Honors.

## Advanced Placement Latin 5

1 yr 1 cr

All students in this course refine the skills required to read Latin literature at sight, using the Modernist approach and the curriculum embraced by the AP Latin exam. The focus of the year is on the translation, analysis, and interpretation of the poetry of Vergil's *Aeneid*. Mastery of content, metrical scansion, poetic devices, and relevant Roman culture and history are the goal. The AP syllabus contains about 2,000 lines of Latin poetry; these are carefully translated. The whole of the *Aeneid* is read in English, and its plot, themes, imagery, and literary history are analyzed in detail. The cultural and historical focus is the Age of Augustus. Students are also trained in techniques for

responding to essay prompts based closely upon passages of Latin. A summer study assignment – reading of Vergil’s *Aeneid* in English – will help prepare them for the AP curriculum.

**Prerequisite: Successful completion of Latin 4 Honors.**

## **SPANISH**

### **Spanish 1**

**1 yr 1 cr**

This course provides students an opportunity to complete the study of Level 1 Spanish. It moves students toward greater knowledge of the structure of the language through various listening, speaking, writing and reading activities. Thematic vocabulary and dialogue/discussion are used to improve communicative competence and cultural understanding. Students continue to the Avancemos textbook series. This course is conducted largely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 8AB or teacher placement.**

### **Spanish 2A**

**1 yr 1 cr**

The second level moves the student towards greater knowledge of the structure of the language through various listening, speaking, writing and reading activities. Thematic vocabulary and dialogue/discussion are used to improve communicative competence and cultural understanding. The course is designed for students who need reinforcement of Spanish 1 concepts. Students begin with Unit 1 of the Avancemos 2 textbook. This course is conducted largely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 8C, Spanish 1 or teacher placement.**

### **Spanish 2**

**1 yr 1 cr**

Spanish 2 moves the student towards a more advanced knowledge of the structure of the language through various listening, speaking, writing and reading activities. Thematic vocabulary is used to improve communicative competence and cultural understanding. The course is designed for students who have successfully completed Units 1-3 of the Avancemos 2 textbook while demonstrating competence in listening, speaking, reading, and writing. This course is conducted primarily in Spanish to allow for learning through language immersion. **Prerequisite: Successful completion of Spanish 8C or teacher placement.**

**Prerequisite: Successful completion of Spanish 2A.**

### **Spanish 3**

**1 yr 1 cr**

In this course, further emphasis is placed on listening, reading, writing and speaking to enable students to attain greater competency in the Spanish language. By the end of Spanish 3, students have learned many new grammatical structures and have significantly increased their vocabulary. Students explore the culture of the Hispanic and

Latin American world through film, short stories, news media and projects. This course is conducted primarily in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 2.**

### **Spanish 3 Honors**

**1 yr 1 cr**

In this course, students strive to expand their oral and written expression while deepening their reading and listening skills. By the end of Spanish 3 Honors, they have mastered many advanced grammatical structures and significantly increased their vocabulary. Students explore the culture of the Hispanic world through film, literature, news media and projects. This course is conducted entirely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 2.**

### **Spanish 4**

**1 yr 1 cr**

In Spanish 4, emphasis is placed on improving the students' confidence in using their Spanish language skills. Students explore and appreciate the culture of the Hispanic world through readings (fiction and non-fiction), films, and news media. Real-life language skills are practiced daily through conversation and discussion of authentic materials. This course is conducted entirely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 3 or 3H.**

### **Spanish 4 Honors**

**1 yr 1 cr**

This advanced level course is part one of a two-year curriculum that prepares the student for the Advanced Placement Spanish Language & Culture Exam. The primary focus is on improving Spanish language skills through the exploration of current events in authentic news media, along with study of the history, geography, literature and art of the Spanish-speaking world. Students review grammar while learning more advanced structural concepts. Greater proficiency and flexibility in both conversation and composition is emphasized. This course is conducted entirely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 3 Honors.**

### **Spanish 5**

**1 yr 1 cr**

Spanish 5 is an advanced level course in which the focus is on a review and refinement of language skills. Students explore and appreciate the culture of the Hispanic world through news media, readings (fiction and non-fiction), film and projects. Real-life communicative skills are exercised via conversation, discussion and simulations. This course is conducted entirely in Spanish to allow for learning through language immersion.

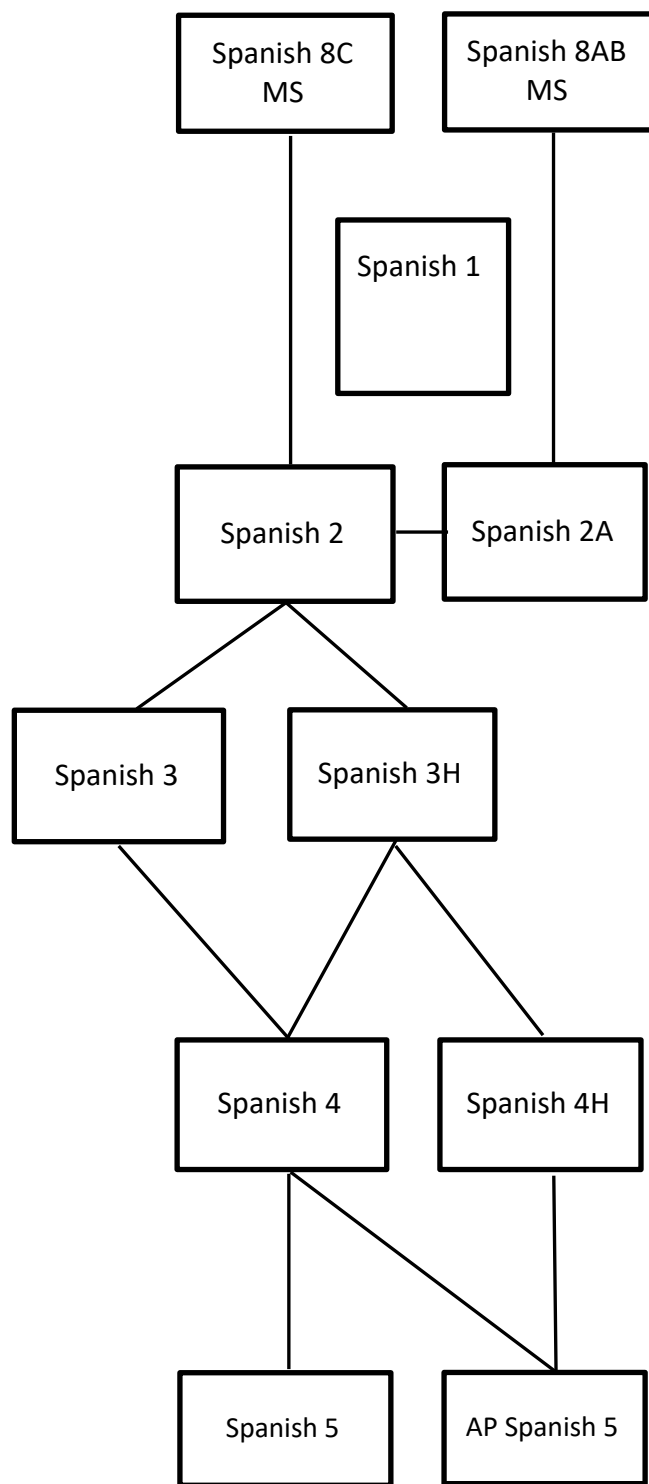
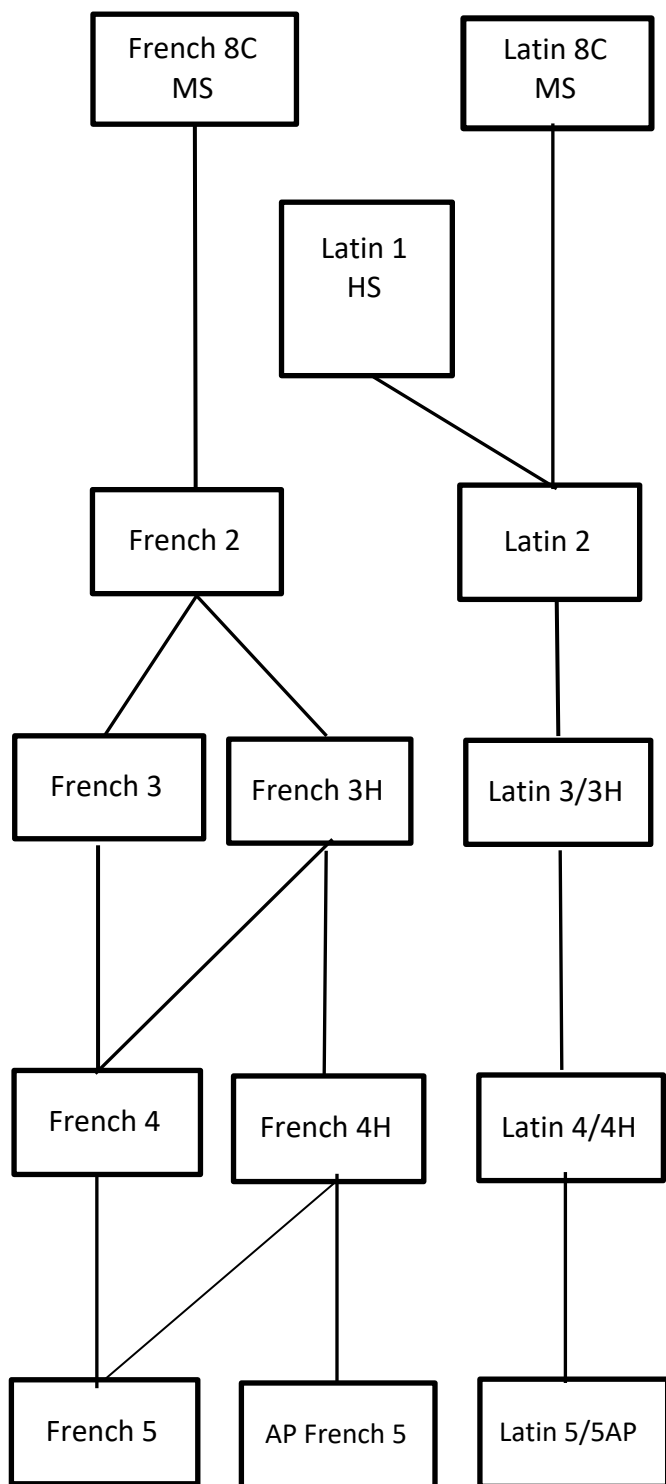
**Prerequisite: Successful completion of Spanish 4 or 4 Honors.**

**Advanced Placement Spanish 5****1 yr 1 cr**

This is the second part of a two-year curriculum. Students prepare for and are expected to take the Advanced Placement Spanish Language & Culture Exam. The primary focus is on improving Spanish language skills through the exploration of current events in authentic news media. Students also become acquainted with Peninsular and Latin-American literature. Writing is expressed through authentic responses in e-mail and persuasive essays. Weekly conversations in Spanish are practiced and recorded in the lab. It is a college-level course requiring a high degree of competency in listening, speaking, reading and writing. The course has a required summer assignment. This course is conducted entirely in Spanish to allow for learning through language immersion.

**Prerequisite: Successful completion of Spanish 4 Honors.**

# WORLD LANGUAGE



# **BOCES TECH CENTER**

The Tech Center is run by the Board of Cooperative Educational Services in Yorktown. The courses offered are designed primarily for juniors and seniors and may be taken by a student who has an interest in a particular field that he/she would like to pursue as a career. Students may continue their education after graduation in advanced technical schools if they so desire. Tech Center courses carry three credits and meet every day in Yorktown for two hours. This means that students must compress their required courses at John Jay into either the morning or afternoon sessions.

## **Business Career Academy**

Microcomputer Tech/Cybersecurity/Programming/  
Coding/Gaming  
Microcomputer Technology\*\*

## **Communications Career Academy**

Animation & Motion Graphics  
Computer Graphics  
Digital Film, Video & Audio Production  
Digital Media\*  
Fashion Design  
Fashion Design Assistant\*

## **Cosmetology Career Academy**

Barbering\*  
Cosmetology I & II  
Cosmetic Services\*\*\*

## **Hospitality Career Academy**

Baking & Pastry Arts  
Culinary Arts  
Culinary Arts at Tilly Foster Farm\*/\*\*  
Food Prep Assistant\*  
Food Service Transition to Work\*

## **Health Career Academy**

Animal Care  
Animal Care & Farm Science at Tilly\*  
Certified First Responder  
Certified Nurse Aide / Home Health Aide  
Emergency Medical Technician  
Introduction to Physical Therapy / Rehab  
Law Enforcement /EMS  
Medical Assistant  
New Visions Health (Interview Required)  
Sports Medicine  
Veterinary Science

## **Environmental Science Career Academy**

Urban Forestry\*\*  
Urban Forestry/Arboriculture

\*Life Level Programs

\*\*Core Level Programs

New Visions (Seniors Only)

## **Construction Career Academy**

Architecture / Engineering  
Carpenter's Assistant Trainee\*  
Carpentry  
Construction Electricity  
Construction Technology\*\*  
Construction Technology at Tilly  
HVAC / Plumbing / Pipe Fitting  
New Visions Engineering (Interview Required)  
Preservation/Restoration/Commercial Masonry  
Welding

## **Transportation Career Academy**

Auto Body  
Auto Mechanics I & II  
Small Engine Repair\*  
Small Engine / Motorcycle Technology

## **Teaching Career Academy**

Childcare Assistant\*  
Child Development & Education I & II

## **English New Learner Career Academy**

ENL Alternate Options (TASC)  
ENL Architecture / Engineering  
ENL Auto Body  
ENL Auto Mechanics  
ENL Business & Computer Technology  
ENL Carpentry  
ENL Cosmetology I & II  
ENL Culinary  
ENL Immersion  
ENL Medical Assistant  
ENL Pre-Nurse Aide  
ENL Urban Forestry

## **Additional Offerings**

Alternate Options (TASC)

## **9<sup>th</sup> & 10<sup>th</sup> Grade Offerings**

Introduction to Health Occupations  
Introduction to Engineering