

2024 | 2025

HIGH SCHOOL  
COURSE CATALOG



**SMITHTOWN**  
CENTRAL SCHOOL DISTRICT



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## New York State Diploma Requirements Applicable to All Students Enrolled in Grades 9-12

### Credit Requirements

(Apply to all diploma types: local, Regents, Regents with advanced designation)

	Minimum number of credits
English	4
Social Studies <i>Distributed as follows:</i> <i>U.S. History (1)</i> <i>Global History and Geography (2)</i> <i>Participation in Government (½)</i> <i>Economics (½)</i>	4
Science <i>Distributed as follows:</i> <i>Life Science (1)</i> <i>Physical Science (1)</i> <i>Life Science or Physical Science (1)</i>	3
Mathematics	3
World Languages	1 <sup>(**)</sup>
Visual Art, Music, Dance, and/or Theater	1
Physical Education <i>(participation each semester)</i>	2
Health	½
Electives	3 ½
<b>Total</b>	<b>22</b>

<sup>(\*\*)</sup>Students with a disability may be excused from the requirement for 1 unit of credit in World Languages if so indicated on their IEP, but they must still earn 22 units of credit to graduate.

#### 1.) Pathways

A student must either:

- earn the [Seal of Civic Readiness](#); or
- pass an additional Regents Exam or Department Approved Alternative in a different course (English, mathematics, science, or social studies); or
- pass a Department Approved Pathway Assessment (Arts, CDOS, World Languages); or
- successfully complete a NYSED-approved CTE program, including the associated 3-part technical assessment; or
- successfully complete all the [requirements for earning the CDOS Commencement Credential](#).

Beginning in fall 2022, a select number of NYS schools will pilot the [Individual Arts Assessment Pathway \(IAAP\)](#). Reference [Multiple Pathways](#) and [Department Approved Alternative Examinations](#).

#### 2.) Traditional Appeals

All appeals are subject to local district approval. Reference: [Appeals, Safety Nets, and Superintendent Determination](#)

#### 3.) Special Endorsements

**Honors:** A student earns a computed average of at least 90 on the Regents Exams applicable to either a Regents diploma or a Regents diploma with advanced designation. No more than 2 Department approved alternatives can be substituted for Regents Exams. The locally developed Checkpoint B examination in World Languages is not included in the calculation.

**Mastery in Math and/or Science:** A student meets all the requirements for a Regents diploma with advanced designation AND earns a score of 85 or better on 3 math Regents Exams and/or 3 science Regents Exams.

**Technical Endorsement:** A student meets the requirements for either a local diploma, a Regents diploma or a Regents diploma with advanced designation AND successfully completes a Department approved CTE program including the 3-part technical assessment.

**Seal of Biliteracy:** A student meets the criteria for earning the [NYS Seal of Biliteracy](#).

**Seal of Civic Readiness:** A student meets the criteria for earning the [NYS Seal of Civic Readiness](#).

Reference the [Endorsements and Seals webpage](#) or [NYS Diploma/Credential Requirements](#) for additional information related to awarding special endorsements to students with exam exemptions due to COVID-19.

#### 4.) World Languages Exemption

Students with a disability may be excused from the required units of credit in World Languages if so indicated on their IEP, but they must still earn 22 units of credit to graduate. Such student who seeks a Regents diploma with advanced designation does NOT have to complete the 5-unit sequence in the Arts or CTE in lieu of the sequence in World Languages in order to meet the assessment requirements for the advanced diploma.

#### 5.) Superintendent Determination of a Local Diploma

Students with a disability who are unable to attain a local diploma through the various safety net provisions may be eligible for a Superintendent Determination of a local diploma under certain conditions. Reference: [Appeals, Safety Nets, and Superintendent Determination](#)

#### 6.) Flexibilities due to the COVID-19 Public Health Emergency

**Exemptions:** Students granted an exemption from any exam due to COVID-19 are not required to pass such specific exam to meet the assessment requirements for any diploma type. Reference the following FAQs: [June/August 2020](#), [January 2021](#), [June/August 2021](#), and [January 2022](#)

**Special Appeals:** Eligible students may use lower scores (50-64) on Regents Exams taken during the 2021-22 or 2022-23 school year to meet the assessment requirements for any diploma type. Reference: [Special Appeals Memo](#) and [FAQ](#).

**Special Determination:** Students who are scheduled to graduate in **June 2022** and either do not qualify for a Special Appeal or who are unable to participate in one or more required Regents Exam(s) because of illness, including isolation restrictions due to COVID, may request a [Special Determination to Graduate with a Local Diploma in June 2022](#).

#### 7.) Exemptions from the Regents Exam in US History and Government (Framework)

Eligible students shall be granted an exemption from the June 2022, August 2022, or January 2023 Regents Exam in US History and Government (Framework). Reference: [FAQ on Cancellation of Regents Exam in US History and Government \(Framework\)](#)

### Assessment Requirements

	Regents Diploma for All Students		Regents Diploma via Appeal for All Students		Local Diploma via Appeal for All Students		Local Diploma for Students with a Disability		Local Diploma via Appeal for English Language Learners	
REGENTS EXAM or passing score on a Department approved alternative	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score
English Language Arts (ELA)	1	65 <sup>1</sup>	1	1 Regents exam with a score of 60-64 for which an appeal has been granted by the district and all remaining Regents exams with a score of 65 <sup>1</sup> or above	1	2 Regents exams with a score of 60-64 for which appeals have been granted by the district and all remaining Regents exams with a score of 65 <sup>1</sup> or above	1	55 <sup>*^</sup>	1	Either the ELA Regents exam with a score of 55-59 for which an appeal has been granted by the district, and all remaining Regents exams with a score of 65 <sup>1</sup> or above, <u>OR</u> 1 Regents exam with a score of 60-64 and the ELA Regents with a score of 55-59 for which appeals have been granted for both by the district, and the remaining Regents exams with a score of 65 <sup>1</sup> or above <sup>†</sup>
Math	1	65 <sup>1</sup>	1		1		55 <sup>*^</sup>	1		
Science	1	65 <sup>1</sup>	1		1		55 <sup>*^</sup>	1		
Social Studies	1	65 <sup>1</sup>	1		1		55 <sup>*^</sup>	1		
Pathway <i>(See note 1 on reverse side)</i>	1 or CDOS	65 <sup>1</sup> if Regents Exam	1 or CDOS	1 or CDOS	1 or CDOS	55 <sup>*^</sup> if Regents Exam	1 or CDOS			
Compensatory Safety Net	<i>Non-Applicable</i>		<i>Non-Applicable</i>		<i>Non-Applicable</i>		Scores of 45-54 on any required Regents exam (except ELA and Mathematics) can be compensated by a score of 65 <sup>1</sup> or above on another required Regents exam including ELA and Mathematics.		<i>Non-Applicable</i>	

### Regents Diploma with Advanced Designation

Students seeking the Regents diploma with advanced designation must:

- Meet the credit and assessment requirements for a Regents diploma; and
- Pass **two additional** Regents **exams** or Department approved alternatives in **mathematics**; and
- Pass **one additional** Regents **exam** or Department approved alternative in **science**
  - students seeking advanced designation must pass at least one Regents exam or Department approved alternative in both sciences (**one life** and **one physical**); and
- Complete a **sequence**:
  - earn an additional 2 units of credit in World Languages and pass a locally developed Checkpoint B World Languages examination, or
  - complete a 5 unit sequence in the Arts, or
  - complete a 5 unit sequence in CTE.

#### Assessment Combinations for Advanced Designation

Traditional Combination	ELA, Global History and Geography, US History and Government, 3 mathematics, 2 science (1 life science, 1 physical science) = 8 assessments
Pathway Combination (other than STEM)	ELA, 1 social studies, 3 math, 2 science (1 life science, 1 physical science), 1 Pathway (other than science or math) = 7 (+Pathway) or 8 assessments.
STEM (Mathematics) Pathway Combination	ELA, 1 social studies, 4 math <sup>‡</sup> , 2 science (1 life science, 1 physical science) = 8 assessments.
STEM (Science) Pathway Combination	ELA, 1 social studies, 3 math, 3 science (at least 1 life science, at least 1 physical science) = 8 assessments.

\* A student with a disability may appeal scores between 52 and 54 on up to two Regents examinations in any discipline and graduate with the local diploma. Reference [New York State Diploma/Credential Requirements: Local diploma for Students with Disabilities](#).

<sup>^</sup> In the event a student with a disability is unable to attain a passing score on any Regents examination, the student may be eligible for a Superintendent Determination of a local diploma. Reference [Appeals, Safety Nets, and Superintendent Determination](#).

<sup>†</sup> English Language Learners seeking an appeal for a score of 55-59 on the ELA Regents Exam are only eligible if they entered the United States in grade 9 or after and were classified as an English Language Learner when they took the test the second time. Reference [New York State Diploma/Credential Requirements: Local diploma for English Language Learners](#).

<sup>‡</sup> The 4<sup>th</sup> mathematics examination can be selected from the list of [Department Approved Alternative Examinations](#).

<sup>1</sup> For the purposes of determining a student's diploma type, exemptions and Special Appeals should be considered passing scores. Both exemptions and [Special Appeals](#) may be applied to all diploma types.

# INTRODUCTION

## Challenge by Choice

The Smithtown Central School District's educational program strives to provide all students with the fundamental academic skills and knowledge required for their maximum educational development and the opportunity to develop their interests and abilities to the fullest extent according to their potential.

The district's Challenge by Choice initiative has been developed to assist our students in selecting courses that will help them to reach their highest potential. This program guide contains information on course offerings, specifying all prerequisites, difficulty levels, course content and course expectations. Students will receive departmental recommendations based on their academic record and current progress. Students interested in engaging in more challenging course work by enrolling in a related honors, college or (AP) Course and who have taken the prerequisite course(s) may make those selections during the scheduling session in the computer lab. Students are encouraged to discuss their interest in taking more challenging coursework with their current classroom teacher, parents/guardians and school counselor. Once a student has enrolled in an honors-, college- or AP-level course, there is no guarantee that a future request for a level change can be accommodated (i.e., honors level to Regents level). For additional information on level changes, students and parents should refer to the student agenda to review the district's course change/drop procedures. We encourage students to pursue excellence and rigorous academic experiences. Should you have additional

questions regarding course selections or program expectations, please remember that teachers, counselors, building administrators and departmental administrators are available to assist you.

## Prerequisites and Recommendations

To guide students in making course selections, each course in the program guide includes any prerequisites. Students must pass and receive course credit for the course(s) listed as prerequisites to take the desired course. In addition to any prerequisites, some courses may include a co-requisite. Courses listed as co-requisites must be taken concurrently with the desired course if not previously completed. Some course descriptions also include recommendations about the skills and prior performance that provide a strong foundation for success in a course. Recommendations are intended to provide guidance to both parents and students as they consider enrolling in challenging coursework.

## Regents/FLACS Examinations and Final Course Grades

The district encourages all students to strive for success when taking Regents and/or FLACS examinations. In an effort to encourage students to pursue their personal best, the district affords students the benefit of recalculating final course grades when they retake a Regents or FLACS examination in future testing administrations and earn a higher examination score. This practice applies only to Regents and FLACS examinations that are factored into final course grades and does not apply to locally developed final examinations.

All final course grades are calculated at the conclusion of the school year

with either the actual Regents or FLACS examination grade or an "F" (as a final exam grade at one-ninth) in the case where a student is absent from the examination. When an absent student takes the Regents and/or FLACS examination in a future examination period (in most cases, August), the final course grade will be recalculated using the actual Regents and/or FLACS examination score. In cases where an August examination is not available (e.g. Physics Regents, FLACS examinations), students who are absent due to an excused absence will be offered the choice to take an alternative final examination or wait until the next Regents or FLACS examination administration and have their final course grade determined accordingly.

## AP Courses

Students in Advanced Placement courses are expected to take the appropriate AP examination. The AP examination must be taken for an AP course to receive the additional 1.0 weighting for the grade point average.

Students are expected to pay the associated College Board fee for the examination.

## College Board AP Capstone Program

AP Capstone is a diploma program offered by the College Board designed to equip students with the independent research, collaborative teamwork and communication skills that are increasingly valued by colleges. According to the College Board website, it "cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions." The AP Capstone courses consist of AP Capstone Seminar

(grade 11) and AP Capstone Research (grade 12) offered through the English department. These courses can be used to fulfill the core 11th and 12th grade English requirements. Additional details on course requirements can be found in the English section of this program guide. Students who earn AP scores of 3 or higher in AP Seminar and AP Research will earn the AP Seminar and Research Certificate from the College Board. Students who earn AP scores of 3 or higher in AP Seminar, AP Research and four additional AP examinations will earn the AP Capstone Diploma from the College Board.

For more information on the AP Capstone program, please visit the following link: <https://advancesinap.collegeboard.org/ap-capstone>

### **Project Lead the Way (PLTW)**

The Project Lead the Way curriculum is designed to increase a student's exposure to the areas of science, technology, engineering and mathematics. PLTW applies skills in each of these areas to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the "right" answer. Students learn how to apply STEM knowledge, skills and habits of mind to make the world a better place through innovation.

In PLTW Engineering, students engage in open-ended problem-solving, learn and apply the engineering design process and use the same industry-leading technology and software as are used in the world's top companies. Students are immersed in design as they investigate topics such as sustainability, mechatronics, forces, structures, aerodynamics, digital electronics and circuit design, manufacturing and the environment, which gives them an opportunity to learn about different engineering disciplines before beginning postsecondary education or careers.

In PLTW Biomedical Science, students are empowered to explore and find solutions to some of today's most pressing medical challenges. Students step into the roles of biomedical science professionals and investigate topics including human medicine, physiology, genetics, microbiology and public health.

Students work together in teams to find unique solutions, and in the process, learn in-demand, transferable skills like critical thinking and communication. For additional information on the PLTW program, please visit the following link: <https://www.pltw.org/>. Students enrolled in PLTW courses take a national end-of-course examination. This EOC examination must be taken for a PLTW course to receive the additional 1.0 weighting for the grade point average.

### **Career and Technical Endorsements**

The Smithtown High School career and technical education department (CTE) is proud to offer students the opportunity to receive technical endorsements on their high school diploma if they meet the required criteria. The New York State Education Department has approved eligible students to receive the Marketing and Accounting/Finance CTE endorsements in the area of business, and the Human Development and Food/Nutrition endorsements in the area of Family and Consumer Science. These endorsements will show potential colleges and employers that the student has met the requirements of specialized content in coursework as well as work experience, which is the cornerstone of the CTE experience. In addition, these endorsements can also be used as a graduation requirement under the "4 + 1" pathway option for graduation for both the Regents Diploma and Regents Diploma with Advanced Designation. Additional information on each of the

endorsement requirements can be found [HERE](#).

### **Seal of Civic Readiness**

The New York State Seal of Civic Readiness (NYSSCR) is a formal recognition that a student has attained a high level of proficiency in terms of civic knowledge, civic skills, civic mindset, and civic experiences. Civic-ready students use civic knowledge, skills, and mindsets to make decisions and take actions for themselves, their communities, and public good as members of a democratic society. Through the Seal of Civic Readiness initiative, Smithtown High School students are provided with meaningful opportunities to develop specific civic knowledge, skills, and mindsets—and to participate in authentic actions and experiences—that are necessary for them to function as productive civic participants within their schools, communities, states, our country, and the world.

The New York State Seal of Civic Readiness acknowledges the importance of being an active participant in our democracy and community. Work towards the Seal empowers students with a sense of agency. The Seal highlights the strong civic mindsets and contributions of our students towards a better world. Therefore, students earn points and are recognized for their community service and hard work. Attaining the Seal of Civic Readiness becomes part of the high school transcript and diploma for these students and is a statement of accomplishment for future employers and for college admission. The NYSSCR can also serve as a graduation pathway under New York State's "4 + 1" option for both the Regents Diploma and the Regents Diploma with Advanced Designation. More information regarding the Seal of Civic Readiness can be found [HERE](#).

# COLLEGE CREDIT COURSES

Smithtown Central School District affords students the opportunity to earn college credits while taking courses in high school. Each respective college/university sets the criteria for eligibility to earn these credits. It is recommended that families/students contact prospective colleges/universities to find out if the college credits earned from these courses will be accepted for their anticipated program of study.

HS Course Name (Department)	College (# of Credits)	HS Course Name (Department)	College (# of Credits)
College Accounting 1 (Business)	Farmingdale State College (3)	College Italian 4 (World Languages)	Stony Brook University (4)
College Accounting 2 (Business)	Farmingdale State College (3)	College Italian 5 (World Languages)	Stony Brook University (3)
College American Sign Language 3 (World Languages)	Stony Brook University (4)	College Journalism & Media Literacy (English)	Stony Brook University (3)
College Business Law (Business)	LIU Post (6)	College Marine Ecology (Science)	Stony Brook University (3)
College Calculus (Mathematics)	Suffolk County Community College (3)	College Marketing (Business)	LIU Post (6)
College Child Development (FCS)	LIU Post (3)	College Oceans (Science)	Stony Brook University (3)
College Computer Applications (Business)	LIU Post (3)	College Personal Investments (Business)	LIU Post (3)
College Early Childhood/Preschool (FCS)	LIU Post (3)	College Robotics 2 (Technology)	Farmingdale State College (3)
College English 12 (English)	Stony Brook University (6)	College Spanish 3 (World Languages)	Stony Brook University (4)
College Entertainment Marketing (Business)	LIU Post (3)	College Spanish 4 (World Languages)	Stony Brook University (4)
College Fashion Apparel & Accessories (Business)	LIU Post (3)	College Spanish 5 (World Languages)	Stony Brook University (3)
College Fashion Marketing (Business)	LIU Post (3)	College Sports Management (Business)	LIU Post (3)
College Food Science (FCS)	LIU Post (4)	College Sports Medicine (Health)	Adelphi University (3)
College French 3 (World Languages)	Stony Brook University (4)	College Statistics (Mathematics)	Suffolk County Community College (3)
College French 4 (World Languages)	Stony Brook University (4)	College Virtual Enterprise (Business)	LIU Post (6)
College French 5 (World Languages)	Stony Brook University (3)	PLTW Biomedical Innovation (Science)	Augustana University (4)
College Genocide in the 20th Century (Social Studies)	Farmingdale State College (3)	PLTW Computer Integrated Manufacturing (Technology)	Rochester Institute of Technology (3)
College German 3 (World Languages)	Stony Brook University (4)	PLTW Human Body Systems (Science)	Rochester Institute of Technology (3)
College German 4 (World Languages)	Stony Brook University (4)	PLTW Intro to Engineering Design: DDP (Technology)	Rochester Institute of Technology (3)
College German 5 (World Languages)	Stony Brook University (3)	PLTW Medical Interventions (Science)	Rochester Institute of Technology (3)
College Interior Design (FCS)	SUNY Oneonta (3)	PLTW Principles of Biomedical Science (Science)	Rochester Institute of Technology (3)
College Introduction to Real Estate (Business)	LIU Post (3)	PLTW Principles of Engineering (Technology)	Rochester Institute of Technology (3)
College Italian 3 (World Languages)	Stony Brook University (4)		



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# NCAA-APPROVED COURSES

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Any student seeking consideration to participate in a college Division I or II athletics program for scholarship purposes must meet certain NCAA requirements. The list below includes all core courses that have been approved by the NCAA. All potential college athletes must log onto [www.ncaa.org](http://www.ncaa.org) to complete the initial Eligibility Clearinghouse Form. Parents/Guardians and students are encouraged to contact their school counselor with any questions.

## ENGLISH

- AP Capstone Research - English
- AP Capstone Seminar - English
- AP English Language and Composition
- AP English Literature and Composition
- College English 12
- Creative Writing 1
- Creative Writing 2
- Discover NY: A Literary Exploration
- English 9
- English 9 Honors
- English 10
- English 10 Honors
- English 11
- English 12
- Speak Up!

## MATHEMATICS

- AP Calculus AB
- AP Calculus BC
- AP Statistics
- Algebra 1
- Algebra 1 RE
- Algebra 2
- Algebra 2 RE
- Algebra 2 Honors
- College Calculus
- College Statistics
- Foundations in Advanced Algebra
- Functions & Statistics
- Geometry
- Geometry RE
- Geometry Applications
- Geometry Honors
- Introduction to Calculus
- Introduction to Calculus Honors

## SCIENCE

- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics 1
- AP Physics with Calculus
- Astronomy
- Biology
- Chemistry
- College Marine Ecology
- College Oceans
- Earth Science
- Earth Science Honors
- Environmental Science
- Forensic Science Crimes and Clues
- Forensic Science Investigations
- Physics
- PLTW Biomedical Innovation
- PLTW Human Body Systems
- PLTW Medical Interventions
- PLTW Principles of Biomedical Science
- PLTW Principles of Engineering (Technology Course)
- Topics in Science

## SOCIAL STUDIES

- AP Comparative Government and Politics
- AP European History
- AP Human Geography
- AP Macroeconomics
- AP Psychology
- AP United States Government and Politics
- AP U.S. History
- AP World History: Modern
- College Genocide in the 20th Century
- Criminal Justice
- Economics
- Global History 1

- Global History 1 Honors
- Global History 1 RE
- Global History 2
- Global History 2 RE
- History of Sports in American Society
- History Through Film
- Human Conflict
- Introduction to Psychology
- New York City and Long Island History
- Participation in Government
- Participation in Government/Leadership
- U.S. History and Government
- U.S. History and Government RE

## WORLD LANGUAGES

- American Sign Language 1
- American Sign Language 2
- College American Sign Language 3
- College French 3
- College French 4
- College French 5
- College German 3
- College German 4
- College German 5
- College Italian 3
- College Italian 4
- College Italian 5
- College Spanish 3
- College Spanish 4
- College Spanish 5
- French 1
- French 2
- German 1
- German 2
- Italian 1
- Italian 2
- Spanish 1
- Spanish 2



# ART COURSES

## **STUDIO IN ART (7015)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

This course will focus on the basic principles of art and the elements of design as they relate to two- and three-dimensional art. Studio in Art will give students a survey of many different media and techniques, providing an excellent foundation for all other art courses. As well as maintaining a sketchbook for ideas, designs and assignments, activities will include drawing, painting, printmaking, graphic design, sculpture and crafts. It is strongly recommended that Studio in Art be taken as a prerequisite to all elective art courses. Studio in Art is required for AP Art students. Studio in Art fulfills the arts graduation requirement.

## **STUDIO IN CRAFTS 1 (7501)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course will focus on the basic principles of art and the elements of design as they relate to two- and three-dimensional design projects that reflect historical and multicultural

references. Students will learn to apply design concepts influenced by historical research to all projects. Originality and imagination are stressed. While learning the impact various cultures have had on crafts, students may explore the areas of tie-dye, batik, weaving, basketmaking, book arts and printing. Studio in Crafts 1 combined with Studio in Crafts 2 fulfills the arts graduation requirement.

## **STUDIO IN CRAFTS 2 (7511)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: Studio in Crafts 1*

A continuation of Studio in Crafts 1, this course will explore two- and three-dimensional craft techniques and their cultural impact while focusing on the basic principles of art and the elements of design. Working through the many cultural and historical influences of craft throughout the ages, students may explore the areas of papermaking, printing, jewelry making, stained glass, enameling and ceramic sculpture. Studio in Crafts 1 combined with Studio in Crafts 2 fulfills the arts graduation requirement.

## **STUDIO IN DIGITAL MEDIA ARTS (7305)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

College and career readiness emphasizes 21st-century learning skills such as the ability for students to communicate and express themselves in an artistic and creative manner through the use of multimedia technology. Students will use industry-standard applications to create digital media focusing on design, production and function. Students may collaborate and communicate as design teams to manage projects. Projects may include animation, video game design, 3D printing, photography, film/video, web design, coding, interactive media and communication design. Studio in Digital Media Arts fulfills the arts graduation requirement.

## **FILM & VIDEO 1 (7306)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Students have taken Studio in Digital Media Arts*

While studying the phenomenon of persistence of vision, students will discover the magic in motion picture

making. They will learn techniques in cell and cut paper animation, claymation, live-action filmmaking methods and videography, as well as some computer graphics. Major assignments include a flipbook, an animated movie and a live-action video production. Drawing, storyboard preparation, set building, clay modeling and scriptwriting are among the various processes studied in Film & Video. Drawing ability is not necessary.

### **PHOTOGRAPHY 1 (7307)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Students have taken Studio in Digital Media Arts*

While studying the art of making great pictures, students will learn the basic principles of design and composition. The course will cover the basics of digital photography, and students will learn how to effectively use both single-lens reflex and point-and-shoot cameras. Students will learn about camera basics such as aperture, shutter speed and exposure and then apply the knowledge in the digital world with computer programs such as Adobe Photoshop and Lightroom.

### **DRAWING 1 (7051)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Students have taken Studio in Art*

This is a basic course that teaches the concepts of line, value (shading), texture and form while integrating various techniques and drawing materials. Skills in seeing and eye-hand coordination are emphasized and practiced. Students will explore a variety of media, such as pen and ink,

charcoal, pastels and more. This class is necessary for students who plan to take AP Art or choose a career in art.

### **PAINTING 1 (7091)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Students have taken Studio in Art*

This is an introductory course in painting. Students will learn to apply elements of design in developing original paintings on various surfaces and stretched canvas in the areas of still life, abstract works, portraits and landscapes. Students will learn color theory as applied to paint and will work with acrylics, watercolors and various other media. This course is required for any student planning to take AP Art.

### **DRAWING & PAINTING 2 (7105)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisites: Drawing 1 and Painting 1*

This advanced-level course will provide opportunities for further development of individual expression. Techniques and materials learned in the Drawing and Painting classes are expanded to achieve a more professional and sophisticated vision. Students will create a portfolio of completed pieces that can be used for entry into AP Art and college.

### **FASHION ILLUSTRATION (7200)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Studio in Art or Drawing 1*

This course concentrates on drawing the fashion figure with emphasis

on a variety of drawing and design techniques. Students will learn the proportions of the fashion figure, how to design and draw garments with details and how to render fabrics. The development of style will be individually developed through the exploration of color, texture, line and the layout of the fashion figure in composition.

### **ADVANCED DIGITAL MEDIA ARTS (7309)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: Studio in Digital Media Arts*

This course will further develop the role of computer technology as an art medium in the emerging field of digital media. Students will be challenged to create projects that apply design principles and color theory reflective of the style of notable artists. Students will use industry-standard applications to create their digital media projects. Projects may include animation, video game design, 3D printing, photography, film/video, web design, coding, interactive media and communication design.

### **FILM & VIDEO 2 (7308)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: Film & Video 1*

This course is designed to give students the opportunity to experience how films are developed and to create their own short films. Through the screening of various professional films, students will learn how to write and film their own works. Each student will shoot individual assignments as well as work together in groups creating collaborative projects. They will study the art of screenwriting, cinematography, film production,

editing and marketing. All students will gain valuable, in-depth experience while working with motion-picture cameras.

## **FILM HISTORY & CRITICISM (7350)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Through the screening of a variety of significant films such as “Citizen Kane” and “The Graduate,” students will learn the history of motion pictures. The class will focus on the different historical perspectives and cultural influences in film from the early days of film with works such as “Birth of a Nation” to present-day films, including “The Matrix” and “Memento.”

Students will study the early history of motion pictures and learn how films were first developed, how they evolved and where they are going. Full-length films will be analyzed for plot, technique, symbolism and character development. Utilizing classroom discussions, written comparisons, character sketches and reviews, the students will learn to sharpen their powers of criticism and appreciate the artistic value of film. No background in art or film is necessary.

## **CERAMICS 1 (7561)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*Recommendation: Students have taken Studio in Art or Studio in Crafts 1 and 2*

This course is an introductory hands-on exploration of clay. Students will create original pottery and ceramic sculpture while learning the techniques of hand building. Students will also learn a variety of finishing techniques that include glaze and colored slips.

This is an excellent course of study for all art and nonart majors, providing a fun opportunity for self-expression and creativity.

## **CERAMICS 2 (7571)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: Ceramics 1*

Students will continue to build on foundation skills learned in Ceramics 1. This course focuses on the further development of hand building, the potter’s wheel, surface decorations and glazing techniques in an advanced studio environment.

## **AP STUDIO ART (7470)**

**Grades 11-12**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisites: One studio foundation course, one art elective, portfolio review and/or departmental approval*

*Recommendation: Students have completed Studio in Art, Drawing 1 and Painting 1*

## **AP STUDIO ART 2 (7471)**

**Grade 12**

**Full Year, 1 Credit**

**Summer Assignment Required**

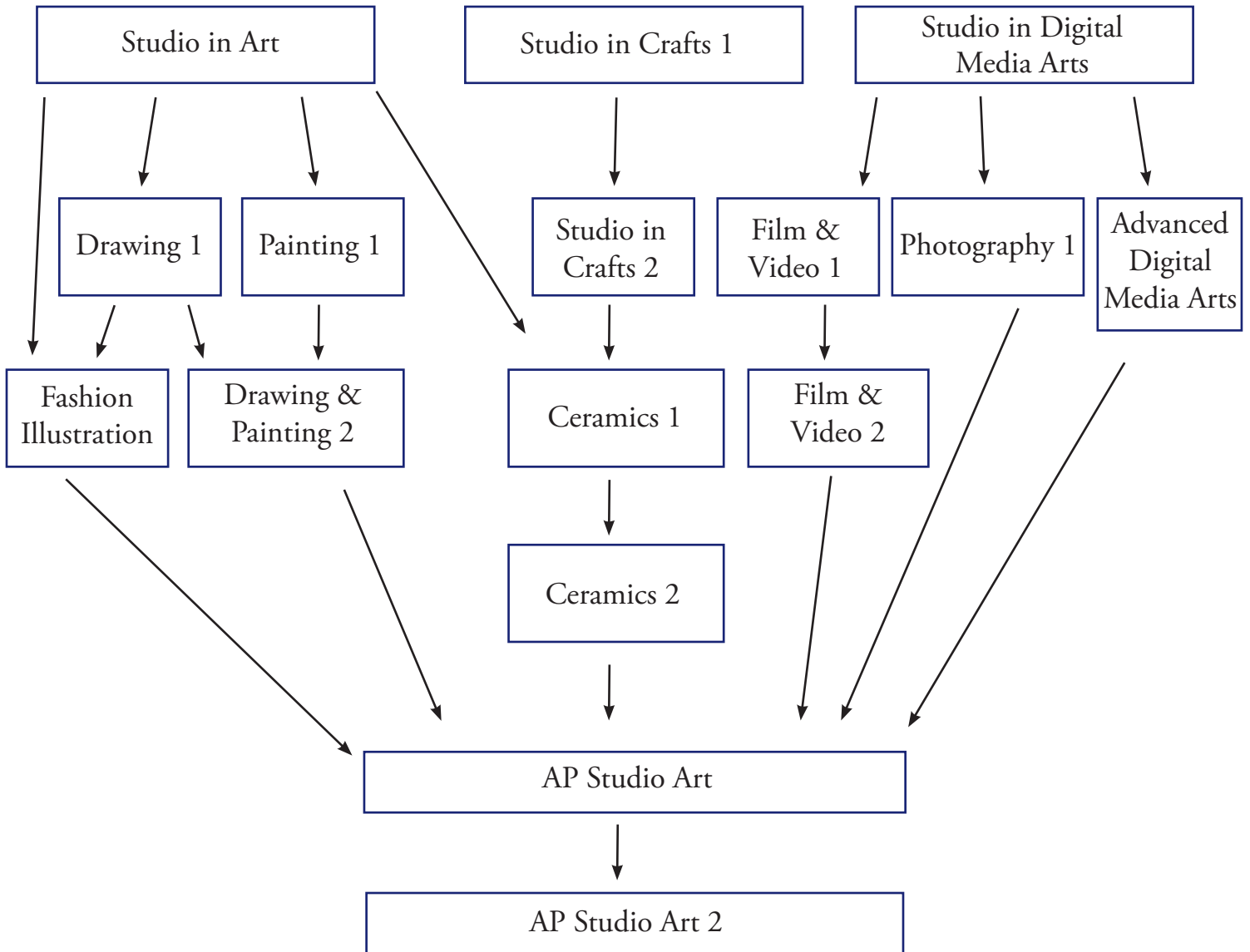
*Prerequisite: AP Studio Art*

The AP Studio Art 2 course is designed for highly motivated students who are seriously interested in a college-level study of art. Students must successfully complete at least a three-credit sequence in art, undergo a portfolio review and receive departmental approval before they can enroll in the AP Art course. AP Art students are expected to have a firm grasp of the elements of design and the principles of art before they begin the Advanced Placement course of study.

AP Art assignments are designed to help students think at a higher, more sophisticated level. Art assignments are formulated to meet most college and art school admissions requirements. Assignments may include a wide assortment of design, drawing, painting, printmaking, computer art, sculpture and mixed media problems.

At the conclusion of the year, AP Art students are expected to take a performance-based exam which allows them to earn college credit if they achieve a rating acceptable to the college or school to which they have applied. Throughout the year, AP Art students prepare and develop portfolios in accordance with the College Board’s AP qualifying regulations. This portfolio prepares them for regional and national exhibitions, enables them to participate in scholarship competitions and provides competitive opportunities for admission to colleges and professional art schools. Portfolio development is an evolving process, and at regular intervals throughout the year students will have their portfolios evaluated by both teachers and college admissions representatives. Based on student requests, this course may be offered on alternate years.

# Art



## Electives

Film History & Criticism



# BUSINESS COURSES

## (Career & Technical Education)

### **ACCOUNTING (5010)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Accounting is the “language of business” and is a necessary course for many college majors and for all college business majors. Learn the basics of understanding business financials. This course stresses the principles and procedures needed to build a beginning foundation in accounting fundamentals. The course will focus on the accounting cycle of a small business.

### **COLLEGE COMPUTER APPLICATIONS (5500)**

**Grades 10-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

The most necessary course for any college major! Using the latest version of Microsoft Office (Excel, PowerPoint, Publisher and Word) and Google Docs, students will learn the basics of word processing, spreadsheets, databases and digital presentations. Students will also explore the creation of their own websites, as well as current trends in technological communication and

networking. Students will become familiar with applications that are commonly used in both the college classroom and the workplace. The applications learned can be used for communications, business, graphic arts, science, math and engineering. Microsoft Office is the preferred program used by most large and small companies in the U.S.A. It is essential that every high school graduate be competent in these programs in today’s highly technological world. No previous experience with these programs is required, although the ability to keyboard proficiently is recommended. Students enrolled in this course will have the opportunity to earn MOS Certification in Microsoft Excel and certification in G Suite. Students are responsible for the fees associated with the optional certification examinations.

### **BUSINESS MATH & FINANCIAL APPLICATIONS (5100)**

**Grades 10-12**

**Full Year, 1 Credit**

*Credit for this course may be used to meet the third-year math requirement.*

*Prerequisite: None*

This course emphasizes the use of basic mathematics to model and explore

real- world financial applications in personal and business financial situations. This course will prepare students with the appropriate tools to understand PRT interest calculations, banking, investing, loans, gross income and income taxes. Students will apply these business mathematical concepts through practice and projects. Computer applications such as Excel and Google Sheets will be used to reinforce the applications and class discussions.

### **COLLEGE ACCOUNTING 1 (5020)**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Farmingdale State College.**

*Credit for this course may be used to meet the third-year math requirement.*

*Prerequisite: None*

Planning on majoring in accounting, management, marketing, finance or any other business area in college? Do you have an entrepreneurial spirit and want to own your own business? Do you want to work for the FBI or one of the Big 4 accounting firms? Then this class is for you. Build your foundation now with this college-level accounting course designed for the

motivated student. The topics covered are those in a college introductory course. No previous accounting course is required. Students will learn to tackle the requirements of a college course. Information will be applied in a variety of novel accounting situations. The computer will also be utilized for various applications.

### **COLLEGE ACCOUNTING 2 (5025)**

**Grades 11-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Farmingdale State College.**

*Credit for this course may be used to meet the third-year math requirement.*

*Prerequisite: College Accounting 1*

This course is designed for the highly motivated, above-average high school student who has a strong interest in accounting. The topics covered are those that are taught in a second-term college accounting course. This course will cover topics such as account classification, financial statements for partnerships and corporations, retained earnings, earnings per share, notes and bonds payable, budgets, cash flow statements and managerial accounting. The computer will also be utilized to enhance learning the above topics. It will provide practical applications of the learned material. Based on student requests, this course may be offered on alternate years.

### **COLLEGE BUSINESS LAW (5091)**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 6 college credits from LIU Post.**

*Prerequisite: None*

This course will explore legal issues that impact all of us as consumers, employees, or future business owners.

Examples of topics covered will include: constitutional law, contract law, criminal law, property law, family law, and employment law. Through case studies and current events, students will apply these legal concepts to issues impacting social media, sports and entertainment, cybersecurity, human resource management, and financial transactions. This course will rely on up-to-date information from internet research and guest speakers. This course is beneficial for all students planning to attend college, manage a business, pursue a career in law, or simply become more knowledgeable about the impact of the legal system on today's society.

### **COLLEGE INTRODUCTION TO REAL ESTATE (5470)**

**Grades 10-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

This course is designed for students who are interested in real estate and provides both the background and foundation to pursue a career in real estate and educates students on being a future buyer and/or seller of real estate themselves. Students will be introduced to the terminology, concepts, and basic practices of real estate. This course surveys real estate law, real estate ownership, the art of selling, extent of real estate interests, brokerage responsibilities, marketing strategies, and management with a focus on the real estate market on Long Island. The course will address both residential and commercial properties.

### **COLLEGE VIRTUAL ENTERPRISE (5111)**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course**

**for 6 college credits from LIU Post.**

*Prerequisite: None*

*Recommendation: Accounting or College Accounting, and Principles of Marketing or Introduction to Business*

Virtual Enterprise is an international business simulation program that has students create and manage their very own virtual business. You, the students, take on the role of employees and will be involved in actual "on-the-job" work experiences, including sales, marketing, accounting, personnel management, etc. The only difference between the VE and an actual business is that no material goods are produced or real money exchanged. Students will work in one or more of the departments in the VE organization. In each department, students will be expected to work individually and as a member of a team to fulfill the responsibilities and tasks associated with their department. Students will develop initiative, creativity and responsibility, and enhance oral and written communication skills, as well as improve their ability to work on a team.

### **COLLEGE FASHION MARKETING (5131)**

**Grades 9-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

Are you curious about fashion designers, models, hair and make-up artists, and celebrity styles? This course is designed to give you the latest information on the trends which will affect every aspect of how you look and dress. Students will be introduced to the terminology and fundamentals of the fashion industry. Introductory business and marketing concepts are covered through this course with a

focus on the multibillion dollar fashion industry. Fashion industry speakers and field trips help to enhance the learning and application of concepts covered in class.

### **COLLEGE FASHION APPAREL & ACCESSORIES (5136)**

Grades 9-12

Half Year, .5 Credit

Students may elect to take the course for 3 college credits from LIU Post.

*Prerequisite: None*

Students will see the place of apparel and accessories in the world of fashion design and merchandising. Students study the manufacturing of materials and the evolution of apparel through the history of costumes. Students become familiar with the buying, merchandising and marketing of all accessory classifications. These include handbags, shoes, jewelry, gloves, neckwear, belts, millinery and cosmetics. Students become versed in designers and accessory terminology, and they explore the various stages of display development.

### **INTRODUCTION TO BUSINESS (5080)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

Explore the world of business and learn about topics important to all of us today as consumers, future business majors, and potential business owners. Students will gain an understanding of business ethics, business ownership, the global economy, government's role in business, marketing, and advertising. This course is a foundation course that includes a variety of experiences, case studies, team projects, and presentations. This course provides fundamental business knowledge

for students, providing an easy transition from school to college and the workforce. Students will become familiar with the modern business environment and current terminology used in business.

### **PERSONAL FINANCIAL MANAGEMENT (5119)**

Grades 9-12

Half Year, .5 Credit

This is a required course for students graduating with a CTE sequence.

*Prerequisite: None*

The purpose of this course is to provide students with skills for money management. Start with a goal, create a plan, implement your plan and adjust as needed to accomplish your financial goals. Learn the skills and competencies needed for success in the workplace and to begin to become financially literate. This course has also been developed to allow students to begin to meet the Career Development and Occupational Studies learning standards at the commencement level. Topics covered include banking and economic systems, budgeting, investments, insurance, credit, financial literacy, identity theft and career planning.

### **KEYBOARDING FOR COLLEGE & CAREERS (5170)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

Students enrolled in this course will develop accurate keyboarding skills with the use of our computer-aided keyboarding software. Given the usage of computers in school and business, keyboarding is an essential part of a student's academic and nonacademic life. This course will enable students to learn the touch system of keyboarding and then apply these skills in the latest word processing

applications. As a part of this course, students will learn various types of current business document formatting using Microsoft software and Google Docs. Keyboarding will help students throughout their high school and college career and provide them with employable skills. Students enrolled in this course will have the opportunity to earn MOS Certification in Microsoft Word. Students are responsible for the fees associated with the optional certification examination.

### **COLLEGE MARKETING (5125)**

Grades 10-12

Full Year, 1 Credit

Students may elect to take the course for 6 college credits from LIU Post.

*Prerequisite: None*

From Madison Avenue to Hollywood! Explore the psychology of promoting and selling goods and services. Learn how and why Great Adventure and Disney World sell their amusement parks to you, the consumer. Learn how major stores such as Abercrombie & Fitch and McDonald's target customers and develop marketing strategies for those customers. Students examine consumer behavior and government regulations pertaining to the business world. Current events, trends and case studies will be integrated and evaluated throughout the classroom discussions. Students will explore the world of social media and how it is implemented in marketing. In addition, students will create a marketing plan and presentation for a product that they invent for the Smithtown marketplace. Guest speakers and hands-on projects are all part of this exciting year. This course is also the foundation course for our school's DECA chapter, a co-curricular national marketing association. Students are encouraged to join and participate.



## **COLLEGE ENTERTAINMENT MARKETING (5181)**

**Grades 9-12**

**Half Year, .5 Credit**

**Members of the class may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

This course will focus on the marketing of various entertainment industries including, but not limited to, the music industry, live theatrical performing arts and television. This course will introduce students to the business aspect of the entertainment industry, which is a global multibillion dollar industry of individuals working in many different career capacities. There are people creating the music, working at record labels, distribution and publishing companies, and recording studios. Additionally, there are employment opportunities in the areas of artist management, promotion, production and legal counsel. In the live theatrical performance industry the scope of study will range from stage production to the marketing of performing arts events that can span from Broadway productions to dance productions. The television industry has a huge audience base, and this course will teach students how to market to those audiences to create successful shows such as Friends. Guest speakers and field trips will be utilized to provide a real-world connection with the materials presented.

## **SPORTS MARKETING (5160)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This half-year course is designed for students with an interest in the sports industry and its related careers. Marketing is the tool that has allowed

the United States economy to be one of the most successful in the world. Introductory business and marketing concepts are covered throughout this course with a focus on the multibillion-dollar sports industry. Additionally, marketing has also made the sports and entertainment industries important parts of our modern economy. Fans and companies spend billions of dollars each year on sports, while entertainment is one of the largest exports the U.S. offers to the rest of the world. Utilizing the specific environments of both industries, students will be introduced to the basic marketing principles and components that are used in our economic system. The exploration of these principles will be studied and applied in an active, hands-on participative environment, through class projects, internet simulations and general classroom lectures.

## **COLLEGE SPORTS MANAGEMENT (5166)**

**Grades 10-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

This course is designed for students who are interested in the daily operations and decision-making processes of their favorite sports team, or learning what it takes to be an executive in the sports industry. In this course, you will learn how teams are owned and operated within today's dynamic global economy. Students will also be given a broad understanding of the sports business sector by exploring available career opportunities, the development of the sports management profession, and how to manage the pressures of human resources, ethics,

societal influences and media relations. Utilizing specific environments from professional sports franchises and leagues, students will be introduced to basic managerial principles and philosophies through the context of the sports industry. The exploration of these topics will be studied and applied in an active and participative environment, through class projects, internet simulations and general classroom lectures.

## **WALL STREET: INTRODUCTION TO INVESTMENTS (5042)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

The class will explore and analyze the basic business areas of management, economics and finance in today's global financial marketplace. Students will develop an introductory knowledge of the stock market (the ABCs of investing). The use of current events is stressed. This knowledge is applied to the challenges of investing. Students will relate how economic and business principles affect investments through guest speakers, a stock market contest on the internet and classroom lecture and activities.

## **COLLEGE PERSONAL INVESTMENTS (5521)**

**Grades 10-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from LIU Post.**

*Prerequisite: None*

Imagine yourself being able to achieve your personal financial dreams. This course will give you the opportunity to explore personal investment options beyond the stock markets. International finance and economics will be examined in a current

context, including their impact and relationship to the U.S. financial markets. Students will review stock market investing concepts and learn more advanced concepts and strategies about the stock market. They also will be introduced to all types of investment classifications such as bonds, mutual funds, international investments, options and futures necessary to achieve a balanced personal investment portfolio. Guest speakers will update students on current events and careers in the financial field and will enrich their knowledge of investments.

### **COLLEGE AND CAREER PLANNING (5445)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Where do I begin? What do I want to do with my life after graduation? Students will explore college options related to their interests and begin to plan for their career through research and exploration activities. Students will create a career plan to lay the foundation for sound career decision-making. First, students will explore “who you are” and what careers are best suited for them. Class activities will include self-assessment, career research and identification of high school courses needed as well as suitable college majors. Guest speakers and industry professionals will enhance student learning. All students will complete a Career Portfolio, which will include results of career research as well as their self-assessment of their current résumé and references. This course is a perfect introduction to Career Jump Start, in which students may obtain a paid or nonpaid internship in the career field of their choice.

### **CAREER JUMP START (5431)**

**Grades 10-12**

**Half Year, .5 - 2.5 Credits**

*Prerequisite: None*

Students will gain insight into the new and exciting career opportunities of the 21st century and learn how to successfully compete in a global market. Students will be given the tools to enhance their communication skills, including proper email correspondence and appropriate body language in a business setting. Students will learn about LinkedIn, a powerful social media platform to network, find a job and be informed about new trends in the workplace. Students will learn how to prepare professional employment documents necessary for a job search including a resume, list of references, cover letter and formal thank-you letters. Students will create personal e-portfolios to use in the present and build upon in the future. Students will understand how to match their skills and abilities to specific career requirements. Students will enhance their presentation skills as they participate in mock interviews, as well as create and practice their personal elevator pitches. In addition, students will participate in case studies, virtual internships and field trips to experience real-world settings. Additional topics include getting along with colleagues, dealing with supervisors and navigating the day-to-day work environment. Professionals will visit the classroom to work with students on a variety of topics to provide real-world insights. Students will become familiar with New York State workplace safety laws and employee regulations, as well as forms and procedures used in the general workplace environment (e.g., W-2, W-4, I-9). Students will also have the opportunity to work directly

with the work experience coordinator to secure an internship or meaningful work experience. All students will receive .5 credit for the class and students age 16 and older can earn an additional .5 credit for every 150 hours of work outside of school (up to 2 credits for 600 hours of workplace experience).

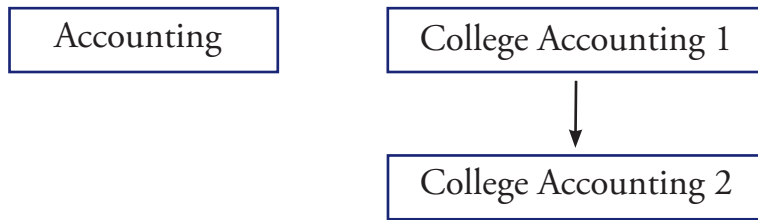
# Business

(See Page 7 for information related to career and technical endorsements)

## Foundation Courses



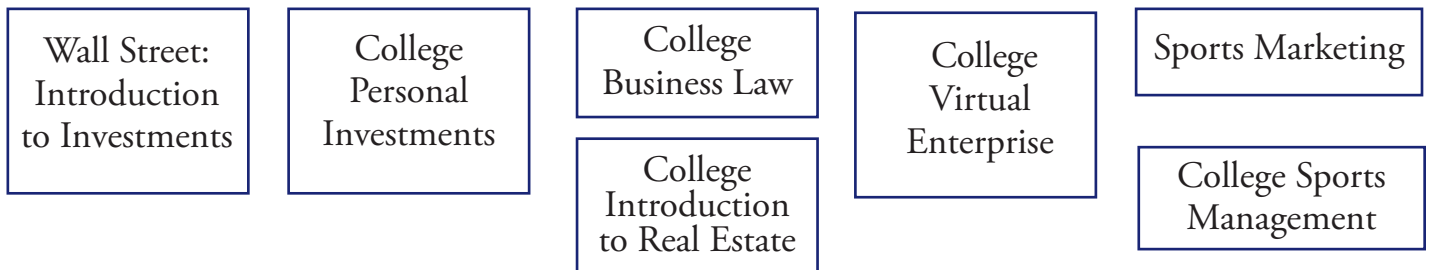
## Accounting



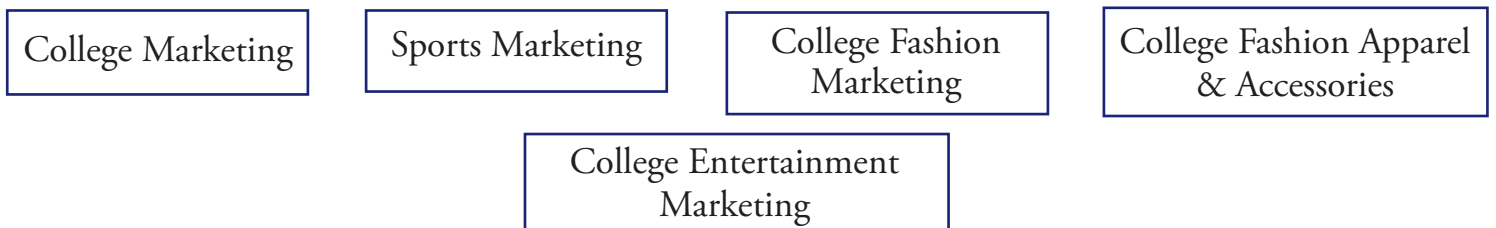
## Computer Information Technology



## Management, Finance and Investments



## Marketing/Public Relations



## College and Career Transition Courses





# ENGLISH COURSES

## **ENGLISH 9 (1010)**

**Grade 9**

**Full Year, 1 Credit**

*Prerequisite: English 8*

English 9 is aligned to the NYS Learning Standards and prepares students to take the English Regents Examination at the end of their junior year. Students receive instruction in reading and the writing process through the study of a range of literature, including short stories, poetry, drama, nonfiction and informational passages. The curriculum builds students' grammar and vocabulary skills through direct instruction and a constant exposure to challenging terminology. A sequential set of reading, writing, listening and speaking objectives provides overall unity to English 9 and ultimately prepares students for the English Regents in grade 11. Students are required to complete research activities. Students requiring additional support will be scheduled for the Regents Extended Lab.

## **ENGLISH 9 (1010RE)**

**Grade 9 Regents Extended Lab**

**Full Year, Alternate Day**

**2.5 Periods/Week**

*Prerequisite: Departmental placement*

The grade 9 Regents Extended Lab is designed for students who have demonstrated the need for extra support in reading and writing skills. Student needs are addressed through additional class time and modified instructional materials that intensively tackle basic language arts skills. The extra support period may satisfy the Academic Intervention Service requirement.

## **ENGLISH 9 HONORS (1020)**

**Grade 9**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: English 8*

*Recommendation: English 8 with a grade of at least B+*

English 9 Honors is aligned to the NYS Learning Standards and prepares students to take the English Regents Examination at the end of their junior year. The course is designed for grade 9 students who have demonstrated exceptional performance and effort in all areas of English Language Arts. The purpose of the course is to challenge students' intellect and to increase the range of their literary skills through advanced reading and intensive writing instruction. Students will be prepared to take AP Language and Composition,

AP Capstone Seminar and AP Literature. Students are required to complete independent work and research activities.

## **ENGLISH 10 (1040)**

**Grade 10**

**Full Year, 1 Credit**

*Prerequisite: English 9 Honors or English 9*

English 10 is aligned to the NYS Learning Standards and prepares students to take the English Regents Examination at the end of their junior year. The course builds on many of the skills and activities initiated in English 9R. Reading skills and the writing process are emphasized, in addition to a rich literature program including classic literature titles, nonfiction and informational passages. A sequential set of reading, writing, listening and speaking objectives provides overall unity to English 10. The curriculum builds students' grammar and vocabulary skills through direct instruction and a constant exposure to challenging terminology. Students are required to complete research activities. Students requiring additional support will be scheduled for the Regents Extended Lab.

## **ENGLISH 10 (1040RE)**

**Grade 10 Regents Extended Lab**

**Full Year, Alternate Day**

**2.5 Periods/Week**

*Prerequisite: Departmental placement*

The grade 10 Regents Extended Lab is designed for students who have demonstrated the need for extra support in reading and writing skills. Student needs are addressed through additional class time and modified instructional materials that intensively tackle basic language arts skills. The extra support period may also satisfy the Academic Intervention Service requirement.

## **ENGLISH 10 HONORS (1050)**

**Grade 10**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: English 9 Honors or English 9*

*Recommendation: English 9 with a grade of at least B+*

English 10 Honors is aligned to the NYS Learning Standards and prepares students to take the English Regents Examination at the end of their junior year. The course is designed for grade 10 students who have demonstrated exceptional performance and effort in all areas of English language arts. The purpose of the course is to challenge students' intellects and to increase the range of their literary skills through advanced reading and intensive writing instruction. Students will be prepared to take AP Language and Composition, AP Capstone Seminar–English and AP Literature. Students are required to complete independent work and research activities.

## **ENGLISH 11 (1070)**

**Grade 11**

**Full Year, 1 Credit**

*Prerequisite: English 10 Honors or English 10*

English 11 is aligned to the NYS Learning Standards and prepares students to take the English Regents Examination in June. The course builds on many of the skills and activities initiated in English 10. Reading skills and the writing process are emphasized, in addition to a rich literature program. A sequential set of reading, writing, listening and speaking objectives provides overall unity to English 11. Emphasis is on advancing reading, writing, research and analytical skills. Students are required to complete a research paper. Students will take the English Regents in June, and it will count as one-ninth of the overall course grade. Students requiring additional support will be scheduled for the Regents Extended Lab.

## **ENGLISH 11 (1070RE)**

**Grade 11 Regents Extended Lab**

**Full Year, Alternate Day**

**2.5 Periods/Week**

*Prerequisite: Departmental placement*

The grade 11 Regents Extended Lab is designed for students who have demonstrated the need for extra support in reading and writing skills. Student needs are addressed through additional class time and modified instructional materials that intensively tackle basic language arts skills. The extra support period may also satisfy the Academic Intervention Service requirement.

## **AP CAPSTONE SEMINAR – ENGLISH (1100)**

**Grade 11 (satisfies core requirement)**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: English 10 Honors or English 10*

*Recommendation: Cumulative average of B+ or better and the ability to collaborate with others*

AP Capstone is an innovative program that allows students to engage in a rigorous development of the critical skills necessary for success in college. The program of study includes a two-course sequence: AP Seminar and AP Research. Students enrolled in AP Capstone Seminar will learn how to investigate real-world topics from multiple perspectives. Students will carefully analyze information, write evidence-based arguments and effectively communicate them to others. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. In addition to taking the AP Seminar examination, students are required to take the English Regents examination as part of their graduation requirement. The Regents examination will count as one-ninth of the overall course grade.

## **AP ENGLISH LANGUAGE AND COMPOSITION (1085)**

**Grades 11-12**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: English 10 Honors or English 10*

*Recommendation: Cumulative average of B+ or better*

Advanced Placement English Language and Composition is a course for highly motivated students who, in their junior year, want to take a college-level English course. All students in the course take the AP English Language and Composition Exam. Depending on their score, students may apply for advanced placement when they enter college. This course is the equivalent of a college freshman composition class with emphasis on advanced writing skills. The demands of AP Language and Composition are very high, and this is considered a challenging course. Students who wish to sign up must be skilled and highly motivated. As juniors, they are required to take the English Regents Examination as part of their graduation requirement. The Regents exam will count as one-ninth of the overall course grade.

### **ENGLISH 12 (1089)**

**Grade 12**

**Full Year, 1 Credit**

*Prerequisite: AP English Language and Composition, AP Capstone Seminar – English or English 11*

English 12 is aligned to the NYS Learning Standards and prepares students for college and career readiness. The course is a culmination of the high school English program and includes various projects and activities that build on prior instruction. Reading skills and the writing process are emphasized, in addition to a rich literature program including classic and contemporary literature titles, nonfiction and informational passages. The curriculum builds students' grammar and vocabulary skills through direct instruction and a constant exposure to challenging terminology. As part of this course, students are required to complete a research project.

### **AP CAPSTONE RESEARCH – ENGLISH (1105)**

**Grade 12 (satisfies core requirement)**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: AP Capstone Seminar–English*

AP Capstone Research allows students to deeply explore an academic topic, problem or issue of individual interest. Through this exploration, students design, plan and conduct a year-long, research-based investigation to address a research question. Students further develop the skills acquired in the AP Capstone Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing and synthesizing information as they address a research question. Students explore their skill development, document their processes and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

### **COLLEGE ENGLISH 12 (1096)**

**Grade 12**

**Full Year, 1 Credit**

**Summer Assignment Required**

**Students may elect to take the course for 6 college credits from Stony Brook University.**

*Prerequisite: AP English Language and Composition, AP Capstone Seminar–English or English 11*

*Recommendation: Cumulative average of B+ or better*

Students who opt for this credit must enroll online in the Stony Brook University ACE Program and pay the reduced tuition by the deadline established by the university. College

English 12 is aligned to the NYS Learning Standards and prepares students for college entrance. The course is designed for grade 12 students who have demonstrated superior abilities in all areas of English language arts. The purpose of the course is to challenge students' intellects and increase the range of their literary skills through advanced reading, intensive writing and analysis of film. As part of this course, students are required to complete a research project.

### **AP ENGLISH LITERATURE AND COMPOSITION (1120)**

**Grade 12**

**Full Year, 1 Credit**

**Summer Assignment Required**

*Prerequisite: AP English Language and Composition, AP Capstone Seminar–English or English 11*

*Recommendation: Cumulative average of B+ or better*

Advanced Placement English Literature and Composition is a course for highly motivated students who, in their senior year, want to take a college-level English course. All students in the course take the AP English Literature and Composition Exam. Depending on their score, students may apply for advanced placement when they enter college. This course is the equivalent of a college freshman literature class with emphasis on advanced writing skills. The demands of AP Literature and Composition are very high. Students who wish to sign up must be skilled and highly motivated.

## ENGLISH ELECTIVE COURSES

The English department is a rich resource for students interested in expanding their creative horizons and sharpening their career skills. We encourage all students to round out their high school experience by exploring these stimulating courses. All elective courses offered by the English department count towards the Regents Diploma elective requirements.

### COLLEGE ADVISORY (1270)

Grades 10-12

Half Year, .5 Credit

*Prerequisite: None*

This course provides practice in college-level reading and writing through weekly assignments, class discussions, and reflections in written and oral form. Reading and writing assignments will vary, but students will focus on reading comprehension skills and strategies that will help with the ACT and SAT, vocabulary development, narrative writing and eventually writing their college essay. Through a process of self-discovery and personal development, students will ultimately come to a better understanding of their strengths, goals and a vision for their future as it relates to college. In this course, students will experience the following: preparing for the ACT and SAT, creating a portfolio, developing a personalized college essay and writing narrative essays while reading various college-level articles, essays and reviews. Based on student requests, this course may be offered on alternate years.

### CREATIVE WRITING 1 (1250)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

Creative Writing exposes students to the challenges of writing short stories, poetry and drama by providing

extensive practice in these genres. The course is a workshop/seminar with the students' own writing serving as the primary material for discussion and analysis. Assignments will be geared toward providing a variety of writing experiences, covering such skills as characterization, point of view, narration and dialogue. Student work is gathered, and our award-winning literary magazines, *Penumbra* and *Solstice*, include much of the student writing from the course.

### CREATIVE WRITING 2 (1260)

Grades 10-12

Half Year, .5 Credit

*Prerequisite: Creative Writing 1*

Creative Writing 2 is a continuation of Creative Writing 1 with the emphasis adapted to meet individual students' interests in short stories, plays and poems. Individual projects will be developed cooperatively between student and teacher in a workshop/seminar atmosphere. Student work is gathered, and our award-winning literary magazines, *Penumbra* and *Solstice*, include much of the student writing from the course. This course may be repeated for credit.

### DISCOVER NY: A LITERARY EXPLORATION (1237)

Grades 11-12

Half Year, .5 Credit

*Prerequisite: None*

Get ready to explore the city that never sleeps in a way like never before. Like the boys in "The Laughing Man," students will take a whirlwind tour through Manhattan, the four other boroughs and Long Island. To begin the study of New York lore, students will explore one of the first fictional New Yorkers: Washington Irving's *Diedrich Knickerbocker*. Henry James will evoke the elegance and elitism of

New York's Gilded Age in Washington Square; F. Scott Fitzgerald will herald the beginning and end of the Jazz Age from a speakeasy in the Village. Students will take the "A" train to Harlem to hear the blues poetry of Langston Hughes. Along the way, students will ride the ferry with Edna St. Vincent Millay. The tour will end at Ground Zero, a place of unspeakable trauma and staggering human loss, reading poetry and short stories that capture the tragedy, resilience and enduring hope that defines New York. Based on student requests, this course may be offered on alternate years.

### FILM AND LITERATURE 1 (1235)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This course will explore the relationship between literature and cinema by focusing on film adaptations of popular and classic literature. Students will read a variety of literary genres such as the novel, short stories and nonfiction essays, and then view selections from the corresponding films. The course will examine various genres such as romance, children's literature, crime/noir, Westerns, science fiction, horror/suspense, classics and drama. By understanding the process by which we "read" a film, students will be able to better dissect a text. Students will examine both literary and film devices to address the central questions: How can analyzing film adaptations allow us to better understand the techniques and purpose of both literature and film in our society? What are the underlying issues and possibilities in the process of adapting a text? There will be a variety of writing assignments, including film reviews, blog entries, adaptation assessments and creative writing. Based on student requests, this course may be offered on alternate years.

## FILM AND LITERATURE 2: THE SEQUEL (1236)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This course will explore the relationship between literature and cinema by focusing on film adaptations of popular and classic literature. There will be an emphasis on literary and cinematic techniques to discuss, interpret and analyze the selected texts. Students will read a variety of literary genres and then view the corresponding films. The course will continue to examine different genres with a focus on magical realism, war, biography, noir/detective, gothic romance, comedy and mystery/suspense. Students will delve deeper into film techniques to address the central questions: How can analyzing film adaptations allow us to better understand the techniques and purpose of both literature and film in our society? How do we synthesize connections between individual texts and a variety of film interpretations? What are the variety of ways that a film can adapt from the source material? There will be a variety of writing assignments including film reviews, a class-generated website, adaptation assessments and creative writing. The final project will offer students the opportunity to create an individual website with a collection of film reviews or to write a film adaptation from a short story. Based on student requests, this course may be offered on alternate years.

## INTRO TO JOURNALISM & MEDIA LITERACY (1321)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This preliminary course will introduce students to aspects of print and mass media. Students will have an

opportunity to improve their writing by actively participating in the writing process, beginning with brainstorming and ending with publication. Students will be introduced to various forms of media, learning how to consume and evaluate the media in its various forms. The primary purpose of the course is to develop media literacy skills and provide an introduction to the world of journalism and publishing.

## COLLEGE JOURNALISM & MEDIA LITERACY (1325)

Grades 9-12

Full Year, 1 Credit

**Students may elect to take the course for 3 college credits from Stony Brook University**

*Prerequisite: None*

Journalism & Media Literacy is a full-year elective course designed to stimulate and challenge serious writers. Students will have the opportunity to write, edit, produce and even broadcast their stories in various forms including, but not limited to, print, radio, video, websites and podcasts. The class functions primarily as a workshop to produce the daily video broadcast and the school newspapers for Smithtown High School's eastern and western campuses (both *The Bull's Eye* and *The Matador* are award-winning publications). Students must have a passion for writing and a strong interest in newspapers, broadcast journalism, current events and photography. Students must be able to gather information, generate stories, take photos and video, cover events outside of the regular school day, and work with a group to share and receive constructive criticism of their products. The course will cover interviewing techniques, research procedures, career opportunities and freedom of the press, as well as the production, editing and social skills associated

with broadcasting. This course may be repeated for credit.

## SCIENCE FICTION: HEROES, MYTHS & LEGENDS (1350)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This high-interest course will allow students to explore the relationship between popular culture, legends, science fiction, and mythology. Students will be offered the opportunity to deepen their understanding of a variety of writing and film genres. As students are already familiar with the characters and narratives of contemporary science fiction, they will have the opportunity to view them through a different lens. Students will explore and analyze the presence of stereotypes and mythological elements in these stories, and gain a deeper understanding and appreciation of the world of science fiction. Based on student requests, this course may be offered on alternate years.

## SPEAK UP! (1285)

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

Do you want to participate more in classes? Do you wish you could join in lively conversations? Are you too nervous during presentations? Do you love to debate others? Speak Up! is an exciting elective course for students who wish to overcome fears of public speaking. Students will get to choose topics, learn how to craft effective speeches and build their speaking confidence. Basic and advanced techniques will be explored, including interviews, reading stories aloud, random rants, sports and celebrity commentary, debating hot issues, etc. Based on student requests, this course may be offered on alternate years.



## **THEATRE ARTS (1225)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

*This course fulfills the art/music credit required for graduation.*

Theatre Arts is a full-year elective in which students will learn the basics of acting and public speaking in a non-traditional and energizing setting. Through improvisation and other theatrical activities, students will learn how to manipulate their voices, create different characters, effectively stage/block their movements, articulate, react quickly and appropriately to a variety of situations, and learn how to become more natural and relaxed on stage. Students will also focus on the history of theater, vocal manipulation, sets, costume, lighting and design basics, monologue work, audition preparation, the rehearsal process, short group scenes, film and movie acting, writing/directing plays and acting in whole-group productions. Future teachers, lawyers, politicians, managers, advertisers, publicists, broadcasters, directors, scriptwriters and anyone else who must stand in front of a live audience and deliver a message will find the benefits of taking an acting course at Smithtown High School innumerable. Any student interested in becoming a member of the International Thespian Honor Society or Theatre Arts Club is encouraged to take this course. This course may be repeated for credit.

## **20th-CENTURY AMERICAN POP CULTURE (1273)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Students will explore the richly textured popular culture of 20th-century America. Through an engaging interdisciplinary investigation of how cultural developments shaped American

life in the 20th century, students will learn how to critically analyze a variety of media and entertainment formats, including an examination of movies, TV shows, visual art, literature, advertising, and fashion. Based on student requests, this course may be offered on alternate years.

## **SPORTS IN LITERATURE (1271)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course looks at the role of sports in the collective conscience of American culture since the beginning of the 20th century. Through fiction, nonfiction, poetry, and film, students will come to an understanding of both the impact of sports on society and how society impacted the games we love to play and watch. Based on student requests, this course may be offered on alternate years.

## **CONTEMPORARY YOUNG ADULT LITERATURE (1272)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course is an introduction to the multiple genres of contemporary young adult literature that addresses important issues among teenagers. Students will read YAL texts written by various award-winning authors that explore a range of themes, perspectives, and social norms to stimulate engaging classroom discussions. In addition, students will explore several film adaptations of the written novels to draw comparisons from a sociocultural perspective. Based on student requests, this course may be offered on alternate years.

# English

## Grade 9

English 9 Honors    *or*    English 9



## Grade 10

English 10 Honors    *or*    English 10



## Grade 11

AP Capstone Seminar – English  
*or*  
AP English Language and Composition    *or*    English 11



## Grade 12

AP English Language and Composition  
*or*  
AP English Literature and Composition  
*or*  
AP Capstone Research – English  
*or*  
College English 12    *or*    English 12

## Electives

Introduction to Journalism  
& Media Literacy

Film and Literature 1

Creative Writing 1



College Journalism &  
Media Literacy

Film and Literature 2:  
The Sequel

Creative Writing 2

Science Fiction: Heroes,  
Myths & Legends

Speak Up!

Theatre Arts

College Advisory

Discover NY: A Literary  
Exploration

20th-Century American  
Pop Culture

Sports in Literature

Contemporary  
Young Adult Literature

# FAMILY & CONSUMER SCIENCES COURSES

(Career & Technical Education)



## **CHEF'S CHOICE 1 (6005)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This is an important course for every high school student, whether college or career bound. Students will learn the importance of teamwork and time management skills. This course introduces students to the concepts of safety and sanitation; kitchen tool selection, care, storage, and proper usage; and measurements, nutrition, and food preparation. Recipes are designed for the practical lifestyles of today's society.

## **CHEF'S CHOICE 2 (6015)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: Chef's Choice 1*

This course is designed for those students who have a desire to experience new and more advanced cooking techniques and/or students who are interested in a food-related career. Students will expand upon their knowledge from Chef's Choice 1 as they work cooperatively in a lab setting. Emphasis will be on creating various recipes and incorporating advanced techniques.

## **BAKING 1 (6080)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This course will allow students to create recipes they love while learning the basics of baking. Students will understand the tools and techniques used in baking while learning to work cooperatively as a team and manage their time wisely. This course will explore the use of ingredients in baked goods and their roles in the final outcome. Topics will include cookies, pies, cakes, quick breads, and yeast breads.

## **BAKING 2 (6081)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: Baking 1*

In this course, students will use their knowledge from Baking 1 to enhance their baking skills. Students will continue practicing proper kitchen safety and sanitation while working in labs. This course is intended to give students a detailed understanding of cookie and pastry preparation techniques, which includes quick breads, yeast breads, and enriched and laminated doughs. Cookie mixing methods, pies, tarts, syrups, icings,

saucers, custards, creams, and cakes will also be explored. Students will also taste and evaluate products they create in class to enhance their understanding of the course material.

## **FOOD FOR LIFE (6087)**

Grades 10-12

Half Year, .5 Credit

*Prerequisite: None*

This course is designed to give students the opportunity to learn nutrition basics and bring them to life in the kitchen. Students will be educated on the principles of sensible and safe food choices related to the science of nutrition all while exploring nutritional needs throughout their adolescent years. Through student-led research and practical food labs, students will gain the skills and knowledge to create a meal plan for a variety of different scenarios that teenagers are faced with today, which includes but is not limited to personal health goals, sports nutrition, mental health, disabilities, and medical considerations. This course will also address the importance of meal preparation with a focus on healthy and simple recipes, proper food storage, and portion sizes.

## **COLLEGE FOOD SCIENCE (6086)**

Grades 11-12

Full Year, 1 Credit

Students may elect to take the course for 4 college credits from LIU Post.

*Credit for this course may be used to meet the third-year science requirement.*

*Prerequisite: None*

*Recommendation: Chef's Choice 1 or Baking 1*

This course is designed to reinforce and enhance students' knowledge of scientific principles and processes as it applies to the study of food and nutrition. College Food Science connects aspects of food chemistry, biology, earth science and psychology to real-life examples through class discussions, experiments, projects and cooking labs. It explains the scientific principles and processes that occur inside your pan each time you cook and inside your body every time you eat. Students will have the opportunity to cook and sample nutritious foods to observe their impact on the human body. This course is great for students interested in career and technical education as well as the field of food preparation or dietetics.

## **CHILD DEVELOPMENT (6030)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

Do you enjoy children? Are you interested in becoming a teacher, pediatrician or counselor? Students learn about the stages of childhood as they study the behavior of infants, toddlers and preschoolers in this class. Caring for our simulated baby allows students to acquire parenting skills and realistic expectations of children's needs.

## **COLLEGE CHILD DEVELOPMENT (6040)**

Grades 10-12

Half Year, .5 Credit

Students may elect to take the course for 3 college credits from LIU Post.

*Prerequisite: Child Development*

This course provides an in-depth study of the five periods of childhood, from prenatal development through adolescence. Fieldwork at a local elementary school or day care center will be incorporated when possible. Students explore current child development research and findings.

## **COLLEGE EARLY CHILDHOOD/PRESCHOOL (6120)**

Grades 9-12

Half Year, .5 Credit

Students may elect to take the course for 3 college credits from LIU Post.

*Prerequisite: College Child Development or Child Development*

In this course students operate a preschool program for neighborhood children. Students gain insight into the developmental needs of children as they prepare crafts, snacks, games, stories, self-help, reading readiness and number concept activities for children in a safe, nurturing environment. This course is a must for all those planning to work with children in their career or share their lives with children.

## **ADVANCED EARLY CHILDHOOD/PRESCHOOL (6125)**

Grades 10-12

Half Year, .5 Credit

*Prerequisite: College Early Childhood/Preschool*

## **ADVANCED CHILDHOOD/PRESCHOOL LEADERSHIP (6130)**

Grades 11-12

Half Year, .5 Credit

*Prerequisite: Advanced Early Childhood/*

*Preschool*

This is an option for students who desire additional experience working with the preschool program. Course requirements and projects will be determined on an individual basis to meet the student's needs and goals.

## **PRESCHOOL TEACHER PREP (6055)**

Grade 12

Half Year, .5 Credit

*Prerequisite: Advanced Childhood/Preschool Leadership*

Students will put their knowledge and experience gained from previous advanced Early Childhood courses into practice. Students in this course will be responsible for overseeing and mentoring the students responsible for the teaching of the preschool program. Students will work with the student teachers to develop and execute age-appropriate lessons, create stimulating environments, and ensure safety in the classroom. Students will explore the future career path of becoming an educator and gain valuable experience with hands-on learning.

## **COLLEGE INTERIOR DESIGN (6116)**

Grades 9-12

Half Year, .5 Credit

Students may elect to take the course for 3 college credits from SUNY Oneonta.

*Prerequisite: None*

*\*Note: When College Interior Design and Clothing Construction are both selected, they may be used to fulfill the art/music graduation requirement.*

This course provides students the opportunity to develop skills in applying the elements and principles of design to interiors and enables the students to explore their creativity.

Projects are integrated throughout the course to provide applications of housing styles and trends, furniture styles and placement, design and function of space, green designs and designing floor plans. A craft unit allows students to create simple crafts for the home. Students will explore the many careers available in this field.

and many other pertinent techniques. Two to three construction projects will be completed during the semester. This is a must-have course for any student thinking of pursuing a career in fashion and/or design. It is also a great course for any student who wishes to enhance his or her sewing skills.

## **CLOTHING CONSTRUCTION 1 (6090)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

*\*Note: When College Interior Design and Clothing Construction 1 are both selected, they may be used to fulfill the art/music graduation requirement.*

This course is open to all who want experience working with fabric using both hand and machine sewing. Students will learn the properties and characteristics of fabric. They will construct a craft project as well as a garment for themselves. Techniques include learning to use a pattern, marking, cutting, fitting and ironing. Students will learn to sew buttons as well as hem by hand. This is an excellent class for anyone who would like to be able to care for their own clothes as well as those seeking a career in any area of design, as colleges expect students to sew before they can design.

## **CLOTHING CONSTRUCTION 2 (6095)**

**Grades 9-12**

**Half Year, .5 Credit**

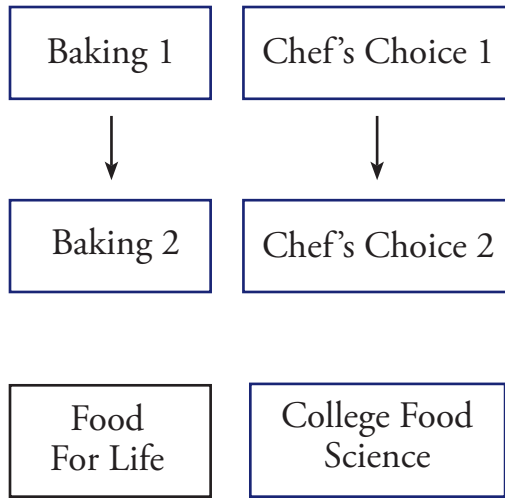
*Prerequisite: Clothing Construction 1*

This course will expand on the basic techniques learned in Clothing Construction 1. Projects will incorporate skills learned in the prior course as well as new skills such as sewing in a zipper, setting in a sleeve,

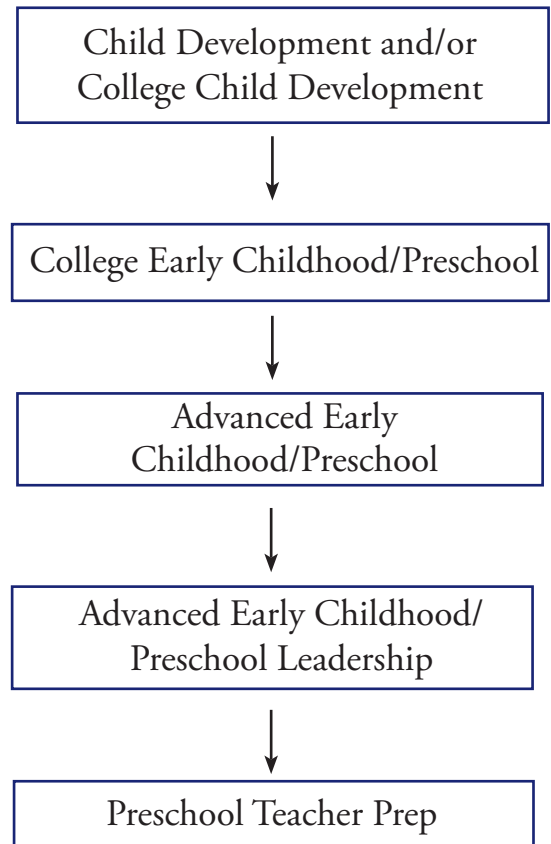
# Family & Consumer Sciences

(See Page 7 for information related to career and technical endorsements)

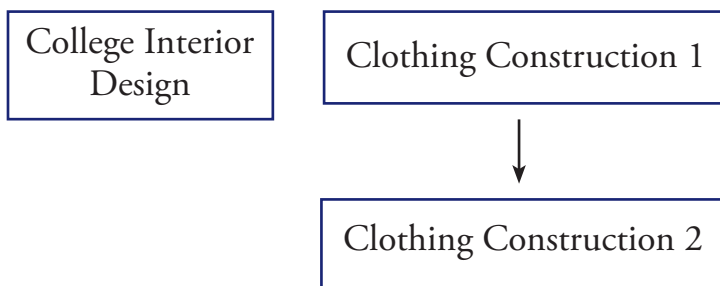
## Food & Nutrition



## Preschool & Child Development



## Home & Personal Management





# HEALTH COURSES

## **HEALTH (4850)**

Grades 9-12

Half Year, .5 Credit

*Prerequisite: None*

This is a one-semester offering concentrating on specific health problems and concerns. Topics include mental health, drug abuse, alcohol, tobacco, consumer health, disease prevention, proper nutrition and family living. The program is designed to promote health and wellness through healthy decision-making and promotion of a healthy lifestyle. Successful completion is required for graduation.

## **FIRST AID & CPR (4880)**

Grades 10-12

Half Year, .5 Credit

*Prerequisite: Health*

This course is designed to help students prepare for all first-aid emergencies. Many students will find the course particularly helpful in obtaining summer employment, as Suffolk County requires a CPR certificate for all lifeguards. Teachers involved in the program are certified as American Red Cross instructors and will issue certificates in: A. Standard First Aid and B. Cardiopulmonary Resuscitation.

## **COLLEGE SPORTS MEDICINE (4876)**

Grades 10-12

Half Year, .5 Credit

**Students may elect to take the course for 3 college credits from Adelphi University.**

*Prerequisite: Health*

*Recommendation: Students have taken First Aid & CPR*

This course is designed to prepare students with an understanding of the prevention and care of athletic injuries and accidents. This course allows students to begin the study of anatomy, physiology and kinesiology science. Topics will focus on the prevention, evaluation and rehabilitation of sports-related injuries. Various health careers related to sports medicine will also be explored. Students interested in pursuing careers in sports medicine, athletic training, physical therapy, occupational therapy, nursing and physical education would find this course to be a great introduction to their future profession. Future college athletes will also find this course helpful for the prevention and care of personal injuries.

## **THE REAL WORLD: COLLEGE HEALTH ISSUES (4855)**

Grade 12

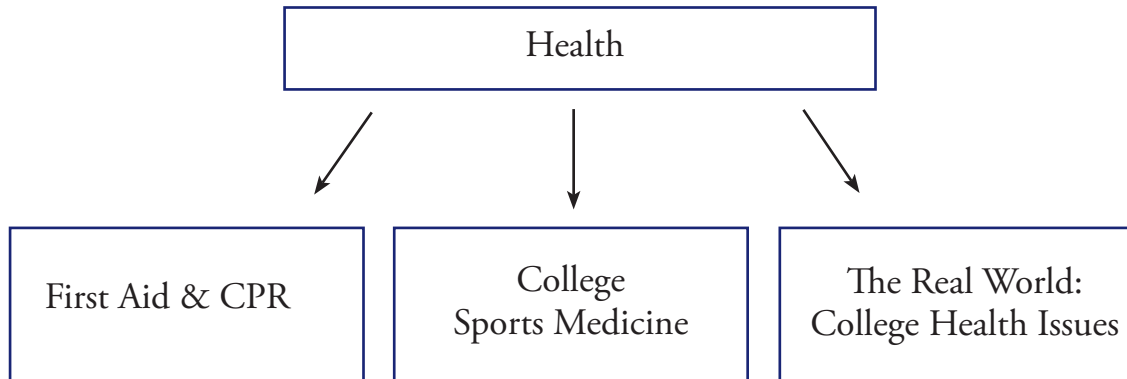
Half Year, .5 Credit

*Prerequisite: Health*

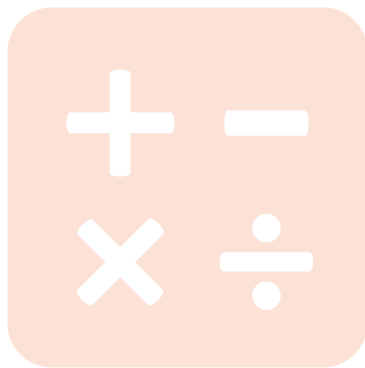
This course is designed with the graduating senior in mind. It will explore life outside of high school. Whether it be college or work, this

course will be focused on the “real world.” This class will be student-centered. Students will have the opportunity to add to the topics covered by the instructor. Some topics included will be campus life, the interview process, stress management, time management, addictions, relationships, wellness, human sexuality and social media. Classroom instruction will also focus on resources students can access within the community and online. In a world full of information, it is important for students to be able to access and utilize credible resources in their daily lives.

# Health







# MATHEMATICS COURSES

## **ALGEBRA 1 (3170)**

**Grade 9**

**Full Year, 1 Credit**

*Prerequisite: Math 8*

*Recommendation: Math 8 with a grade of at least B*

This is the first course of the high school Regents mathematics courses. It is a one-year course which meets the New York State Learning Standards in Algebra 1. This course emphasizes skills and processes to enable students to successfully solve problems in different settings. The focal point of the course is algebra: solving linear equations, quadratic equations, systems of equations, graphing lines and parabolas, and work with functions. Students take the Algebra 1 Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade. The course requires the use of a graphing calculator, which is provided by the school.

## **ALGEBRA 1 (3170RE)**

**Grade 9**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Math 8*

This course follows the same curriculum as Algebra 1 but includes additional class time as it meets for double periods on alternate days. The course requires the use of a graphing calculator, which is provided by the school. Students will take the Algebra 1 Regents examination in June. The Regents examination grade counts as one-ninth of the overall course

grade. The additional class time may satisfy the academic intervention service requirement.

## **GEOMETRY HONORS (3280)**

**Grades 9-10**

**Full Year, 1 Credit**

*Prerequisite: Algebra 1*

*Recommendation: Algebra 1 (grade 8) with a grade of at least B+ or Algebra 1 (grade 9) with a grade of at least A*

This course is the first of our honors program. It is a one-year course which meets the New York State Learning Standards in Geometry. The course is also enriched with select advanced topics. Problem-solving skills, creative thinking and real-life applications are explored. Students are expected to participate in various mathematics competitions and research. The course includes geometric relationships, constructions, locus, informal and formal proofs, transformational geometry, coordinate geometry and trigonometry. This course requires the use of a graphing calculator, which is provided by the school. Students take the Geometry Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade.

## **GEOMETRY (3270)**

**Grades 9-10**

**Full Year, 1 Credit**

*Prerequisite: Algebra 1*

*Recommendation: Algebra 1 with a grade of at least B*

This is the second course of the high school Regents mathematics courses. It is a one-year course which meets the New York State Learning Standards in Geometry. The course emphasizes conceptual understanding and problem-solving abilities rather than assessing knowledge of isolated skills and facts. The course includes geometric relationships, constructions, locus, informal and formal proofs, transformational geometry, coordinate geometry and trigonometry. This course requires the use of a graphing calculator, which is provided by the school. Students take the Geometry Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade.

## **GEOMETRY (3270RE)**

**Grades 9-10**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Algebra 1*

*Recommendation: Algebra 1 with a grade between C- and B- or Algebra 1RE with a grade of at least B*

This course follows the same curriculum as Geometry but includes additional class time as it meets for double periods on alternate days. This course requires the use of a graphing calculator, which is provided by the school. Students take the Geometry Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade. The additional class time may satisfy the academic intervention service

requirement.

## **GEOMETRY APPLICATIONS (3285)**

**Grade 10**

**Full Year, 1 Credit**

*Prerequisite: Algebra 1*

This course is an opportunity for students to delve into the geometry curriculum of the New York State Regents. Students will be expected to develop the capabilities to construct valid mathematical arguments through the exploration of formal proofs, definitions, postulates, theorems, logic, and transformations. Additionally, students will become familiar with the properties of shapes. These skills are meant to help students be prepared to take the NYS Next Generation Math Learning Standards Geometry Regents examination. By taking this course, students can look forward to gaining knowledge and a greater understanding of geometric concepts.

## **ALGEBRA 2 HONORS (3310)**

**Grades 10-11**

**Full Year, 1 Credit**

*Prerequisite: Geometry Honors or Geometry*  
*Recommendation: Geometry Honors with a grade of at least B+ or Geometry with a grade of at least A*

This course is the second of our honors program. It is a one-year course which meets the New York State Learning Standards in Algebra 2. This course is also enriched with select advanced topics. The course emphasizes conceptual understanding and problem-solving abilities rather than assessing knowledge of isolated skills and facts. The course includes the study of real and complex numbers; solving and applying polynomial, rational and radical equations; exploration of trigonometric, exponential and logarithmic functions and their applications; the relation of the geometric series to finance; the use of probability, and modeling data distributions to draw conclusions. This course requires the use of a graphing calculator, which is provided by the school. Students take the Algebra 2 Regents examination in June. The Regents

examination grade counts as one-ninth of the overall course grade.

## **ALGEBRA 2 (3300)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: Geometry Honors or Geometry or Foundations in Advanced Algebra*

*Recommendation: Geometry with a grade of at least B*

This is the third and final course of the high school Regents mathematics courses. It is a one-year course which meets the New York State Learning Standards in Algebra 2. The course emphasizes conceptual understanding and problem-solving abilities rather than assessing knowledge of isolated skills and facts. The course includes the study of real and complex numbers; solving and applying polynomial, rational and radical equations; exploration of trigonometric, exponential and logarithmic functions and their applications; the relation of the geometric series to finance; the use of probability; and modeling data distributions to draw conclusions. This course requires the use of a graphing calculator, which is provided by the school. Students take the Algebra 2 Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade.

## **ALGEBRA 2 (3300RE)**

**Grades 11-12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Geometry Honors or Geometry or Foundations in Advanced Algebra*

*Recommendation: Geometry with a grade of at least C-*

This course follows the same curriculum as Algebra 2, but includes additional class time as it meets for double periods on alternate days. Students use the graphing calculator, which is provided by the school. Students take the Algebra 2 Regents examination in June. The Regents examination grade counts as one-ninth of the overall course grade. The additional class time may satisfy

the academic intervention service requirement.

## **FOUNDATIONS IN ADVANCED ALGEBRA (3290)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: Geometry Honors or Geometry*

*Recommendation: Geometry RE with a grade of at least C-*

This is a one-year course which meets select New York State Learning Standards in Algebra 2. The course is designed to build on algebraic and geometric concepts learned in previous math courses. It will develop and master advanced algebraic skills such as solving systems of equations, understanding properties of higher-degree polynomials including roots and end behavior, exploring exponential and rational functions algebraically and graphically, and drawing conclusions using probability. This course will also introduce higher-level mathematics such as matrices and complex fractions. This course requires the use of a graphing calculator which is provided by the school. Students who successfully complete this course will be eligible to take Algebra 2.

## **INTERMEDIATE ALGEBRA 1 (3122)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisite: Geometry or Principles of Geometry*

Students will continue to explore mathematical concepts while strengthening their algebraic skills. Topics include real-life applications in the areas of advanced algebra, exponential and logarithmic functions, and statistics. Students will complete four projects and take four quarterly exams.

## **INTRODUCTION TO CALCULUS HONORS (3174)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisite: Algebra 2 Honors or Algebra 2*

*Recommendation: Algebra 2 Honors with*

a grade of at least B+ or Algebra 2 with a grade of at least A

This course is designed to prepare students for the Advanced Placement Calculus BC course. A rigorous approach to calculus with some precalculus is studied. Topics include functions and their graphs, limits and continuity, the derivative and its application, curve sketching, Rolle's Theorem, The Mean Value Theorem, techniques of integration and its application, area under a curve, area bounded by two curves, volumes of revolution, conic sections, and logarithmic and exponential functions. This course requires the use of a graphing calculator, which is provided by the school.

### **INTRODUCTION TO CALCULUS (3173)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisite: Algebra 2 Honors or Algebra 2*

*Recommendation: Algebra 2 with a grade of at least B*

This course offers students a wide variety of topics that form the foundation of higher mathematics and will prepare them to take either Calculus or Advanced Placement Calculus AB. Topics include families of functions and transformations, theory of equations, rational functions, exponential and natural logarithmic functions, limits and continuity, the derivative and its applications, and curve sketching. The graphing calculator, which is provided by the school, will be used at select points in this course.

### **FUNCTIONS & STATISTICS (3125)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisite: Algebra 2 Honors or Algebra 2*

Functions and Statistics includes precalculus concepts such as circular functions, rational functions, logarithmic functions, matrices, family of functions, and transformations. The course will also expose students to some elements of a college statistics course, including regression models and normal and binomial distributions.

### **INTERMEDIATE ALGEBRA 2 (3123)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisite: Intermediate Algebra 1*

Students will continue to explore mathematical concepts while strengthening their algebraic skills. Topics include real-life applications in the areas of advanced algebra, exponential and logarithmic functions, trigonometry, conic sections and statistics. Students will complete four projects and take four quarterly exams.

### **AP CALCULUS BC (3175)**

**Grade 12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Introduction to Calculus Honors*

*Honors*

*Recommendation: Introduction to Calculus Honors with a grade of at least B+*

This course is equivalent to two semesters of college calculus. It meets for double periods on alternating days. Topics include methods of integration (by parts and partial fractions), L'Hospital's rule, improper integrals, polynomial approximations, sequences and series, tests for convergent and divergent series, Taylor series, McLaurin series, parametric equations and polar equations. This course requires the use of a graphing calculator, which is provided by the school. All students will take the Advanced Placement Calculus BC exam.

### **AP CALCULUS AB (3150)**

**Grade 12**

**Full Year, 1 Credit**

*Prerequisite: Introduction to Calculus Honors or Introduction to Calculus*

*Recommendation: Introduction to Calculus with a grade of at least A*

This course will include a study of limits continuity, theory and techniques of differentiation, related rate problems, maximum/minimum applications, trigonometric function and their derivatives, approximations by use of differentials, the fundamental theorem of calculus, the definite and indefinite integral, areas under the curve, curve sketching, volumes of revolution and techniques of integration. Special

emphasis is given to exponential and logarithmic functions and their applications. This course requires the use of a graphing calculator, which is provided by the school. All students will take the Advanced Placement Calculus AB exam.

### **COLLEGE CALCULUS (3155)**

**Grade 12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits through the Beacon Program at Suffolk Community College.**

*Prerequisite: Introduction to Calculus Honors or Introduction to Calculus*

College Calculus serves as a powerful tool in the solution of many complex technological problems that arise in physics, engineering, chemistry and other related fields. Topics include real numbers, introduction to analytic geometry, functions, limits and continuity, the derivative, applications of the derivative, antidifferentiation and the definite integral. This course requires the use of a graphing calculator, which is provided by the school. Successful completion of this course satisfies the SUNY general education mathematics requirement if taken for college credit. Students who take the course for college credit are required to take an enhanced version of the midterm and final examination.

### **COLLEGE STATISTICS (3128)**

**Grade 12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits through the Beacon Program at Suffolk Community College.**

*Prerequisite: Functions & Statistics or Introduction to Calculus Honors or Introduction to Calculus (seniors who have completed Algebra 2 Honors or Algebra 2 may take this course with departmental approval.)*

This is a full-year, college-level statistics course for seniors. Students will cover important statistical topics including binomial and normal distributions, statistical models and inference procedures. Successful completion of

this course satisfies the SUNY general education mathematics requirement if taken for college credit. Final quarterly assessments in this course are required of all students. Students who take the course for college credit will also be required to take a midterm and final examination.

### **AP STATISTICS (3127)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisites: Geometry Honors or Geometry*  
*Recommendation: Geometry with a grade of at least B*

In this course, students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns using probability and simulation, and statistical inference. Students who plan to take an AP science course will benefit greatly from AP Statistics. At least one statistics course is typically required for college majors such as engineering, psychology, sociology, health science and business. Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. This course can be taken concurrently with Algebra 2 Honors, Introduction to Calculus Honors, Introduction to Calculus, AP Calculus or Calculus.

### **COMPUTER SCIENCE FOR INNOVATION (3228)**

**Grades 9-10**

**Half Year, .5 Credit**

*Prerequisite: None*

How does computer science make things work? This course is for students who wish to learn more about how computer science is applied in real life. This course combines concepts from two PLTW Gateway courses: *PLTW Innovators and Makers* and *PLTW App Creators*. Students who have taken *PLTW App Creators* in middle school may also enroll in this course. In the first part of this course, students will use block coding to gain knowledge of how coding flows, design algorithms, utilize computational thinking practices, and code and upload programs to

microcontrollers that perform a variety of authentic tasks. Teams select and solve a personally relevant problem related to wearable technology, interactive art or mechanical devices. Students will then continue expanding their knowledge of computational thinking through the creation of mobile apps. Students continue the use of block coding as they collaboratively design and develop mobile solutions to authentic problems. Students experience the positive impact of the application of computer science to society as well as to other disciplines, particularly biomedical science. There is no PLTW end-of-course examination (EoC) for this course.

### **AP/PLTW COMPUTER SCIENCE PRINCIPLES (3235)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: Algebra 1*

In this course, students learn to automate tasks in a variety of languages, find patterns in data and interpret simulations. Students collaborate and work in teams to develop computational thinking, and create and present solutions that can improve people's lives. This course does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. This course also builds students' awareness of the tremendous demand for computer specialists and for professionals in all fields who have computational skills. This PLTW course addresses all learning objectives in the College Board's AP CS Principles framework. All students will take the Advanced Placement examination as well as the PLTW end-of-course examination.

### **INTRO TO COMPUTER SCIENCE PROGRAMMING (3250)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: Geometry Honors or Geometry*

This course is an introduction to programming. Students who have a strong

mathematics background and a love of solving puzzles will enjoy this course. Students are introduced to computer programming concepts, such as loop structures, conditional statements and arrays. Object-oriented concepts such as inheritance, abstract classes and interfaces will be introduced. More advanced topics including linked lists, files, stack and queues, recursion, searches and sorts may be included. Students will also delve into web applications by writing applets.

### **AP COMPUTER SCIENCE A (3260)**

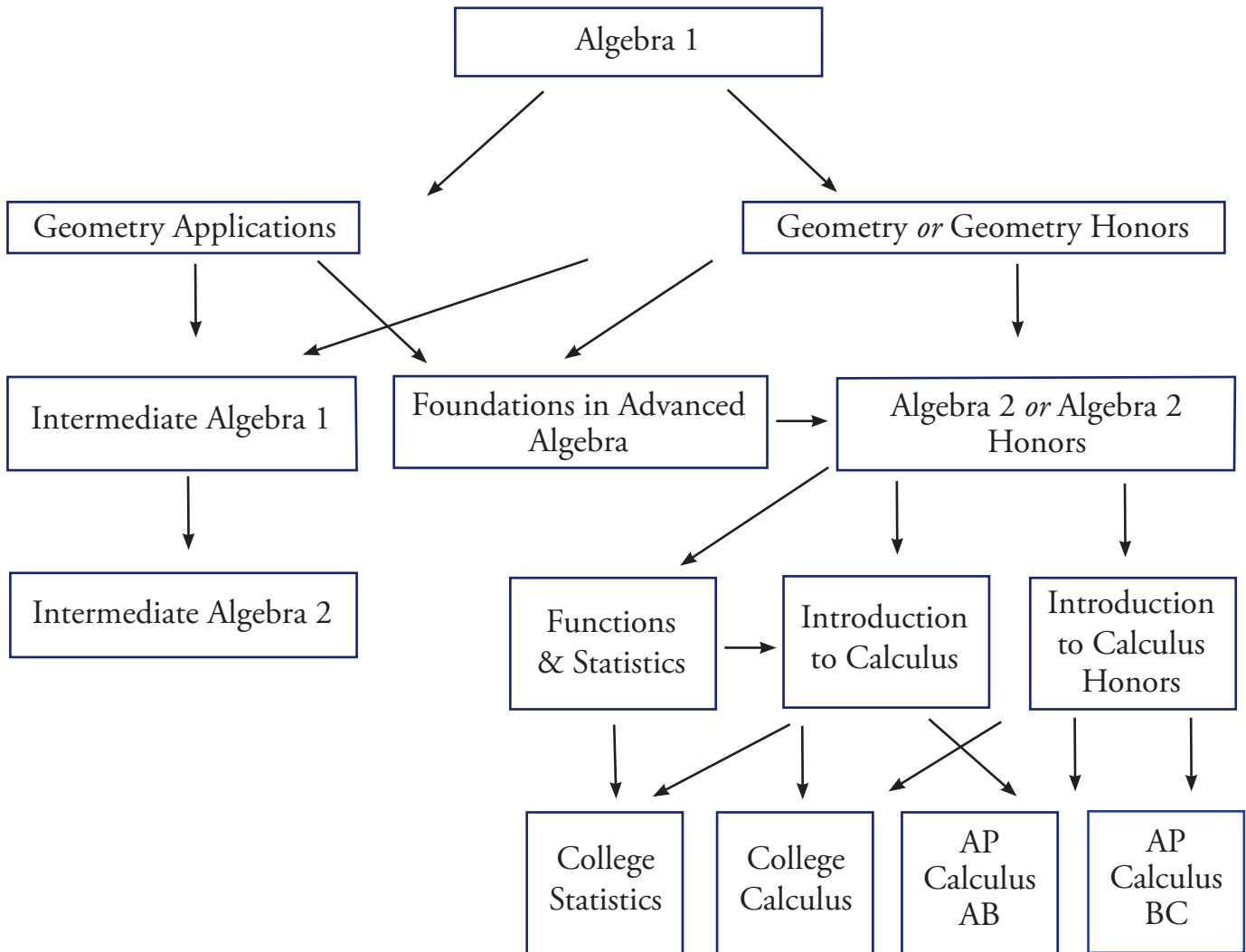
**Grades 11-12**

**Full Year, 1 Credit**

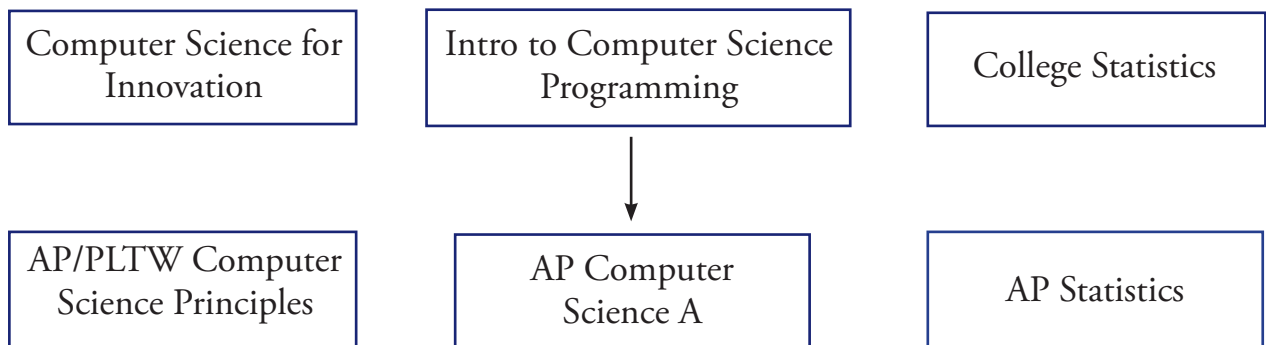
*Prerequisite: Introduction to Computer Science Programming*

This course is comparable to a first-year course in a college or university computer science department. The major emphasis is on programming methodology, algorithms and data structures. Applications are used to develop student awareness of the need for particular algorithms and data structures, as well as to provide topics for programming assignments to which students can apply their knowledge. A particular programming language constitutes the vehicle for implementing computer-based solutions to particular problems. Treatments of computer systems and social implications of computing are integrated into the course.

# Mathematics



## Electives





# MUSIC COURSES

## **CONCERT CHOIR (7710)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

*Recommendation: Prior musical experience is beneficial.*

Open to all students whose skill level meets the criteria necessary for success at the high school level. This is a musical group devoted to the study of advanced choral literature. Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. This course may be repeated for credit. Concert Choir fulfills the arts graduation requirement.

## **TREBLE CHOIR (7715)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

*Recommendation: Prior musical experience is beneficial.*

Open to all grade 9-12 students whose vocal range is in the soprano or alto range. This is a musical group devoted to the study of advanced choral literature. Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. If this course is not offered, students requesting this course will be enrolled in Concert Choir instead. This course may be repeated for credit. Treble Choir fulfills the arts graduation requirement.

## **SYMPHONIC BAND (7670)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisites: The ability to perform upper-level high school music on a band instrument. Audition required. Departmental permission is necessary. Balanced instrumentation is also taken into consideration.*

This musical group is devoted to the study and performance of the most advanced wind-band music. Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. This course may be repeated for credit. Symphonic Band fulfills the arts graduation requirement.

## **CONCERT BAND (7680)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: The ability to perform high school-level music on a band instrument.*

This is a musical group devoted to the study and performance of a variety of styles and levels of wind-band music. Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. This course may be repeated for credit. Concert Band fulfills the arts graduation requirement.

## **CONCERT ORCHESTRA (7640)**

**Grade 9-12**

**Full Year, 1 Credit**

*Prerequisite: The ability to perform high school-level music on an orchestral string instrument.*

Open to all orchestral string players.

Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. This course may be repeated for credit. Concert Orchestra fulfills the arts graduation requirement.

## **SYMPHONIC ORCHESTRA (7650)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: The ability to perform upper-level high school music on an orchestral string instrument. Audition required.*

*Departmental permission is necessary. Balanced instrumentation is also taken into consideration.*

This musical group is devoted to the study and performance of the most advanced orchestral music. Members meet each day for an ensemble rehearsal. Attendance is required at one additional rotating lesson period each week. This course may be repeated for credit. Symphonic Orchestra fulfills the arts graduation requirement.

## **MUSIC THEORY (7720)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

*Recommendation: Previous instruction or experience in music.*

This course deals solely with the mechanics of music and is designed to provide the student with a thorough understanding of everything on the musical written page. It will include all major and minor keys and scales, all phases of rhythm, sight-reading, interval and chord reading, melodic and

rhythmic dictation, and the beginnings of analysis in four-part writing. This course will thoroughly prepare the student for any future involvement with music, whether or not music is chosen as a career.

### **AP MUSIC THEORY (7730)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: Music Theory or departmental permission*

The curriculum is one that follows the College Board Advanced Placement Program syllabus. The course is designed to cover the scope of work that would be equivalent to

a first-year college course in music theory. Students will develop the ability to recognize, understand and describe the basic materials and processes of music that are heard or presented in a score through ear training, sight singing, analysis, composition and rhythmic studies. All students accepted into this program will be expected to take the Advanced Placement examination. Based on student requests, this course may be offered on alternate years.

### **ADVANCED MUSIC THEORY (7740)**

**Grades 11-12**

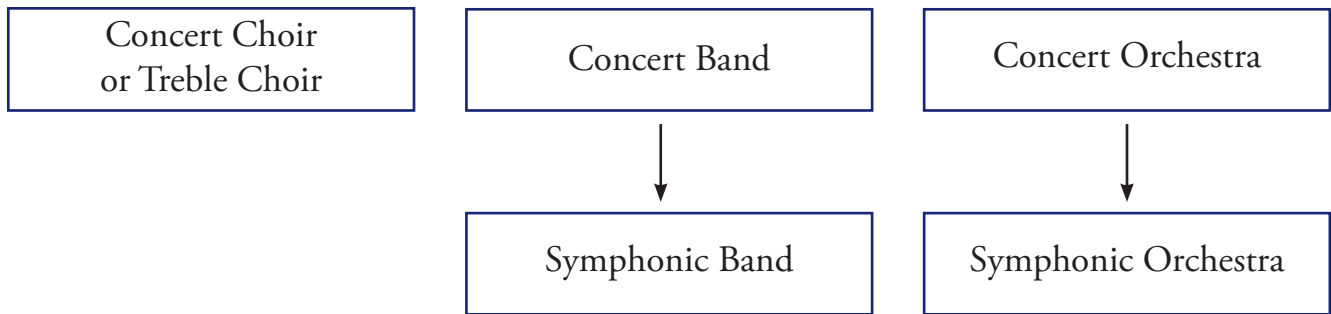
**Full Year, 1 Credit**

*Prerequisite: AP Music Theory*

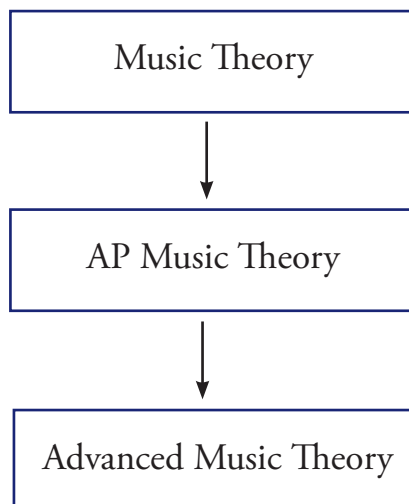
This course is designed for students who have completed AP Music Theory and want to pursue additional advanced studies in music theory through the application of Advanced Placement content within individualized projects. Students will further develop their understanding of technical, stylistic, expressive and rhetorical elements of music to aid with analysis and composition of music. Based on student requests, this course may be offered on alternate years.

# Music

## Performing Ensembles



## Music Theory





# PHYSICAL EDUCATION COURSES

## **PHYSICAL EDUCATION 9 (8000)**

**Full Year, Alternate Days, .5 Credit**

*Prerequisite: None*

The ninth grade physical education curriculum is a program designed to improve physical well-being, social skills and behavior in students through structured activities. Students will experience designed activities and basic Crossfit training principles that will promote movement concepts, advance motor skills, improve core strength and enhance fitness levels. Additionally, self-confidence, self-esteem, leadership skills, communication skills, mutual support, respect toward differences and the ability to formulate and achieve goals will be targeted through the structured activities.

## **PHYSICAL EDUCATION GRADES 10-12**

**Full Year, Alternate Days, .5 Credit**

*Prerequisite: None*

The grade 10-12 program is designed to foster lifetime wellness awareness, increase fitness and broaden healthy lifestyle choices. Special attention will be given to the development of cardiovascular endurance, muscular strength and flexibility. Student health and wellness will be explored and developed. Emphasis on fitness is enhanced and improved. The units will guide students' knowledge of fitness concepts as well as the understanding and need to lead a healthy lifestyle. Guided instruction will include units in net sports, project adventure activities, step aerobics and wellness-associated activities.

Students will be able to select from a list of courses to complete their physical education experience. This program is

designed progressively and will guide students in their pursuit of leading a healthy lifestyle. The pursuit of lifetime fitness is strengthened and enhanced. Students will have an understanding of components and resources available to them as well as the knowledge to establish and direct their own personal fitness program. These electives encompass higher-level strategies, processing and the application of skills. Fitness is an integral aspect in all of these electives.

Students are encouraged to select different courses for each year. Courses to choose from are listed below.

### **TEAM SPORTS (8700)**

*Prerequisite: None*

This course is designed to improve skill acquisition in the sports of football, soccer, volleyball, basketball, softball, team handball and ultimate frisbee. Other team sports may be substituted or added due to enrollment, facility space, etc. Students will be involved with organizing and participating in small-sided games with the focus on developing the necessary skills needed to become successful at these sports. Sport-specific conditioning exercises will be completed daily. Teambuilding concepts will be developed and discussed.

### **LIFETIME SPORTS (8720)**

*Prerequisite: None*

This course is designed to provide knowledge and improve skills in sports that can be participated in for a lifetime. Students will receive basic instruction in archery, badminton, tennis, volleyball and golf. Both individual and team competitions will be organized.

Conditioning and lifelong fitness will be emphasized and explored in relation to these sports.

### **MOVEMENT AND EXPLORATION (8790)**

*Prerequisite: None*

Explore movement through creative dance, hatha yoga, karate, self-defense, and aerobic and anaerobic conditioning exercises. Students will receive valuable information regarding heart rate monitoring, nutrition, fitness principles, stress relief and anatomy.

### **PERSONAL FITNESS (8750)**

*Prerequisite: None*

This course is designed to improve the physical fitness level of individuals. Through anaerobic and aerobic conditioning exercises, students will learn how to monitor their progress during a specific workout plan geared towards their needs. Nutrition, anatomy, fitness principles and various training methods will be discussed, incorporated and tested. Students will gain knowledge that will allow them to monitor themselves outside of school.

### **ADVENTURE EDUCATION (8785)**

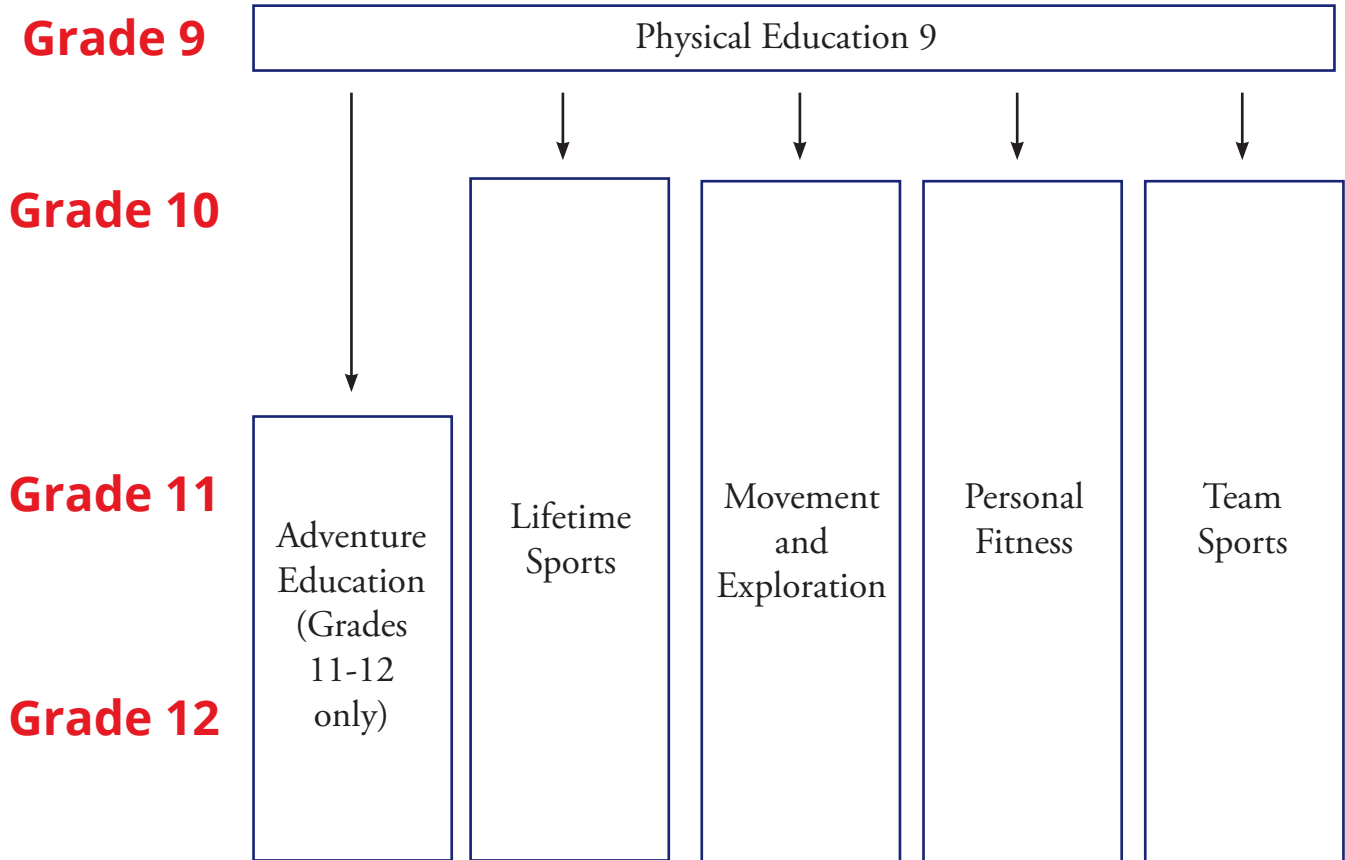
**Grades 11-12 Only**

*Prerequisite: None*

This adventure course will explore various warmup games, trust-building exercises, group initiatives and problem-solving activities. The students will develop the necessary skills to complete the low- and high-challenge course. Leadership and communication skills will be enhanced through teambuilding activities.



# Physical Education





# SCIENCE COURSES

## **EARTH SCIENCE (4010)**

**Grades 9-12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Science 8 or Biology*

This lab course is based on the activities and content specified in the New York State Earth Science curriculum. It is an interdisciplinary program that applies many of the topics of physics, biology, chemistry and mathematics studied in earlier grades. The Earth Science course culminates in a Regents exam which counts as one-ninth of the overall course grade.

## **EARTH SCIENCE HONORS (4030)**

**Grade 9**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Science 8 or Biology*

*Co-requisite: Algebra 1 (if not previously completed)*

*Recommendation: Science 8 with a grade of at least A or Biology with a grade of at least B+*

This lab course is designed for students who have demonstrated high academic ability and are willing to accept the demands of a particularly rigorous course of study. Students conduct investigative laboratory and field projects associated with physical and historical geology, astronomy, weather and climate. In addition to covering the Earth Science curriculum, selected topics of biology, chemistry and physics are studied around central MST themes. Earth Science Honors students complete the Regents examination in Earth Science, which counts as one-ninth of the overall course grade.

## **BIOLOGY (4050)**

**Grades 10-12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Earth Science Honors or Earth Science*

In biology, as well as in other science courses, the laboratory is where students study biological concepts and develop scientific skills. Although the subject matter is interrelated, discrete units may be identified. These are evolution, modern genetics, reproduction, plant and animal development, heredity, life processes in plants and animals, and ecology. The course concludes with the Living Environment Regents examination, which counts as one-ninth of the overall course grade.

## **AP BIOLOGY (4060)**

**Grades 10-12**

**Full Year, 1 Credit**

**10 Periods/Week**

*Prerequisite: Earth Science Honors or Earth Science*

*Recommendation: Earth Science with a grade of at least A or Earth Science Honors with a grade of at least B+*

Sophomore students who are accepted into this rigorous program will take 10 periods of college-level biology per week. The Advanced Placement curriculum will be followed. A college text, study guide, outside readings, lectures, discussions and laboratory activities will be utilized in this course. By mid-May the students are prepared for and are required to sit for the Advanced Placement examination in Biology. Students who have not taken Living Environment

(Biology) 4050 are required to take the Living Environment Regents examination administered in June.

## **CHEMISTRY (4100)**

**Grades 10-12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: AP Biology or Biology*

*Co-requisite: Algebra 2 Honors, Algebra 2 or Foundations in Advanced Algebra*

*Recommendation: Biology with a grade of at least B*

This is an introductory chemistry course that addresses atomic concepts, nuclear chemistry, the periodic table, nomenclature, chemical bonding, solutions, kinetics/equilibrium, acids, bases and salts, oxidation-reduction and organic chemistry. The course involves hands-on experimentation and problem-solving. The course concludes with the Chemistry Regents examination, which counts as one-ninth of the overall course grade.

## **AP CHEMISTRY (4120)**

**Grades 11-12**

**Full Year, 1 Credit**

**10 Periods/Week**

*Prerequisite: AP Physics 1 or Physics or Chemistry or AP Biology*

*Co-requisite: Algebra 2 Honors or Algebra 2*

*Recommendation: AP Physics 1/ AP Environmental Science/ AP Biology with a grade of at least B+, Physics with a grade of at least A, or Chemistry with a grade of at least A*

This course is designed for students who have demonstrated achievement and

interest at a level well above average in both mathematics and science. Emphasis is on the basic principles of chemistry, often described quantitatively, and often derived from the laboratory experience. Instruction is on the college level, and by mid-May students are prepared for, and are required to sit for, the Advanced Placement examination in Chemistry. Students will also sit for the Chemistry Regents examination in June, which counts as one-ninth of the overall course grade.

### **PHYSICS (4080)**

**Grades 11-12**

**Full Year, 1 Credit**

**7.5 Period/Week**

*Prerequisite: AP Biology or Biology*

*Co-requisite: Algebra 2 Honors or Algebra 2*

*Recommendation: Algebra 1 with a grade of at least B+ and Biology with a grade of at least B+*

This course is a study of motion, heat, waves, sound, optics, electricity, electronics and nuclear energy. Recitation classes and a comprehensive laboratory program develop concepts. Basic mathematical, trigonometric and algebraic skills are necessary for student mastery of many of the topics. This course culminates in the Physics Regents examination, which counts as one-ninth of the overall course grade.

### **AP PHYSICS 1 (4091)**

**Grades 11-12**

**Full Year, 1 Credit**

**10 Periods/Week**

*Prerequisite: AP Biology or Biology*

*Co-requisite: Introduction to Calculus*

*Honors or Introduction to Calculus*

*Recommendation: Biology with a grade of at least A or AP Biology with a grade of at least B+, and Algebra 2 with a grade of at least B+*

This course is designed for 11th and 12th graders who have demonstrated achievement and interest at a level well above average in both mathematics and science. AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion) work, energy and power; mechanical waves and sound; and introductory simple circuits. Through inquiry-based learning,

students will develop scientific critical thinking and reasoning skills. By mid-May the students are prepared for and are expected to sit for the Advanced Placement examination in AP Physics 1.

### **AP PHYSICS WITH CALCULUS (4110)**

**Grade 12**

**Full Year, 1 Credit**

**5 Periods/Week**

*Prerequisite: AP Physics 1*

*Co-requisite: College Calculus or AP*

*Calculus AB or AP Calculus BC*

This is a second-level AP Physics course especially appropriate for students planning to major in physical science, computer science or engineering. The course is equivalent to two semesters of calculus-based, college-based physics. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; oscillations and gravitation; electrostatics; conductors, capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course. By mid-May the students are prepared for and are expected to sit for the Advanced Placement examinations in both AP Physics C: Mechanics and for AP Physics C: Electricity and Magnetism.

### **ENVIRONMENTAL SCIENCE (4180)**

**Grades 11-12**

**Half Year, .5 Credit**

**5 Periods/Week**

*Prerequisite: AP Biology or Biology*

This course presents students with real-life environmental issues and concerns. It is designed to encourage and challenge students to think about practical solutions to these concerns. The six core areas of study are ecology, air, food, aquatic systems, water and energy. Emphasis will be placed on understanding the major scientific principles behind how our environment works and the impact society is having on the environment.

### **TOPICS IN SCIENCE (4147)**

**Grades 11-12**

**Half Year, .5 Credit**

**5 Periods/Week**

*Prerequisite: AP Biology or Biology*

This course will present many current issues from the fields of environmental science, medicine, biology, chemistry and physics. The course is a non-Regents science course that meets five days per week. Class discussions, projects, labs and outside speakers will be incorporated into the course. Come and learn about yourself and our constantly changing world.

### **FORENSIC SCIENCE CRIMES AND CLUES (4254)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: Earth Science Honors or Earth Science*

Forensic science is the study and application of science to the process of law and involves the collection, examination, evaluation and interpretation of evidence. Students will gain a basic understanding of proper procedures for securing, assessing and processing crime scenes and DNA evidence, as well as the scientific and analytical approaches to determining the value of evidence as it relates to the court of law.

### **FORENSIC SCIENCE INVESTIGATIONS (4255)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: Earth Science Honors or Earth Science*

This course examines the additional principles, theories and practices of forensic science utilized within the law enforcement community. This course will provide students with the opportunity to learn ballistic evidence, tool mark and other impressions, serology and blood splatter analysis, as well as handwriting and fingerprint evidence used in crime scene investigations.

### **COLLEGE OCEANS (4266)**

**Grades 11-12**

**Full Year, 1 Credit**

**Students may elect to take this course for 3 college credits from Stony Brook University.**

**5 Periods/Week**

*Prerequisites: Earth Science Honors or Earth Science, AP Biology or Biology, and passing*

### *grade on Living Environment Regents examination*

This full-year course meets five periods per week and will provide hands-on experience via lab and field work. The topics addressed include the characteristics of the abiotic marine environment, the interdependence of the abiotic factors (geological, physical and chemical) to biological processes, and marine diversity. Eligible students may elect to obtain three college credits. Total cost is approximately \$250 for the Stony Brook course credit.

### **COLLEGE MARINE ECOLOGY (4276)**

Grades 11-12

Full Year, 1 Credit

**Students may elect to take this course for 3 college credits from Stony Brook University.**

5 Periods/Week

*Prerequisite: Earth Science Honors or Earth Science, AP Biology or Biology, and passing grade on Living Environment Regents examination*

The focus of this course is the study of marine communities and the complex interrelationships of marine life. The beneficial and deleterious interactions between humans and the marine world, especially as they apply to Long Island Sound, will be studied. The fact that the futures of each living community are permanently intertwined will be an important topic of discussion. Eligible students may elect to obtain three college credits for this course. Total cost is approximately \$250 for the Stony Brook course credit.

### **PLTW PRINCIPLES OF BIOMEDICAL SCIENCE (4320)**

Grades 9-12

Full Year, 1 Credit

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Prerequisite: Biology or Earth Science Honors or Earth Science, and passing grade on Earth Science Regents examination or Living Environment Regents examination*

*Co-requisite: AP Biology or Biology, if not previously completed*

Principles of Biomedical Science (PBS) provides an introduction to biomedical

science through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases. They will determine the factors that led to the death of a fictional woman as they sequentially piece together evidence found in her medical history and autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the woman's life and demonstrate how the development of disease is related to changes in human body systems. The activities and projects in PBS introduce students to human physiology, basic biology, medicine and research processes and allow students to design experiments to solve problems. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credits is optional, students interested in receiving these credits will be charged a fee by the college.

### **PLTW HUMAN BODY SYSTEMS (4325)**

Grades 10-12

Full Year, 1 Credit

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Prerequisite: PLTW Principles of Biomedical Science, AP Biology or Biology, and passing grade on Living Environment Regents examination*

Human Body Systems provides the opportunity for students to examine the interactions of body systems as they explore identity, communication, power, movement, protection and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. They will build organs and tissues on a skeletal mannequin, work through real-world cases and often play the

role of biomedical professionals to solve medical mysteries. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credit is optional, students interested in receiving these credits will be charged a fee by the college.

### **PLTW MEDICAL INTERVENTIONS (4330)**

Grades 11-12

Full Year, 1 Credit

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Prerequisite: PLTW Human Body Systems*

Students follow the life of a fictitious family as they investigate how to prevent, diagnose and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices and diagnostics. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credit is optional, students interested in receiving these credits will be charged a fee by the college.

### **PLTW BIOMEDICAL INNOVATION (4321)**

Grades 11-12

Full Year, 1 Credit

**Students may elect to take the course for 4 college credits from Augustana University.**

*Prerequisite or Co-requisite: PLTW Medical Interventions*

In this course, students design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering

to clinical medicine and physiology. Students have the opportunity to work on an independent project as part of this capstone experience. Students are provided the opportunity to receive four credits from Augustana University after meeting the minimum requirements set by the college. While receiving the college credits is optional, students interested in receiving these credits will be charged a fee by the college.

## **AP ENVIRONMENTAL SCIENCE**

**(4191)**

**Grades 10-12**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: AP Biology or Biology*

*Recommendation: Biology with a grade of at least B+*

Environmental science is an interdisciplinary science that embraces a variety of topics in biology, geology, chemistry and physics, as well as economics, politics and ethics. The goal of the course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world. These principles will be applied to identifying and analyzing environmental problems both natural and human-made, evaluating the relative risks associated with these problems and examining alternative solutions for resolving or preventing them. Students take the AP Environmental Science exam in May.

## **SCIENCE & TECHNOLOGY RESEARCH PROGRAM**

**Grades 9-12**

*Prerequisite: Departmental approval required*

**Grade 9**

**(4223) Full Year – .5 Credit/Alternating**

**Days**

**(4224) Full Year – 1 Credit**

**5 Periods/Week**

**Grade 10**

**(4247) Full Year – .5 Credit/Alternating**

**Days**

**(4233) Full Year – 1 Credit**

**5 Periods/Week**

**Grade 11**

**(4248) Full Year – .5 Credit/Alternating**

**Days**

**(4234) Full year – 1 Credit**

**5 Periods/Week**

**Grade 12**

**(4249) Full year – .5 Credit/Alternating**

**Days**

**(4235) Full year – 1 Credit**

**5 Periods/Week**

Research students learn methodology in natural and social sciences by accessing scientific databases, using online bibliographic search techniques and consulting doctoral-level research scholars. Students develop hypotheses and perform experiments to test them. Writing research papers and making presentations at scientific symposia are an integral component of the course. Throughout the program, emphasis is placed upon performing experiments in consultation with mentors. Research projects will be entered into local, regional and national competitions. **Placement in a Summer Research Experience is required.**

## **ASTRONOMY (4305)**

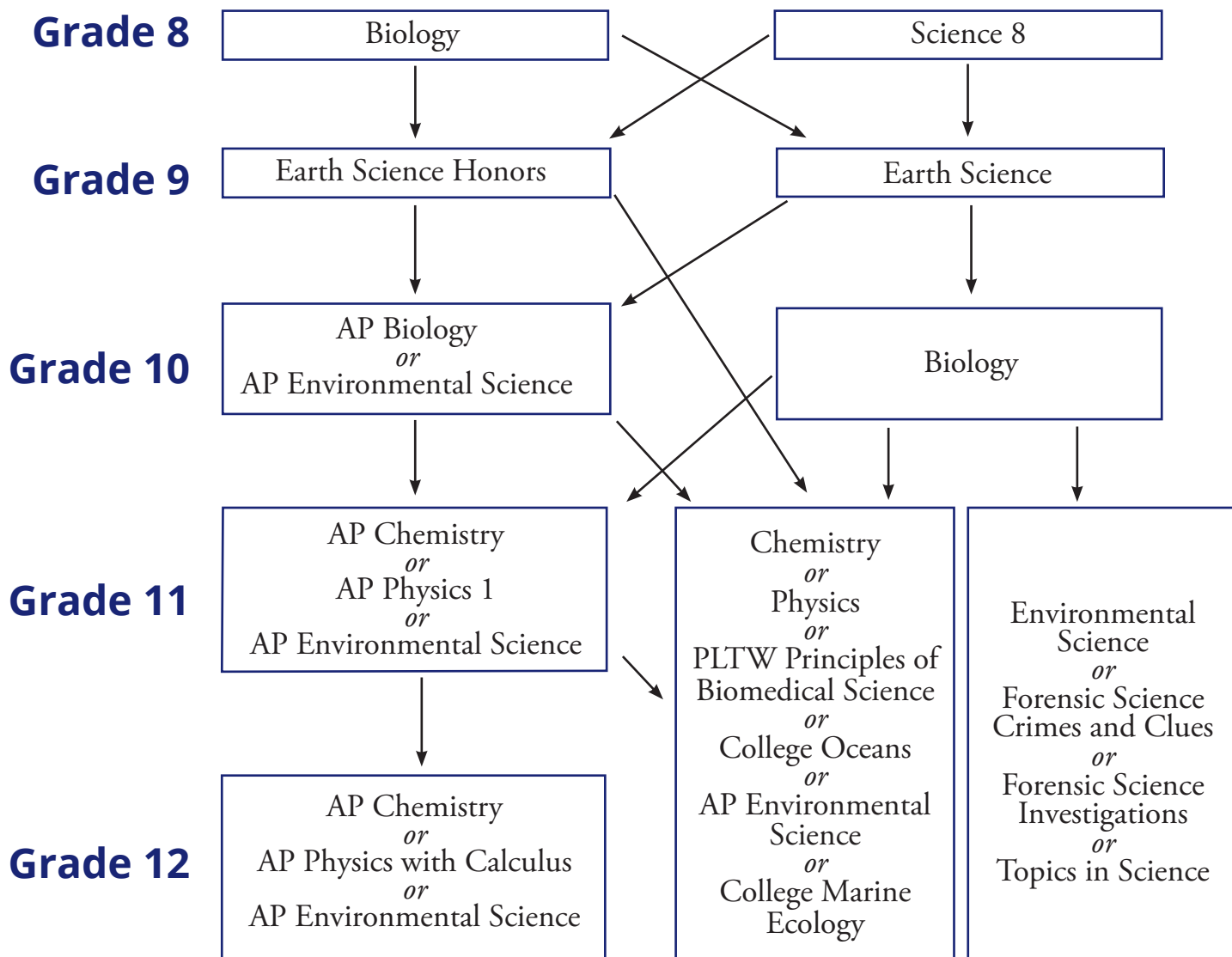
**Grades 11-12**

**Half Year, .5 Credit**

*Prerequisite: AP Biology or Biology, and passing grade on Living Environment Regents examination*

This course is designed to introduce students to the principles governing the planets, galaxy and universe. The course will concentrate on the history of astronomy, our local solar system including the properties of the planets and their satellites, and the recognition of the classic constellations. Additional topics may also include the concepts of modern astronomy and the methods used by astronomers to learn more about the universe. Laboratory activities may be used to enhance learning. Based on student requests, this course may be offered on alternate years.

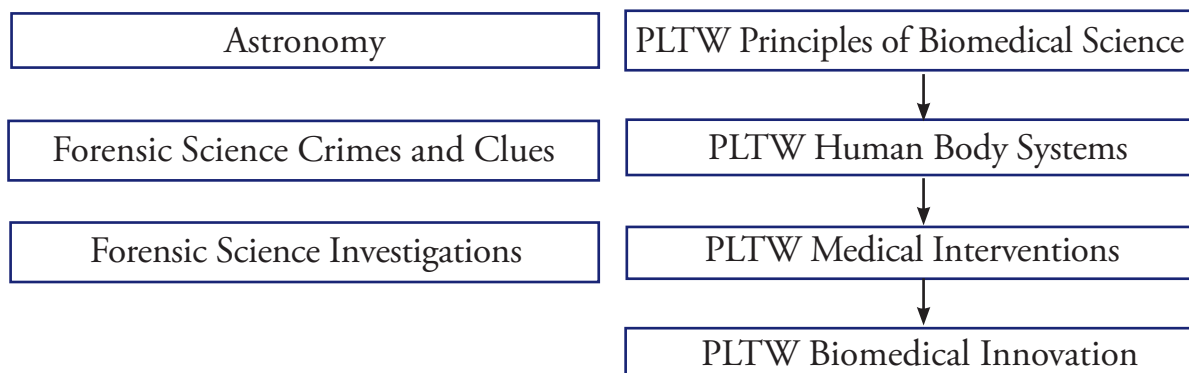
# SCIENCE



## Science & Technology Research Program

9th Grade / 10th Grade / 11th Grade / 12th Grade

### Electives





# SOCIAL STUDIES COURSES

## **SOCIAL STUDIES PROGRAM**

The Social Studies program offers an extensive variety of courses to ensure students become knowledgeable, empathetic and informed citizens of their community and the rapidly changing world around them. To meet these goals, students will engage in deep reading of primary and secondary sources, learn chronological reasoning skills, develop the ability to analyze changes over time, draw comparisons and interpretations of past events, and analyze differing points of view. Teachers will utilize a variety of instructional methods to help students achieve these goals. Simulation activities, role-playing exercises, classroom discussions, debates and research-based projects may be used to ensure students receive the highest level of instruction. Furthermore, students may be expected to utilize technology to meet course requirements, such as conducting internet-based research, designing PowerPoint presentations, using the Google suite of programs and blogging. Our courses incorporate 21st-century skills to ensure students are college and career ready and prepared to become active, engaged and informed citizens in our democratic system.

## **GLOBAL HISTORY 1 (2011)**

**Grade 9**

**Full Year, 1 Credit**

*Prerequisite: Social Studies 8 Honors or Social Studies 8*

Global History 1 is the foundation of the two-year Global History and Geography program. This program is based on the New York State K-12 Social Studies Framework (“NYS Framework”) and is anchored in the New York State Learning Standards for Literacy and Writing and New York State Learning Standards for Social Studies. These standards serve as a consistent set of expectations for what students should learn and be able to do so that we can ensure that all participants are prepared to be active and engaged citizens who are ready to pursue college or a career. This program utilizes a chronological format organized around themes and concepts beginning with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of transregional empires and trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power and the role of belief systems. A midterm and final assessment are required of all students.

## **GLOBAL HISTORY 1 HONORS (2031)**

**Grade 9**

**Full Year, 1 Credit**

*Prerequisite: Social Studies 8 Honors or Social Studies 8*

*Recommendation: Social Studies 8 with a grade of at least A*

This is the first year of a two-year course designed for students who are highly motivated and who possess strong reading and writing skills as well as a mature work ethic. Over the two-year period students will explore four time periods with six overarching themes that emphasize human endeavors, such as the impact of intellectual and technological developments and the emergence of the modern nation-state. These themes provide a framework to make comparisons over time and across cultures. For all time periods, major interpretative issues, alternative historical frameworks and historical debates define the program. A midterm and final assessment are required of all students.

## **GLOBAL HISTORY 1 (2011RE)**

**Grade 9**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisite: Departmental placement*  
Global History 1 RE (Regents)

Extended) is the foundation of the two-year Global History and Geography program. This program is based on the New York State K-12 Social Studies Framework (“NYS Framework”) and is anchored in the New York State Learning Standards for Literacy and Writing and New York State Learning Standards for Social Studies. These standards serve as a consistent set of expectations for what students should learn and be able to do so that we can ensure that all participants are prepared to be active and engaged citizens who are ready to pursue college or a career. This program utilizes a chronological format organized around themes and concepts beginning with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of transregional empires and trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power and the role of belief systems.

The additional class time will provide students the opportunity to ensure mastery of the subject matter and to develop the necessary skills to be successful on the Regents examination. Some of those skills to be addressed include document analysis, map interpretation and reading comprehension. The learning activities utilized in the extra class period will complement the work in the Regents class. A multidisciplinary, multisensory approach to learning is employed. Students participate in many different types of hands-on activities that actively involve them in this program. A midterm and final assessment are required of all students. The extra support period may satisfy the Academic Intervention Service requirement.

## **GLOBAL HISTORY 2 (2115)**

**Grade 10**

**Full Year, 1 Credit**

*Prerequisite: Global History 1 Honors or Global History 1*

Global History 2 is the second part of the two-year NYS Global History program. Students will begin their exploration with a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology and the interconnectedness of the world. The last three key ideas focus on global issues, applying a more thematic approach. A midterm and final assessment are required of all students. All students must take the Global History Regents examination based on the curricula of Global History 2. The Regents examination counts as one-ninth of the overall course grade.

## **GLOBAL HISTORY 2 (2115 RE)**

**Grade 10**

**Full Year, 1 Credit**

**7.5 Periods/Week**

*Prerequisites: Global History 1 and departmental placement*

Global History 2 RE (Regents Extended) is the second part of the two-year NYS Global History program. Students will begin their exploration with a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology and the interconnectedness of the world. The last three key ideas focus on global issues, applying a more thematic approach.

The additional class time will provide students the opportunity to ensure mastery of the subject

matter and to develop the necessary skills to be successful on the Regents examination. Some of those skills to be addressed include document analysis, map interpretation and reading comprehension. The learning activities utilized in the extra class period will complement the work in the Regents class. All students will take a midterm and the Global History Regents examination based on the curricula of Global History 2. The Regents examination counts as one-ninth of the overall course grade. The extra support period may satisfy the Academic Intervention Service requirement.

## **AP WORLD HISTORY: MODERN (2061)**

**Grade 10**

**Full Year, 1 Credit**

*Prerequisite: Global History 1 Honors or Global History 1*

*Recommendation: Global History 1 with a grade of at least A-*

This course follows the Global History 1 Honors course and further prepares students for the Advanced Placement World History examination. Students will begin with a rigorous exploration of the world circa 1450 and continuing to present day. Several concepts are woven throughout the course including European exploration, global trade, absolutism, political revolutions, industrialization, nationalism, imperialism, conflicts, technology and the interconnectedness of the world.

All students are required to take a midterm, take the Advanced Placement Examination in May, and take the Global History Regents examination in June which counts as one-ninth of the overall course grade.

## **AP EUROPEAN HISTORY (2140)**

**Grades 10-12**

**Full Year, 1 Credit**



## Summer Assignment Required

*Prerequisite: Global History 1 Honors or Global History 1*

*Recommendation: Global History 1 with a grade of at least A-*

Advanced Placement European History is a challenging history course recommended for students who are highly motivated and who possess strong reading and writing skills as well as a mature work ethic. This full-year course examines major periods in the history of Europe from the time of the Renaissance to the present. Historical problems and issues will be considered in their political, social, economic, religious and cultural contexts.

All sophomores who participate in this program will be required to take both the Advanced Placement European History examination in May and the Global History Regents examination, which counts as one-ninth of the overall course grade. Juniors and seniors are also required to sit for the Advanced Placement examination in European History. A midterm and final assessment are required of all students. This course may be substituted for the second half of the required two-year Global History program.

## U.S. HISTORY AND GOVERNMENT (2210)

Grade 11

Full Year, 1 Credit

*Prerequisite: AP World History: Modern or AP European History or Global History 2*

This course is based on the New York State K-12 Social Studies Framework (“NYS Framework”) and is anchored in the New York State Learning Standards for Literacy and Writing. These standards serve as a consistent set of expectations for what students should learn and be able to do so that we can ensure that all participants are prepared to be active and engaged citizens who

are ready to pursue college or career goals.

Students will begin by examining the colonial and constitutional foundations of the United States and will explore the government structure and functions written in the Constitution. The development of the nation and the political, social and economic factors that led to the challenges our nation faced during the Civil War will be addressed. Industrialization, urbanization and the problems that accompany them are examined, along with America’s emergence as a world power, the two world wars of the 20th century and the Cold War. Students will explore the expansion of the federal government, the threat of terrorism and the place of the United States in an increasingly globalized and interconnected world. A midterm and final assessment are required of all students. All students are required to take a Regents examination based upon the program of United States History and Government. The Regents examination counts as one-ninth of the overall course grade.

## U.S. HISTORY AND GOVERNMENT (2210RE)

Grade 11

Full Year, 1 Credit

7.5 Periods/Week

*Prerequisites: AP World History: Modern or AP European History or Global History 2; and departmental placement*

This course is based on the New York State K-12 Social Studies Framework (“NYS Framework”) and is anchored in the New York State Learning Standards for Literacy and Writing. Students will begin by examining the colonial and constitutional foundations of the United States and will explore the government structure and functions written in the Constitution. The development of the nation and

the political, social and economic factors that led to the challenges our nation faced during the Civil War will be addressed. Industrialization, urbanization and the accompanying problems are examined, along with America’s emergence as a world power, the two world wars of the 20th century and the Cold War. Students will explore the expansion of the federal government, the threat of terrorism and the place of the United States in an increasingly globalized and interconnected world.

The additional class time will provide students the opportunity to ensure mastery of the subject matter and to develop the necessary skills to be successful on the Regents examination. Some of those skills to be addressed include document analysis, map interpretation, and reading comprehension. The learning activities utilized in the extra class period will complement the work in the Regents class. All students will take a midterm and the United States History Regents examination. The Regents examination counts as one-ninth of the overall course grade. The extra support period may satisfy the Academic Intervention Service requirement.

## AP U.S. HISTORY (2230)

Grades 11-12

Full Year, 1 Credit

*Prerequisite: AP World History: Modern or AP European History or Global History 2*

*Recommendation: Global History 2 with a grade of at least B+*

Advanced Placement United States History is a challenging history course designed for students who are highly motivated and possess strong reading and writing skills as well as a mature work ethic. The course stresses major themes in United States history from

the colonial period to the present. Students will begin by examining the colonial and constitutional foundations of the United States and will explore the government structure and functions written in the Constitution. The development of the nation and the political, social and economic factors that led to the challenges our nation faced during the Civil War will be addressed. Industrialization, urbanization and the problems that accompany them are examined, along with America's emergence as a world power, the two world wars of the 20th century and the Cold War. Students will explore the expansion of the federal government, the threat of terrorism and the place of the United States in an increasingly globalized and interconnected world.

All students are required to take a midterm, take the Advanced Placement United States History examination in May, and take the United States History and Government Regents examination in June which counts as one-ninth of the overall course grade.

### **COURSES THAT SATISFY THE PARTICIPATION IN GOVERNMENT REQUIREMENT**

#### **PARTICIPATION IN GOVERNMENT (2310)**

**Grade 12**

**Half Year, .5 Credit**

*Prerequisite: AP U.S. History or U.S. History and Government*

Participation in Government is a one-semester course in public policy analysis required of all students for graduation. Students will be required to define social problems, identify policy alternatives, evaluate the effects of specific policies, implement policies and apply policy analysis skills to real-world situations. In addition,

through 10 civic engagement hours, this course will serve to create more prepared, active and informed citizens ready to tackle the challenges we face in the 21st century. The Participation in Government program stresses key civic values critical for effective participation in our ever-increasingly multicultural and interdependent world. A final assessment is required of all students.

#### **AP COMPARATIVE GOVERNMENT AND POLITICS (2325)**

**Grades 11-12**

**Full Year, 1 Credit**

*Prerequisites: AP U.S. History or U.S. History and Government or AP World History: Modern or AP European History*  
AP Comparative Government and Politics is a full-year course. The course uses a comparative approach to examine the political structures, policies, and the political, economic and social challenges among six selected countries: China, Iran, Mexico, Nigeria, Russia and the United Kingdom.

Students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. In addition, this course will also examine the political institutions and policies of the United States. Students will participate in a variety of activities such as simulations, debates and seminars. These activities are designed to give students an in-depth understanding of the countries being studied. A midterm and final assessment are required for all students. Students take the Advanced Placement Comparative Government and Politics examination in May. This course satisfies the Participation in Government requirement.

#### **AP UNITED STATES GOVERNMENT AND POLITICS (2320)**

**Grade 12**

**Full Year, 1 Credit**

*Prerequisites: AP U.S. History or U.S. History and Government*

Advanced Placement United States Government and Politics is a full-year course. This course will provide students with an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret the U.S. government and politics and the analysis of specific examples. Topics explored include constitutional underpinnings of the United States government; political beliefs and behaviors; political parties, interest groups and mass media; institutions of national government; and public policy and civil rights liberties.

Students will participate in a variety of activities such as simulations, debates and seminars. These activities are designed to give students insight into such issues as political beliefs and behavior, political parties and interest groups. A midterm and final assessment are required of all students. Students take the Advanced Placement United States Government and Politics Examination. This course satisfies the Participation in Government requirement.

#### **PARTICIPATION IN GOVERNMENT/LEADERSHIP (2340)**

**Grade 12**

**Full Year, Alternate Days, .5 Credit**

*Prerequisites: AP U.S. History or U.S. History and Government, application and departmental approval*

## **LEADERSHIP & POLITICAL PARTICIPATION (2331)**

**Grade 11 Elective (not for PIG credit)**

**Full Year, Alternate Days .5 Credit**

*Prerequisite: Application and departmental approval*

This course will acquaint students with the components of leadership and will assist them in developing effective strategies for participation in activities on local, state, national and global levels. Students will be expected to conduct student-developed projects for the high school campus. These projects may include human rights activities, voter registration and other service component activities necessary to acquaint high school students with responsibilities of participatory citizenship. Students who participate in this program must be willing to devote considerable time to complete work outside of the classroom period. The course will place strong emphasis on government operations and skills essential for leadership and effective participation in our political process. In addition, this course will focus on the teaching and learning needs for the 21st century, highlighting core skills such as critical thinking and problem-solving, goal setting, time management, creativity and innovation, communication, initiative and self-direction, collaboration, and information and media literacy. The integration of these 21st-century skills will assist students to become effective and productive citizens, leaving their mark on our school and their community. Applications must be submitted by students and will be reviewed by a departmental committee for acceptance into the program. A final assessment is required of all students. When taken during senior year, students will have the opportunity to earn the NYS Seal of Civic Readiness through the completion of a Civics Capstone

Project. The Capstone Project will be completed in lieu of the aforementioned final assessment. When taken as a senior, this course satisfies the Participation in Government requirement.

## **COURSES THAT SATISFY THE ECONOMICS AND ECONOMIC DECISION-MAKING REQUIREMENT**

### **ECONOMICS (2350)**

**Grade 12**

**Half Year, .5 Credit**

*Prerequisite: AP U.S. History or U.S. History and Government*

Economics is a one-semester course required of all students for graduation. The course is designed to give students an introduction to macroeconomics and microeconomics. Students will be required to (1) analyze, evaluate and make generalizations based on data; (2) use the problem-solving process to define problems, hypothesize, investigate and analyze selected data and (3) recognize alternative solutions and make decisions both as an individual and a citizen. The units of study are introduction to economics and economic systems, elements of the economy (microeconomics), bringing the economic system together (macroeconomics), and the United States and the world economy. A final assessment is required of all students.

### **AP MACROECONOMICS (2371)**

**Grade 12**

**Full Year, 1 Credit**

*Prerequisites: AP U.S. History or U.S. History and Government*

Advanced Placement Macroeconomics is open to students in grade 12 whose ability and academic performance qualify them for this program. This course takes a more in-depth view of basic economic concepts in both microeconomics and macroeconomics.

Central questions facilitate inquiry into topics including scarcity, resources, markets, federal spending, taxation, fiscal policy, monetary policy, international trade and currency exchange. Students are prepared for success on the AP Macroeconomics exam through a diversity of activities, including graphing, reading assignments, document analysis, debates and discussions, study of contrasting economic theories, lectures, internet research projects and blog post submissions. In addition to the potential of earning college credit through The College Board AP Program, students will become conversant in practical economic knowledge necessary for informed participation in our modern society. Every effort is made to apply core economic concepts to real-life questions and conflicts, making the course relevant to those who may or may not seek to pursue business and finance beyond high school.

A midterm and final assessment are required of all students. Students take the Advanced Placement Macroeconomics examination in May of their senior year. This course satisfies the Economics and Economics Decision-Making requirement.

## **ELECTIVE AP CREDIT COURSE DESCRIPTIONS**

### **AP PSYCHOLOGY (2629)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: Global History 1 or Global History 1 Honors*

Advanced Placement Psychology is a full-year offering intended for students who desire a college-level course. It introduces students to a full range of psychological insights and includes

such topics as personality theory and assessment, intelligence, learning and memory, motivation and emotion, sensation and perception, developmental psychology, psychological disorders and psychotherapy. Some of the individuals studied include Erik Erikson, Sigmund Freud, Carl Jung, Jean Piaget and B.F. Skinner. Students have the opportunity to perform research and conduct experiments. A midterm and final assessment are required of all students. Students take the Advanced Placement Psychology examination in May.

### **AP HUMAN GEOGRAPHY (2635)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: Social Studies 8 Honors or Global History 1 Honors or Global History 1*

Advanced Placement Human Geography is a full-year course of study for students whose ability and academic performance qualifies them for this experience. Advanced Placement Human Geography will introduce students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. Students will also learn about the methods and tools geographers use in their science and practice. A midterm and final assessment are required of all students. Students take the Advanced Placement Human Geography examination.

### **ELECTIVE HIGH SCHOOL CREDIT COURSE DESCRIPTIONS**

#### **CRIMINAL JUSTICE (2415)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course introduces students to our legal system. Students will study criminal law and due process. Guest speakers, student participation in mock trials and field experiences are an integral part of this program. Police, court, correction, probation and parole officers will meet with students, as will defense and prosecuting attorneys. A final assessment is required of all students.

#### **HISTORY THROUGH FILM (2520)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course will examine how film has portrayed historical events and how films have impacted culture and collective memory. The factual accuracy of these films will be studied based on the actual historic events. Discussions and projects will analyze the purpose and accuracy of the films as well as the films' intended audience. Through readings, screenings and assignments, students will learn to broaden their understanding of major historical events and eras throughout American and world history.

#### **HISTORY OF SPORTS IN AMERICAN SOCIETY (2530)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course will examine the development of sports through various historical and cultural perspectives while analyzing the relationship between sports and social, economic, cultural and political forces within the United States as well as the world. Students will also examine the historical significance of various groups in sports through readings, primary sources, audio and visual materials as well as class discussions and debates.

#### **COLLEGE GENOCIDE IN THE 20TH CENTURY (2465)**

**Grades 10-12**

**Half Year, .5 Credit**

Students may elect to take this course for 3 college credits from Farmingdale State College.

*Prerequisite: None*

This course explores the history of ethnic, religious, and other forms of genocide during the twentieth century. The topics covered will include the Armenian massacres of 1915-1923, the Jewish Holocaust (Shoah), and the Roma Porajmos, as well more recent examples of genocide, including events in Cambodia, Bosnia, and Rwanda. Students will also critically assess other claims of genocide in world history, focusing on related issues such as ethnic cleansing, forced population transfers, etc. Based on student requests, this course may be offered on alternate years.

#### **HUMAN CONFLICT (2485)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course will study the history and changing nature of modern warfare and human conflict in the 20th and 21st centuries. This course will investigate the causes, significant events, and effects of major modern wars and disputes beginning with the origins of World War II and culminating with the most recent conflicts facing the world today. Students will also investigate the impact of conflict on U.S. foreign policy and international relations as well as examine the significance the role technological advancement has played in developing new approaches to warfare since the end of World War II. Students will participate in a World War II simulation designed to enhance student understanding of war tactics, wartime decision-making, and international policy development.

Based on student requests, this course may be offered on alternate years.

## **INTRODUCTION TO PSYCHOLOGY (2495)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Introduction to Psychology is a one-semester high school-level course intended for students who desire an introduction to human behavior and personality. This course will assist students to understand human thought and action. Topics include human growth and development, learning and memory, personality, abnormal psychology and therapies. The course attempts to give students insights into the reasons behind their behavior. Hypnosis, dream analysis, the use of reward and punishment to control behavior, ethics of psychological research and the rights of the mentally ill are just some of the topics covered. A final assessment is required of all students.

## **NEW YORK CITY AND LONG ISLAND HISTORY (2540)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course will examine the social, political, cultural and economic history of both New York City and Long Island, and how the changes in greater metropolitan New York affected American life. The course will look at how certain historical forces shaped the region as it is today, examine its cultural traditions and its diversity, and look at the region's history from a variety of different perspectives. With an emphasis on project-based learning and activities, and possible hands-on trips to New York City, this course studies the ongoing social dynamics of cities and their metropolitan suburban areas. Possible themes

include indigenous history, whaling, the development of the NYC/LI region in Colonial America, the market and industrial revolution, the social and economic changes brought about by postwar suburbanization and post-9/11 New York.

# SOCIAL STUDIES

**Grade 9**

Global History 1 Honors *or* Global History 1



**Grade 10**

AP World History: Modern *or* Global History 2  
 AP European History *or* AP European History



**Grade 11**

AP U.S. History *or* U.S. History and Government



**Grade 12**

AP Macroeconomics *or* Economics **AND** AP Comparative Government and Politics *or* AP U.S. Government and Politics *or* Participation in Government *or* Participation in Government/Leadership

## Electives

AP European History

AP Human Geography

AP Psychology

Criminal Justice

College Genocide in the 20th Century

Human Conflict

Introduction to Psychology

Leadership & Political Participation (Grade 11)

AP Comparative Government and Politics

History of Sports in American Society

New York City and Long Island History

History Through Film



# TECHNOLOGY EDUCATION COURSES

## **DIY: INTRODUCTION TO HOME REPAIR SKILLS (6640)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Students will learn the basic skills and techniques relating to the carpentry, plumbing, electricity and automotive trade industries. Students will spend approximately five weeks learning the basics of each of the major trade industries. Using a hands-on approach, students will learn the physical skills, tools and techniques of each trade, enabling students to repair a wide variety of common household issues. This course will introduce students to useful skills for everyday life. Through the introduction of classroom visits of local trade experts, students will be introduced to possible future career choices in the trade industry.

## **CONSTRUCTION MATERIALS/ WOOD 1 (6221)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This is an introductory course for students with an interest in learning to manipulate materials into useful products. Students will learn how to design, plan and select materials to construct a variety of products.

Students will be using a full range of woodworking machines and hand tools to perform such processes as cutting, shaping, joining, adhering and finishing. Students who want to complete more intricate projects should enroll in Construction Materials/ Wood 2.

## **CONSTRUCTION MATERIALS/ WOOD 2 (6223)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: Construction Materials/ Wood 1*

Students will expand the knowledge gained in Construction Materials/ Wood 1 to create large, intricate and appealing projects. The focus of this course will be on the attention to detail. This includes planning and layout skills, straight and accurate cuts, following detailed assembly procedures and much more. This course promotes professionalism and places the emphasis on quality, not quantity.

## **DESIGN & DRAWING FOR PRODUCTION (DDP) (6510)**

**Grades 9-12**

**Half Year, .5 Credit**

*Note: When taken with DDP/*

*Architecture, students may fulfill the art/*

*music requirement with this course.*

*Prerequisite: None*

This course begins with an introduction to the language of industry and the tools of the designer. Students will experience freehand sketching and multiview drawing and will solve a variety of design problems in engineering and architecture. As a major part of this course, students will learn to use computers with CAD software. Students will apply the knowledge and skills learned using CAD software to create original projects using the laser engraver and 3D printer, along with hands-on building. Students desiring to take the second half of this course will select DDP/Architecture.

## **DDP/ARCHITECTURE (6530)**

**Grades 9-12**

**Half Year, .5 Credit**

*This course satisfies the second .5 credit of the art/music requirement when taken after DDP.*

*Prerequisite: Design & Drawing for Production (DDP) or PLTW*

*Introduction to Engineering Design: DDP*

This is one of two courses that can be taken for the second half of DDP. Students will gain an introduction to architecture by solving a variety of design problems. Solutions will be

presented through plan, elevation, pictorial sketches and color renderings. Three-dimensional model building and drawings made on the CAD system are major components of this course. Designing a vacation home from rough idea to finished scale model is the culminating activity in this course.

## **ARCHITECTURE 2 (6540)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: DDP/Architecture*

This course engages students in further development of concepts introduced in DDP/Architecture, including the evaluation of and solutions to more complex problems. Students will study architectural design, plane surveying, advanced drafting techniques, project presentations methods including 3D models, and advanced computer-aided drawing techniques using Autodesk and Autodesk Revit software. Internet exploration of design concepts and scale architectural models are examples of activities included in this class.

## **PLTW INTRO TO ENGINEERING DESIGN: DDP (6690)**

**Grades 9-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Credit for this course may be used to meet the art/music graduation requirement.*

*Prerequisite: None*

Introduction to Engineering Design is part of the Project Lead the Way Engineering program. This course is designed for all students interested in engineering, architecture and drafting. Students are introduced to the engineering profession and a common approach to the solution of engineering problems, known as the design process and application. Students will work individually and in teams to design solutions to a variety

of problems, develop research and analytical skills, learn technical writing and create engineering graphics. They will apply math, science and technology knowledge learned in other courses to solve engineering design problems. Students will use traditional and computer-aided drafting while exploring new and exciting design problems. Students will use the industry-standard 3D solid modeling CAD software to design and document their solutions to problems. Students will apply the knowledge and skills learned using this software to create original projects using the laser engraver and 3D printer, along with hands-on building. Students can elect to take the Certification exam. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credits is optional, students interested in receiving these credits will be charged a fee by the college.

## **PLTW COMPUTER INTEGRATED MANUFACTURING (6695)**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Prerequisite: None*

*Recommendation: Design & Drawing for Production (DDP) or PLTW Intro to Engineering Design: DDP*

Computer Integrated Manufacturing is part of the Project Lead the Way Engineering program. The course introduces students to the high-tech, innovative nature of modern manufacturing. Students will design and build their own automated manufacturing system using the latest technologies, including computer

modeling, computer numeric control technology, computer-aided manufacturing software, VEX robotics, Lynxmotion robotic arms, automated guided vehicles and flexible manufacturing systems. In addition to technical concepts, the course incorporates finance, ethics and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality and efficiency. While implementing these designs, students will continually hone their interpersonal skills, creative abilities and understanding of the design process. The course culminates with a capstone project where students design, build, program and present a manufacturing system model capable of creating a product. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credits is optional, students interested in receiving these credits will be charged a fee by the college.

## **PLTW PRINCIPLES OF ENGINEERING (6565)**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Rochester Institute of Technology.**

*Credit for this course may be used to meet the third-year math or science requirement.*

*Prerequisite: PLTW Intro to Engineering Design: DPP or PLTW Computer Integrated Manufacturing*

Principles of Engineering is part of the PLTW Engineering program. Through problems that engage and



challenge, students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation and kinematics. The course applies and concurrently develops secondary-level knowledge and skills in mathematics, science and technology. Students have the opportunity to develop skills and understanding of course concepts through activity, project and problem-based learning (APB). By solving rigorous and relevant design problems using engineering and science concepts within a collaborative learning environment, APB learning challenges students to continually hone their interpersonal skills, creative abilities and problem-solving skills. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community. Students will employ engineering and scientific concepts in the solution of engineering design problems by using VEX robotics and industry-standard modeling and analysis software. Students are provided the opportunity to receive three credits from Rochester Institute of Technology after earning a qualifying score on the end-of-course examination and meeting the minimum course average requirement set by the college. While receiving the college credits is optional, students interested in receiving these credits will be charged a fee by the college.

### **ROBOTICS 1 (6616)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course explores engineering concepts, the history of robotics, robot design, unmanned aircraft system (UAS) drone technology, and the impact of artificial intelligence on the world of robotics. This course's hands-on, problem-solving approach

incorporates robotic and electronic interfaces. In this engineering laboratory, the students will design, create and program working robots. Students will also be introduced to programming, flying and remotely controlling UAS drones through the use of artificial intelligence. The tools of science, technology, engineering, and mathematics are seamlessly integrated in this authentic learning environment.

### **COLLEGE ROBOTICS 2 (6622)**

**Grades 10-12**

**Half Year, .5 Credit**

**Students may elect to take the course for 3 college credits from Farmingdale State College.**

*Prerequisite: Robotics 1 or departmental permission*

This course expands upon Robotics 1 by further exploring engineering concepts and principles of robotic design. In this engineering laboratory, the students will expand their knowledge of gears, drivetrains, classical mechanics, and sensors to design and build sophisticated robots capable of being controlled autonomously or tele-operated in competitions with other students. This hands-on, problem-solving approach will also incorporate computer programming and CAD software. This 3D modeling software will be used to virtually build and test robotic designs. The tools of science, technology, engineering and mathematics are seamlessly integrated in this authentic learning environment. This course may be repeated for credit.

### **BASIC ELECTRICITY/ ELECTRONICS (6350)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course is a hands-on laboratory experience designed to introduce the student to basic electron theory and its practical applications. The course will

focus on A/C circuits that are found in all residential homes. Students will learn all about the different components found in a typical residential circuit and then construct actual working circuits. Students will be introduced to the National Electric Code and will construct their circuits to comply with the codes. The course will also focus on D/C circuits. Students will learn the various components found in D/C circuits such as diodes, transistors, LEDs and chips. Students will construct several D/C projects. Based on student requests, this course may be offered on alternate years.

### **COMPUTER REPAIR AND CYBERSECURITY (6628)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

The dramatic development of technology, particularly the internet, has made people and businesses extensively use an electronic format for communication and information storage. A large portion of all corporate and individual communication is now created electronically, leaving only a small amount on paper. Students will be introduced to the mechanisms and the history of software, hardware and OS security. Skills and information needed to install, upgrade, repair, configure and troubleshoot computer issues will be addressed. Students will dissect important and emerging issues including privilege sniffing, password security, disaster recovery and digital forensics. Network attack strategies and common countermeasures will be discussed. Several hands-on investigations per unit will afford students the opportunity to assess network vulnerability, identify threats, prevent and respond to attacks, and more. Students can prepare for various industry certification exams as well as IT security jobs.

## **COMPUTER REPAIR AND MAINTENANCE (6629)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

Students will build their knowledge of computer skills with an emphasis on troubleshooting and collaboration. Students will diagnose and repair different computer models. Topics include hard drive, power supply and other hardware repair and replacement; software installation; and networking. Students will learn about the parts of mobile electronics (such as laptops and tablets) and how to replace them. Real-world scenarios, including communication and professionalism, are also emphasized. Students can choose to prepare for industry-leading credentials such as the CompTIA certifications and TestOut PC Pro certification.

## **SMALL ENGINE APPLICATIONS (6450)**

**Grades 9-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course is designed to teach theory of operation, troubleshooting, repair, tuneups and rebuilding all small engines utilized in power equipment. Students will learn the application of special tools used in the overall operation and repair of engines. Students will apply this knowledge to diagnose and troubleshoot the small engines assembled in class. Based on student requests, this course may be offered on alternate years.

## **AUTOMOTIVE TECHNOLOGY 1 (6435)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: None*

This course is designed to introduce the students to basic car care procedures. Nearly all students will own an automobile at some point in their lives. The information and skills students

acquire in this course will prove to be invaluable. In this course, students will learn how to purchase a vehicle, understand insurance documents and coverages, learn how to clean and maintain their car, change engine oil, fix a flat tire, safely and properly lift a vehicle for maintenance and more. The skills that students learn in this class will benefit them throughout their life. The transferable skills learned in this course are beneficial to all students regardless of their career path.

## **AUTOMOTIVE TECHNOLOGY 2 (6436)**

**Grades 10-12**

**Half Year, .5 Credit**

*Prerequisite: Automotive Technology 1*

This is the second course offered in Automotive Technology and is broken into three categories: brake systems, suspension systems, and electric vehicles and the future of automotives. Students will learn related theories for each area along with service procedures. Students will use skills learned in class to perform hands-on brake and suspension services on a variety of vehicles in the classroom. These services include safe operation of vehicle lifting equipment and speciality tools and machines used in the career of an automotive technician.

# Technology

## Construction

DIY: Introduction to Home Repair Skills

Construction Materials/Wood 1



Construction Materials/Wood 2

## Manufacturing

PLTW Computer Integrated Manufacturing

## Electronics

Basic Electricity/ Electronics

## Automotives

Small Engine Applications

Automotive Technology 1



Automotive Technology 2

## Drawing & Design for Production

Design & Drawing for Production (DDP)



DDP/Architecture



Architecture 2

## Computers

Computer Repair and Cybersecurity

Computer Repair and Maintenance

## Engineering

PLTW Introduction to Engineering Design: DDP

PLTW Principles of Engineering

## Robotics

Robotics 1



College Robotics 2



# WORLD LANGUAGE COURSES

## ENGLISH AS A NEW LANGUAGE

Full Year, 1 Credit

ENL 9 (0951)

ENL 10 (0952)

ENL 11 (0953)

ENL 12 (0954)

**Content Support**

Full Year, No Credit

ENL (0960)

These courses are designed to help English language learners gain competency in English as it is used in daily life and an academic setting. All coursework focuses on strengthening the students' speaking, listening, writing and reading abilities. Intensive English language instruction is provided through the five instructional levels: entering (beginning), emerging (low-intermediate), transitioning (intermediate), expanding (advanced) and commanding (proficient). A student's initial level is determined by a placement test when he or she enters the program. Assessment of yearly progress and placement decisions are based on student performance on the NYSESLAT examination given in the spring. An ENL approach is used during an additional support period to assist students with vocabulary and concepts of content area subjects, such as English, social studies, science, math, etc.

## WORLD LANGUAGES

Each language course (or level) bears one credit. To graduate with a Regents Diploma, all students must pass either both seventh and eighth grade language courses and a regionally developed Checkpoint A assessment at the end of grade 8, called the FLACS A Exam; OR a Level 1 language course in high school. The only students who do not have to fulfill this graduation requirement are special education students with an IEP listing a language disability and a language exemption.

By passing a Level 3 course and a new regionally developed Checkpoint B examination, the FLACS B Exam, students become eligible for a Regents Diploma with Advanced Designation.

## REGIONALLY DEVELOPED EXAMINATIONS

Students enrolled in a Level 3 language course must take the FLACS B Exam at the end of the course. The Checkpoint B Exam is counted as the final exam for the course.

## Languages Offered

French, German, Italian and Spanish are offered from Levels 1-5. College courses are offered in Levels 3-5. The use of instructional technology is

integrated throughout the program.

## LEVEL 1 LANGUAGE

Grades 9-12

Full Year, 1 Credit

French 1 (4510)

German 1 (4580)

Italian 1 (4640)

Spanish 1 (4720)

*Prerequisite: None*

These are beginning courses to meet the needs of students who are new entrants or who did not successfully complete their language requirement by the end of grade 8. Those who wish to begin a second foreign language may enroll in these courses if there is sufficient room. All Level 1 language courses build foundation skills in speaking, listening, reading and writing in the target language and enable the student to attain New York State's Checkpoint A level of proficiency. This is a graduation requirement for all students who have no language exemption on an IEP. These courses provide a firm base so that those students who continue their study of languages can take the regionally developed FLACS B examination. Dual language students (studying two or more languages) with an A average in the Level 1 course of their second foreign language may proceed from Level 1 to Level 3 upon

recommendation of the Level 1 teacher and departmental approval. Based on student requests, this course may be offered on alternate years.

## **LEVEL 2 LANGUAGE**

**Grades 9-12**

**Full Year, 1 Credit**

**French 2 (4520)**

**German 2 (4590)**

**Italian 2 (4650)**

**Spanish 2 (4740)**

*Prerequisite: Level 1 or Grade 7/8*

Students will be expected to attain a higher degree of proficiency in communicative skills—speaking, listening, reading and writing—through the use of a variety of materials, including authentic items and the internet. They will also continue their study of the culture of the target language. These courses introduce the students to the Checkpoint B level of the New York State curriculum, which will be completed in Level 3.

## **LEVEL 3 LANGUAGE**

**Grades 10-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 4 college credits from Stony Brook University.**

**College French 3 (4546)**

**College German 3 (4606)**

**College Italian 3 (4666)**

**College Spanish 3 (4756)**

*Prerequisite: Level 2*

Students who opt for this credit must enroll online in the Stony Brook University ACE Program and pay the reduced tuition by the deadline established by that institution. Students will continue to develop their proficiency in communicative skills at the Checkpoint B level in a cultural context. Students work with a variety of materials with an emphasis on authentic materials and the internet. Along with a general review, the further

development of speaking, listening, reading and writing skills will help prepare students for the regionally developed FLACS B examination, which will be the final examination for this course.

## **LEVEL 4 LANGUAGE**

**Grades 11-12**

**Full Year, 1 Credit**

**Students may elect to take the course for 4 college credits from Stony Brook University.**

*Prerequisite: Level 3*

*All courses are taught primarily in the target language.*

Students who opt for this credit must enroll online in the Stony Brook University ACE Program and pay the reduced tuition by the deadline established by that institution.

## **COLLEGE FRENCH 4 (4556)**

This advanced course introduces the students to the history, art, literature and culture of France, as they strengthen and enhance their knowledge of the French language. Students learn of legendary French heroes, such as Charlemagne and Jeanne d'Arc, and explore the beautiful gothic cathedrals and medieval chateaux found throughout France. Reading and writing skills will be improved through the use of authentic materials, such as newspapers, magazines, selections from French literature and the internet. Throughout the year, students will complete oral and written assignments in the form of projects, which will allow them to use their language and presentation skills. Students will be required to use French to communicate in class. Appropriate field trips may be planned. Level 4 introduces students to the Checkpoint C level of proficiency.

## **COLLEGE GERMAN 4 (4616)**

In this course, students will develop a greater understanding of the history, geography, literature, art and culture of Germany through the use of the target language. Students will continue to develop their auditory and oral skills through various individual and group projects, which will give them the chance to demonstrate their proficiency in the target language. Reading and writing skills will be improved through the use of authentic materials, such as newspapers, magazines, selections from German literature and the internet. Students will be required to use German to communicate in class. Appropriate field trips may be planned. Level 4 introduces students to the Checkpoint C level of proficiency.

## **COLLEGE ITALIAN 4 (4676)**

College Italian 4 is an advanced-level course where the students will develop a greater understanding of the cultural aspects of Italy and Italian life through the use of the Italian language. Students will learn about the geography, literature, art, music and general culture of Italy. Students will continue to develop their auditory and oral skills through various individual and group projects, which will give them the chance to demonstrate their proficiency in the target language. Reading and writing skills will be improved through the use of authentic materials, such as newspapers, magazines, selections from Italian literature and the internet. Students will be required to use Italian to communicate in class. Appropriate field trips may be planned. Level 4 introduces students to the Checkpoint C level of proficiency.

## **COLLEGE SPANISH 4 (4766)**

College Spanish 4 is an advanced-level course about the culture of the

Hispanic world. This course is taught primarily in Spanish. Students will use their skills in Spanish to listen, read, write and speak in the language. Topics covered are the geography, history and culture of Hispanic countries; Spanish art and artists; and famous works of Hispanic literature. Appropriate vocabulary and grammatical topics will be reviewed as they relate to each topic. Reading and writing skills will be improved through the use of authentic materials, such as newspapers, magazines, selections from Spanish literature and the internet. Students will do oral and written assignments and projects integrating technology use throughout the year. Students will be required to use Spanish to communicate in class. Appropriate field trips may be planned. Level 4 introduces students to the Checkpoint C level of proficiency.

## **LEVEL 5 LANGUAGE**

**Grade 12**

**Full Year, 1 Credit**

**Students may elect to take the course for 3 college credits from Stony Brook University.**

*Prerequisite: Level 4*

Students who opt for this credit must enroll online in the Stony Brook University ACE program and pay the reduced tuition by the deadline established by that institution.

College courses follow the curriculum and requirements approved by the participating college or university. They enable students to complete New York State's Checkpoint C level of proficiency in the target language. College credit will only be granted if the student completes the college application, submits it with the tuition payment before the due date established by the college and attains the minimum grade set by the

institution. Enrollment is normally limited to high school seniors who have successfully completed the corresponding Level 4 course. High school juniors may enroll if they have completed the corresponding Level 4 course, received a recommendation from their Level 4 teacher and have received departmental approval.

### **COLLEGE FRENCH 5 (4566)**

This course is designed to further develop communication skills in French, while at the same time continuing to examine modern-day francophone life and culture. To work toward oral and written fluency in French, students will participate in presentation, conversation and comprehension activities and will study a variety of cultural and literary readings that will help them expand their ability to use French. Cultural themes will cover the media in France, including its cinema, press and television, as well as an examination of the French educational system. Students will also study the political and historical structures of French society today, including major cities like Paris. In addition, course objectives will be met through the use of information and communication technologies to enhance critical thinking skills. Students will be expected to collaborate and will be encouraged to problem-solve as they learn about the global aspects of modern society in France and francophone countries. This course is conducted in French.

### **COLLEGE GERMAN 5 (4626)**

This is a course designed to provide students with opportunities to further develop their listening, speaking, reading and writing skills in German. These areas will be developed through class discussion, projects, compositions,

literary and cultural readings and film. Readings will include poetry, short stories, selections from Grimm's fairy tales and excerpts from novels, dramatic works, music and modern media. Goethe will be studied in depth, as will other poets, writers and filmmakers. Cultural awareness of German-speaking countries will be stressed throughout this course. Course objectives will be met through the use of information and communication technologies to enhance critical thinking skills. Students taking this course can expect a great deal of creative freedom, as well as the opportunity to hone their composition skills and engage in class discussion of German culture. Students will be expected to collaborate and will be encouraged to problem-solve to reach a greater understanding of the global aspects of modern society in Germany and German-speaking countries. This course is conducted in German.

### **COLLEGE ITALIAN 5 (4686)**

This course is designed to further develop the four skill areas of listening, speaking, reading and writing in Italian through intensive practice, class discussions, compositions, and literary and cultural readings. Emphasis will be on the communicative skills in Italian, the cultural aspects of Italian life and Italy's role in the global community. The course will focus on topics that promote contemporary cultural awareness of Italy such as music, film, art, customs, history, literature, the economy and fashion. Grammatical points are presented within the context of cultural and historical topics. Students will be expected to collaborate and will be encouraged to problem-solve in the target language to enhance critical thinking skills. Course objectives will be met through the use of information and communication technologies. This course is conducted

in Italian.

### **COLLEGE SPANISH 5 (4776)**

This course enables students to further the development of all four skill areas in Spanish: listening, speaking, reading and writing. Emphasis is placed on the development of speaking skills and of better aural comprehension.

In addition, cultural awareness is developed through the use of authentic materials, literature, the internet and other resources. Course objectives will be met through the use of information and communication technologies to enhance critical thinking skills. Basic grammatical structures and usage are reviewed, and more sophisticated ones are introduced. Students will have many opportunities to increase their level of writing proficiency. Topics include fables, various short stories, cooking, fashion, film, television and contemporary issues. As students progress from the fall to the spring semester, the material in all skill areas moves from the simple to the more complex. Students will be expected to collaborate and will be encouraged to problem-solve in the target language. This course is conducted in Spanish.

### **ELECTIVE COURSES**

#### **AMERICAN SIGN LANGUAGE 1 (4500)**

**Grades 9-12**

**Full Year, 1 Credit**

*Prerequisite: None*

This introductory level 1 course will benefit students who want to learn another language or fulfill their language requirement for graduation. It will bring awareness of the deaf culture and the challenges the deaf community faces. In addition to learning American Sign Language, students will be encouraged to become advocates for the deaf community and utilize their

skills for varying job opportunities.

This level 1 course will follow all NYS Checkpoint A standards along with the American Council on the Teaching of Foreign Languages standards for language acquisition. Based on student requests, this course may be offered on alternate years.

#### **AMERICAN SIGN LANGUAGE 2 (4505)**

**Grades 10-12**

**Full Year, 1 Credit**

*Prerequisite: American Sign Language 1*

American Sign Language 2 provides students the opportunity to expand their knowledge of American Sign Language. Continued focus will be placed on raising awareness of the deaf culture and the challenges the deaf community faces. In addition to learning American Sign Language, students will be encouraged to become advocates for the deaf community and utilize their skills for varying job opportunities. This course builds on the foundation developed in American Sign Language 1 by studying advanced skills in expressive and receptive language, grammar and syntax, and vocabulary. This level 2 course will follow all NYS World Language Standards along with the American Council on the Teaching of Foreign Languages standards for language acquisition. Based on student requests, this course may be offered on alternate years.

#### **COLLEGE AMERICAN SIGN LANGUAGE 3 (4507)**

**Grades 11-12**

**Full Year, 1 Credit**

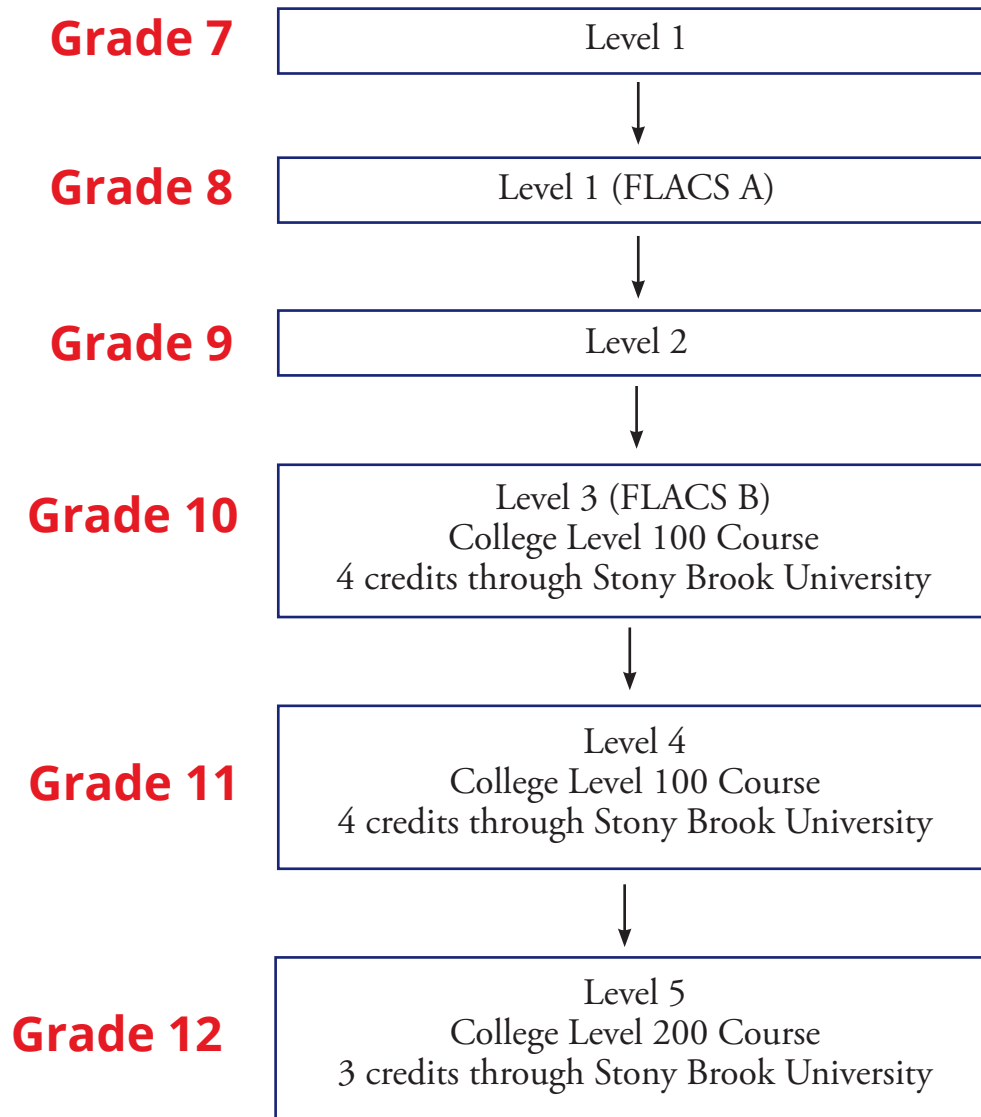
**Students may elect to take the course for 4 college credits from Stony Brook University.**

*Prerequisite: American Sign Language 2*

American Sign Language 3 provides students the opportunity to further

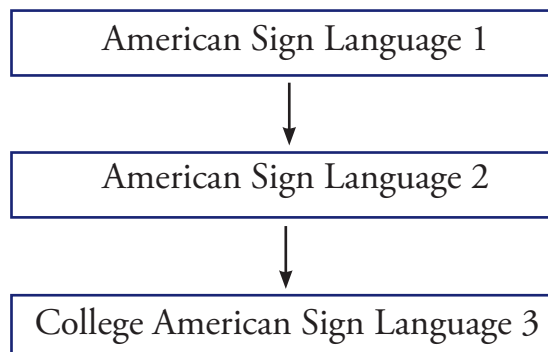
expand their knowledge of American Sign Language. Continued focus will be placed on raising awareness of the deaf culture and the challenges the deaf community faces. In addition to learning American Sign Language, students will be encouraged to become advocates for the deaf community and utilize their skills for varying job opportunities. This course builds on the foundation developed in American Sign Language 2 by studying advanced skills in expressive and receptive language, grammar and syntax, and vocabulary. This level 3 course will follow all NYS World Language Standards along with the American Council on the Teaching of Foreign Languages standards for language acquisition. Based on student requests, this course may be offered on alternate years.

# World Languages



*Note: Students starting a new or second language will begin with a Level 1 course unless beginning proficiency levels can be demonstrated.*

## Electives













# SMITHTOWN

## CENTRAL SCHOOL DISTRICT

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26 New York Avenue, Smithtown, New York 11787

<https://www.smithtown.k12.ny.us>