William Floyd High School



Course Catalog 2019-2020

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William Floyd Union Free School District

of the MASTICS – MORICHES – SHIRLEY 240 Mastic Beach Road Mastic Beach, New York 11951-1028

PRINCIPAL'S MESSAGE

Dear Student:

The **William Floyd High School Course Catalog** is being given to you to assist you and your parents or guardians in making important decisions about the courses you will take during the 2019-2020 school year.

In choosing your courses, you are encouraged to seek assistance from your parents, teachers and school counselor. Try to select courses that will satisfy all of your graduation requirements, as well as explore future possibilities for you, whether attending college or entering the world of work.

I hope you take advantage of the many fine academic opportunities afforded you here at William Floyd High School. I wish you the best in academic success for the year ahead.

Sincerely yours,

Mr. Philip Scotto *HS Principal*



FOR YOUR INFORMATION:

PLEASE NOTE:

Every attempt will be made to meet student program requests. Students must realize, however, that not all courses contained herein may be offered next year. Budgetary, enrollment, and personnel factors may prevent some courses from being offered. Requested alternate courses will be used when courses are not offered or scheduling conflicts occur.

Also, note that it is the responsibility of students and parents to fully review schedules and specific courses after consultation with the guidance counselor. The drop date for all full year and first semester half year courses will be October 20. The drop date for spring semester half year courses will be March 15. No changes will be made beyond these dates.

Please Note: The contents of this course catalog regarding personnel and course offerings are subject to budget approval.

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Counseling Center

The goal of the William Floyd School District Counseling Program is to provide support for every student in their academic growth, career/post-high school plans, and social/personal development. Counselors encourage students to take an active and responsible role in the decision-making process of their high school education. Taking responsibility, developing effective communication skills, and acquiring strong organizational and study/work habits are essential life skills, counselors emphasize these skills in working with their students.

Each year, counselors assist students in their academic and elective course selections for their following school year during a scheduling process which takes place in the mid-winter months. Parents and students are urged to review the William Floyd High School Course Catalog thoroughly in preparation for the scheduling process. Course selections are chosen with student input and are based upon teacher recommendations as well as a student's past performance, standardized test scores, a student's college and career goals, and parent requests. Parents will be asked to review and sign student course selection sheets and are encouraged to contact school counselors with questions or concerns.

The William Floyd School District Mission Statement supports the belief that students benefit from course selections which encompass the highest academic standards possible. The Counseling Department encourages students to take full advantage of all the educational opportunities available to them during their high school years. It is highly recommended that each student pursue an academically demanding schedule, with the goal of attaining admission to a post-high school institution.

DIRECTOR OF STUDENT INFORMATION AND SECONDARY EDUCATION Albert Peterson

High School Counselors

Kerry Brewer	Laura Joseph
Suzanne Crocetti	Stephanie Nardone
Danielle DeNunzio	Laura Nunziata
Amanda Ericksen	Arianna Scanlon
Dana Garner	Ashley Siebert

IMPORTANT INFORMATION

Please be advised that every attempt will be made to meet student program requests. Students must realize, however, that not all courses contained herein may be offered or available. Offering specific courses is dependent upon several factors including sufficient enrollment. Requested alternate courses will be substituted when courses are not offered or scheduling conflicts occur.

It should be noted that the diploma requirements listed on the next several pages are **minimum** graduation requirements. Students are encouraged to take the most rigorous academic program possible in order to develop their intellect and skills to the fullest.

School policy requires that full-time students take at least 5½ course credits per school year. It is strongly recommended that required courses failed during the regular school year be made up in summer school so that students can ensure graduation on time with their classmates.

A 12th grade student whose remaining required courses for graduation are included within their grade 12 schedule is considered a *graduating senior*. A 12th grade student, who has fallen behind in credits and will need to continue attending high school for longer than the current school year in order to graduate will be considered a "12 NP" student. 12NP students do not have senior privileges.

In order for a student to walk the graduation line in June, he or she must successfully meet all graduation requirements prior to graduation day.

<u>Class rank</u> is determined in the fall of senior year, based upon high school credit-bearing courses taken through Grade 11. All courses of study are included for ranking purposes, except those excluded by Board of Education Policy. Selection of the Valedictorian and Salutatorian is in accordance with Board of Education Policy.

Report cards and transcripts indicate actual grades, not weighted grades, as recommended by college admissions offices. Report card grades will not exceed 100. Grades will be weighted to show relative difficulty of different course levels solely to determine rank in class. To accurately reflect the difficulty of different course levels, courses are weighted as follows:

Advanced Placement (AP)	1.10
Honors/AP Prep	1.05
Accelerated	1.05
Regents	1.00

GRADUATION REQUIREMENTS

CREDIT REQUIREMENTS			
Regents Diploma		Advanced Regents	Diploma
English	4	English	4
Social Studies	4	Social Studies	4
Math	3	Math	3
Science	3	Science	3
LOTE	1	LOTE	3
Fine Arts	1	Fine Arts	1
Health	0.5	Health	0.5
Physical Education	2	Physical Education	2
Electives	3.5	Electives	1.5
Total Credits	22	Total Credits 22	

REGENTS EXAM REQUIREMENTS		
Regents Diploma	Advanced Regents Diploma	
English Language Arts (ELA) Regents	English Language Arts (ELA) Regents	
*Global History and Geography Regents	Global History and Geography Regents	
*U.S. History and Government Regents U.S. History and Government Regent		
One Math Regents	Algebra I Regents	
One Science Regents	Geometry Regents	
	Algebra II Regents	
	Living Environment Regents	
	Physical Science Regents	
	LOTE Checkpoint B Exam	

^{*}Students may also utilize multiple pathways to meet Regents Examination requirements.

Please see information on multiple pathways at: http://www.p12.nysed.gov/ciai/multiple-pathways/docs/multiple-pathways-qa-2015-04-08.pdf

DIPLOMA REQUIREMENTS

Entering Freshman Cohort Year	Local Diploma	Regents Diploma	Advanced Regents Diploma
2008 and thereafter	Available for Low	Score 65 or above on	Score 65 or above on 9
	Pass Eligible	5 Required Regents	Required Regents
	students only	Exams	Exams (or 8*)

^{*}May substitute 5 credit sequence of Art, Music, or Career and Technical Education after earning one credit in LOTE.

EXPECTATIONS FOR STUDENTS ENROLLED IN ACCELERATED, HONORS, ADVANCED PLACEMENT, AND COLLEGE COURSES

HONORS AND ADVANCED PLACEMENT

Students are encouraged to take more rigorous courses which will challenge them to develop their critical thinking and analytical skills. Parents and students should consider placement in Honors and Advanced Placement courses with care. A high school record that includes successful completion of Honors or Advanced Placement courses enhances a student's college application. Teacher recommendation is required and maintaining a minimum 85 average may be necessary. Payment of exam fees for Advanced Placement courses is the family's responsibility.

ADVANCED PLACEMENT COURSES

Advanced Art	Computer Science Principles	Physics
Biology	English Language & Composition	Spanish Language & Culture
Calculus (AB)	English Literature & Composition	U.S. Government & Politics
Calculus (BC)	Environmental Science	U.S. History
Chemistry	Macroeconomics	World History
Computer Science A	Music Theory	



Please visit https://apcentral.collegeboard.org/ for additional information on AP courses and exams.



COLLEGE LEVEL COURSES

Through our dual enrollment programs, William Floyd High School offers numerous courses which may enable a student to receive college credit. Students may obtain college credit and, thereby, reduce college tuition costs. A tuition fee is charged in order to obtain the college credit, and this is also the family's responsibility.

COLLEGE COURSES

St. John's University		
Calculus Honors/AP Calculus	Italian IV/V	Spanish V
	SUNY Canton	
Power Sports and Small		
Engines		
	SUNY Delhi	
CTE Carpentry		
	SUNY Farmingdale	
Architectural Problems	Business Law	Business Ownership/Mgmt
College Accounting	College Business Math	Computer applications I & II
CTE Automotive	CTE Medical Assisting	Fashion Marketing
(7 Credits Available)	(6 Credits Available)	
Principles of Engineering	Robotics	Virtual Enterprise
		(9 Credits Available)
Sut	ffolk County Community Colle	ege
Automotive Technology	Business Ownership/Mgmt	College Accounting
College Statistics	Culinary I – Sanitation	Culinary II – Culinary Arts
CTE Automotive	CTE Medical Assisting	Entertainment Marketing
(6 Credits Available)	(6 Credits Available)	
Fashion Marketing	Italian IV/V	Music Theory I
Music Theory II	Piano I	Piano II
Piano III	Precalculus	Spanish IV

TESTING INFORMATION

Students at William Floyd High School participate in various standardized testing programs. These tests provide vital information that may not be obtainable from any other source. We test students to help them gain self-understanding, make decisions/plans about their future, and to meet graduation requirements. Data about aptitudes, achievements, and interests are used to determine the progress of students, to identify areas of strength and weakness, to plan remedial programs, to modify course and teaching methods, and to plan for college admission.

The following standardized tests are required or recommended exams and are available to all students at the High School.

REGENTS EXAMS

The New York State Education Department requires that all students earn a grade of 65 or above on all five required Regents Exams for a Regents Diploma. The required Regents Exams are: Algebra I, Global History and Geography, one Science Regents, US History, and English. To earn an Advanced Regents Diploma, students must also pass the Checkpoint B Exams in Language Other Than English (LOTE), Geometry, Algebra II and an additional Science Regents. (please refer to page 8)

PSAT - PRELIMINARY SAT/NATIONAL MERIT SCHOLARSHIP QUALIFYING TEST*

The PSAT/NMSQT is a "practice SAT" test given in October in preparation for the SAT I. This test is also the first step in entering scholarship programs conducted by the National Merit Scholarship Corporation (NMSC). The PSAT is divided into five (5) sections in three (3) skill areas. There are two (2) twenty-five minute critical reading sections, two (2) twenty-five minute Math sections and one (1) thirty minute writing skills section. Students should take the PSAT in the fall of their junior year. Sophomores may take the PSAT 10. Students may use calculators on all math questions. Scores are reported on a 20-80 point scale in Math, Critical Reading and Writing sections.

SAT - REASONING TEST*

The SAT is one of two national college entrance exams that are used by most colleges as a means of assessing applicants' college readiness. The SAT is provided by College Board (www.collegeboard.org). It is recommended that students take the SAT in the spring of junior year and again in the fall of senior year.

The SAT Reasoning Test measures skills in Mathematics, Reading, Writing and Language. The SAT also has an optional essay. Students are permitted to use a calculator on some of the Math questions. Many questions on the new SAT focus on important, widely used words and phrases found in texts in many different subjects. Some questions ask you to figure out a word's meaning based on context. The words are ones that you will probably encounter in college or in the workplace long after test day.

The Evidence-Based Reading and Writing section and the SAT Essay ask you to interpret, synthesize, and use evidence found in a wide range of sources. These sources include

informational graphics, such as tables, charts, and graphs, as well as multi-paragraph passages in the areas of literature and literary nonfiction, the humanities, science, history and social studies, and on topics about work and career. Scores are reported on a 400-1600 Scale for Evidenced Based Reading and Writing and Math.

ACT*

The ACT is another national college admissions exam which may be used in place of or in addition to the SAT. It is a curriculum-based exam which tests applicant's general educational development and ability to complete college level work. Its website is www.actstudent.org. Specifically, it tests skill levels in English, Math, Reading, and Science, and there is an optional Writing test. ACT scores are reported as four separate scores: English, Reading, Math, and Science; and one composite score is included, which ranges from 1-36.

SAT II SUBJECT TESTS*

The SAT II consists of 20 individual subject tests designed to measure knowledge and skills in particular subject areas as well as the ability to apply that knowledge. They are each 1 hour, multiple choice exams. Many competitive colleges require applicants to take SAT II tests, so applicants should carefully review the admissions procedures for each college to which they are applying. Among the subject areas available for students for this exam are: Literature, U.S. History, Math (Level 1 and Level 2), Biology, Chemistry, Physics, and Languages (Spanish, Italian and French). Scores are reported on a scale of 200 – 800.

ADVANCED PLACEMENT TESTS (AP®)*

AP tests are designed for students who have completed college-level AP courses in high school. Advanced Placement examinations are given in specific subject areas to determine whether a student may gain advanced standing in college. AP Exams are administered in May of each year. Scores range from 1-5. Generally, a score of 3, 4 or 5 may qualify for college credit.

ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)

The ASVAB is an aptitude battery measuring developed abilities. It predicts what a person might accomplish with training or further education. ASVAB is designed to measure potential for occupations that require formal courses of instructional or on-the-job training. In addition, it provides measures of general learning ability that are useful for predicting performance in academic areas. ASVAB is an outstanding Vocational Inventory for all students, even for students not necessarily interested in a career in the Armed Services.

TEST OF ENGLISH AS A WORLD LANGUAGE (TOEFL)

This test is designed for students for whom English is not a native language, and whose scores on the SAT, therefore, would be affected by the language difference.

*William Floyd High School CEEB Code: 333-068

<u>Visual Arts Education</u> <u>High School Course Offerings Grades 9-12</u>



Fine Arts Sequence (5 Credits): Studio in Art, Exploration of Crafts, Music in Our Lives *or* Theory I, and 3 credits in Musical Skill *or* Visual Arts.

For Regents or Local Diploma: 3 or 5 units *Advanced Elective Visual Art Sequences* shown below.

<u>Studio in Art</u> (Foundation Course) Introduction to the nature, function and techniques of the visual arts present and past.



Studio in Drawing Studio In Painting Portfolio Preparation AP Advanced Art

OR

Studio in Drawing
Fashion Design (1/2 Credit)
Fashion Design II (1/2 Credit)
Portfolio Preparation
AP Advanced Art

OR

Studio in Drawing
Fashion Design (1/2 Credit)
Fashion Design II (1/2 Credit)
Illustration (1/2 Credit)
Art Appreciation (1/2 Credit)
Portfolio Preparation

<u>Exploration of Crafts</u> (Foundation Course) Introduction to the fundamentals of threedimensional design using various materials.



Exploration of Crafts II (1/2 Credit)
Advertising & Product Design (1/2 Credit)
Ceramics (1/2 Credit)
Sculpture (1/2 Credit)
Photography (1 Credit)
Advanced Photography (1/2 Credit)
Art Appreciation (1/2 Credit)

OR

Exploration of Crafts II (1/2 Credit)
Advertising & Product Design (1/2 Credit)
Photography (1 Credit)
Advanced Photography (1/2 Credit)
Art Appreciation (1/2 Credit)
Portfolio Preparation

^{*}It is advised any student who is planning to go to college for a Visual Arts degree to take; Portfolio Prep, AP Advanced Art (College Credit Available) & Art Appreciation.

^{**}These sequences are suggestion. Any student who fulfills their state Visual Arts credit can elect to take any art course as long as they fulfill the prerequisite.

^{***}Refer to course descriptions or see your school counselor for recommended grade level for specific courses and suggested course combinations.



Art Department

DEPARTMENT CHAIR

Theresa Bianco

**Please Note: Courses will be offered based on student enrollment.

Studio in Art – 0901 Full Year – 1 Credit Grades 9 – 12

Prerequisite: None

Studio in Art is an exploratory course designed to stimulate the student's interest in visual art and to find a particular medium or area of interest in which they can elect advanced art courses. Since this course is a prerequisite for all advanced art courses, it is strongly recommended that students enroll in this course during grade 9. Art majors will take Studio in Art to begin an Art sequence. This course may be used to meet the one unit New York State Arts requirement for graduation.

Studio in Drawing - 0902 Full Year - 1 Credit Grades 10 - 12

Prerequisite: Studio in Art or Exploration of Crafts and recommendation of previous year's instructor

Studio in Drawing is a full year elective course for Grades 10-12. It is strongly recommended that students enroll in this course in Grade 10. Students learn techniques and methods which will improve and refine their drawing skills. Drawing from life is stressed, as well as figure drawing. Emphasis is placed on accuracy of detail and realism. Proficiency and self-expression are encouraged through the following media: pencil, graphite, charcoal, pen and ink, and Conte' crayon. Students who plan to major in Art are strongly encouraged to take this course prior to taking other art electives.

*Pending SCCC Course Approval: Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through the Suffolk County Community College Beacon Program.

Studio in Painting - 0903 Full Year - 1 Credit
Grades 11 - 12

Prerequisite: Studio in Drawing, and recommendation of previous year's instructor

Studio in Painting is a full-year advanced course, with a concentration on the process and methods of painting. Students experience advanced use of color, light, composition with the main concentration on oil painting. Students are encouraged to develop their own approach and style to painting; individuality is encouraged.

Art Appreciation - 0904

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: None

Art Appreciation is open to Grades 11 and 12 for art majors and non-art majors, or History lovers. It is, however, strongly recommended that students who are planning a career in Art enroll in this course. It is the study of the influence various cultures have had on the artist and his product from ancient to modern times. Architectural, sculptural, pictorial arts, and the artist who produced them are surveyed. In addition to the study of painting and sculpture, prominent museums which house great master works are studied as well as historical monuments and sights of past cultures.

Advertising and Product Design - 0905

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: Exploration of Crafts II, or Drawing, or recommendation from previous year's art teacher.

This course develops the skills and principles necessary to function in the world of commercial art. Graphic Design is lucrative career that involves knowledge of the consumer art. Graphic Design is a lucrative career that involves knowledge of the consumer and the Adobe Creative Suite software. Students will focus on product design and marketing, and create the Yearbook Design, t-shirt logos, and a unique product of their choice.

Photography - 0921

Full Year - 1 Credit Grades 10 - 12

Prerequisite: NYS Arts requirement in Art or Music.

Photography is an introductory course open to all students who have completed the credit requirement in the Arts for graduation. Students will learn the fundamentals and technical skills of traditional black and white film photography. Areas of study include the history of photography, the science of capturing an image, and the workings of a film camera, focus and exposure. Students will create photographs, develop film, and enlarge negatives into black and white prints in a working darkroom. Students will learn about the photography of historic photographers and begin to talk critically about their work. The basics of digital photography will also be introduced in this course. Other areas of study include portraiture, natural and artificial lighting, landscapes, and the career opportunities in the field of Photography. Supplies are provided. Students must have their own 35mm film camera which permits manual adjustment of shutter speeds and apertures would be ideal.

Advanced Photography - 0909

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: Photography with a grade of 75 or higher.

Photography is ideal for the student who is considering a career in Photography or Visual/Graphic Arts. Emphasis is given to developing a critical sense of the visual language and students will further develop their own creative voice as they are encouraged to grow creatively. Areas of study include advanced dark room techniques while experimenting with texture, form, abstraction and light. The use of Digital Photography will be expanded in this course along with increased digital photo editing instruction. The work of well-known Photographers will be explored. Supplies are provided. Students who wish to go beyond the course requirements may need to purchase additional materials. Students must have their own SLR camera, 35mm film camera (a camera which permits manual adjustment of shutter speeds and apertures being ideal), and/or a Digital Camera. (Phone cameras cannot be accepted) for the course.

Portfolio Preparation Honors - 0910

Full Year - 1 Credit

Grades 11 - 12 or Permission of Coordinator

Prerequisite: Recommendation from their Studio in Drawing or previous year instructor.

This course is designed specifically for the students interested in going to college for visual arts or creative field. They should enter the class with a wide variety of art experiences. Students will be introduced to careers in the visual and technical areas. They will be encouraged to develop self-discipline and time management skills. Emphasis will be placed on mark making and developing skills in various types of mediums. Selected works will be properly prepared for portfolio preparation for application to variety of visual art schools. This course will prepare students for the AP Advanced Art exam.

Studio in Ceramics - 0911

Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: Studio in Art or Exploration of Crafts and recommendation of previous year's instructor.

Studio in Ceramics is a one-semester course open to Grades 10-12. The scope of this course is that of total involvement in ceramics. Students are taught various methods of hand-building pottery as well as skills in wheel throwing. Contemporary forms in stoneware are designed and produced in class. Most decorative coloring (glazes) for the student projects are manufactured in class. The student, through experience, develops an appreciation for the potter as an artist.

Studio in Sculpture - 0912

Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: Studio in Art or Exploration of Crafts and recommendation of previous year's instructor.

This course will explore the elements and principles involved in the creation of art that is three dimensional. Sketching will be required, and works of art will be discussed. The course will focus on the design and creation of form in a variety of media. Students will work in plaster, stone, or clay.

AP® ADVANCED ART - 0913

Full Year - 1 Credit

Grades 12 or Permission of Coordinator

Prerequisite: Studio in Painting OR at least 2 advanced art courses with teacher recommendation.

This is a college level course with the focus on developing advanced skills and techniques. Students will investigate ideas and develop a unique body of work including various mediums and art styles. The course will focus on the three sections of the AP Advanced Art exam which includes; 18 pieces of artwork including; Quality, Breadth (demonstration of a wide range of experience) and Concentration (an in-depth, individual project.) Besides completion of the exam students will develop a senior show and project that will be donated to the school district. The AP exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

Illustration - 0914

Half Year - 1/2 Credit

Grades 11 - 12

Prerequisite: Studio in Drawing or permission of the instructor.

Students will explore illustration as a means of communication. Drawing and design skills will be extended through the use of materials and techniques using illustrative components. Student focus will be on historical relationships between composition, design, color, and conceptualization.

Fashion Design - 0915

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: Studio in Drawing or recommendation of previous year's instructor.

Through a series of theoretical and practical lessons, students will explore fashion design. Emphasizing innovation, creativity and technical skill; each student will study the historical development of fashion and use various materials to design and create fashion.

Fashion Design II - 0920

Half Year - 1/2 Credit

Grades 11 - 12

Prerequisite: Fashion Design or recommendation of previous year's instructor.

Fashion Design. Students will build upon their prior experiences in Fashion Design by researching current fashion styles and trends, design clothing and accessories, up-cycling clothing, utilize technology in fashion design, and explore career options in the industries. Simple sewing projects will be introduced, t-shirt design and accessories/garment construction will be produced by students. Part of the course requirements will be two work with students from Fashion Marketing to complete a culminating design/business plan for an original design.

Exploration of Crafts - 0918

Full Year - 1 Credit

Grades 9 - 12

Prerequisite: None (Priority will be given to students who need to fulfill their fine arts credit.)

"Exploration of Crafts" is a course designed to introduce students to materials and techniques used in traditional and contemporary crafts. This course focuses on developing an understanding of the cultural significance of 'functional art.' Students will gain an appreciation for the cultural roots of hand-crafted objects and learn about career opportunities and marketing outlets. "Exploration of Crafts" will incorporate various skill building with tools and techniques to demonstrate "craftsmanship." Students will have the opportunity to create pieces such as handmade paper, weaving, mosaics, ceramics, paper-crafts, batik, print-making, woodworking and jewelry. This full year extensive course fulfills the New York State requirement in the Visual Arts.

Exploration of Crafts II - 0919

Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: Exploration of Crafts or recommendation from previous year's art teacher.

This course is designed to continue to introduce students to materials and techniques used in traditional and contemporary crafts. Students will utilize the skills learned in "Exploration of Crafts" and apply it to more advanced craft making such as silversmithing, leatherwork and garment making. They will also be introduced to the marketing components and current trends in product production. Students will be encouraged to take "Advertising and Product Design."



Business Education



The School of Business will enable you to prepare for college, help gain entry-level employment, and fulfill business-related personal responsibilities. Courses are designed to provide a variety of options for students to meet elective requirements, while developing job and college-related skills.

You may elect a 5-unit sequence in Business Education as an alternative to the 3 credit LOTE requirement for an Advanced Regents Diploma. The 5-unit sequence is designed to provide students with skills necessary for entry-level employment.

Math Applications for Business, College Business Math, Accounting, and College Accounting each can be used to satisfy the third required unit of Math.

Refer to the following course descriptions and see your school counselor to select courses which will best suit your individual needs and career goals.

BUSINESS EDUCATION 5-UNIT SEQUENCE

Required Courses:

College & Career Prep Personal Finance



four (4) units from the following:

0 (Advanced Computer Applications (1/2 credit) **	<u> </u>	College Accounting (1 credit) **
College Business Law (1 credit) **			Entertainment Marketing (1 credit) **
Everyday Law (1/2 credit)	S S	11	#Social Media (1/2 credit)
1 0 (Virtual Enterprise (1 credit) **	Wall Street (1/2 credit)
Web Design (1/2 credit)	1		

Work Based Learning:

- Cooperative work Experience (1/2 or 1 credit)
- General Education Work Experience (1/2 or 1 credit)
- Career Exploration Internship Program (1/2 or 1 credit)

*Refer to course descriptions or see your school counselor for recommended grade level for specific courses and suggested course combinations.

** College Credit Available

Business Academy Pathways

(Personal Finance is Recommended for All Business Pathways)

Recommended Courses for Career Fields of Interest

Accounting	 Accounting College Accounting College Business Math Virtual Enterprise Wall Street
Marketing	 Sports, Entertainment or Fashion Marketing Business of Music, Sports, Entertainment, Fashion Marketing or College Business Math Virtual Enterprise #Social Media
Entrepreneurship/Management	 Business Ownership and Management – College Business Math Business Law Virtual Enterprise # Social Media Everyday Law
Technological Literacy	 Computer Applications & Advanced Computer Applications Web Design Video Game Design Virtual Enterprise

CTE DIPLOMA DESIGNATION

The *William Floyd High School Business Academy* gives students the opportunity to obtain CTE Endorsements in Accounting, Small Business Management and Microsoft Office Specialist. The purpose of this endorsement is to prepare students for entry level employment, developing the necessary workplace skills to be a successful employee. It also gives students a strong foundation to continue their post-secondary education. Students can earn the distinction of CTE Endorsement by following one of the pathways listed below:

Accounting:

Required Courses: Personal Finance, College Accounting, and 2 additional Business credits.

Recommended Courses: College Business Math and Virtual Enterprise

Small Business Management:

<u>Required Courses</u>: Personal Finance, Business Ownership & Management, Virtual Enterprise and 1

additional Business credit.

Recommended Courses: College Business Math or College Business Law

Microsoft Office Specialist:

<u>Required Courses</u>: Personal Finance, Computer Applications, Advanced Computer Applications, Virtual Enterprise, and Web Design

Must pass industry assessment in order to receive this endorsement on diploma, participate in work-based learning activities and complete a Career Plan and Employability Profile which is done throughout their required coursework.



Business Department

DEPARTMENT CHAIR

Lee Cillo

**Please Note: Courses will be offered based on student enrollment.

Build a Biz - 0605 Full Year - 1 Credit Grade 9

Prerequisite: None

Like the show 'Shark Tank' and the idea of running a business one day? Do you think you have what it takes to make it? Or do you just like to make a lot of money? This introductory business course will familiarize you with the basics of the dog-eat-dog world of business. This is your chance to gain an edge in life, set up your future, and get a glimpse at topics like: Product Development, Social Media, Marketing, Law, and Financing a Business. It's never too early to start making money and planning ahead!

**New Course pending budget approval and student enrollment

Personal Finance - 0601 Half Year - 1/2 Credit **Grades 9 - 12**

(May also run alternate days for a Full Year) - 0602

Prerequisite: None

This course is a **must have** for all students! Imagine someone gave you \$500...would you throw it away? Millions of people throw away their money by not managing their money properly. Learn how to spend wisely and make your money grow. You will learn how to manage your bank accounts, maintain good credit and even how to make your money work for you. Did you know prices are set a specific way to make you spend more money? Come learn all about this and more while you become financially savvy and secure.

College & Career Prep - 0614 Half Year - 1/2 Credit (May also run alternate days for a Full Year) - 0615 **Grades 9 - 12**

Prerequisite: None

What do you want to be when you grow up? It's never too early (or too late!) to explore your future! This class allows you to explore career options that match your interests, skills and personality. You will research colleges, majors and scholarship opportunities to prepare you for post-secondary education. Online tools will be used to research career paths and what it takes to pursue your chosen path. You will learn how to properly complete job applications, create resumes, cover letters, and develop skills to ace an interview to get the job you want! This is definitely a class to complete before graduation!

**PLEASE NOTE: Students seeking a 5-unit sequence in Business MUST take BOTH College & Career Prep (1/2) and Personal Finance (1/2).

Accounting - 0603

Full Year - 1 Credit Grades 10 - 12

Prerequisite: None

Accounting is not just for those who want to be accountants! Have you ever thought about starting your own business? If so, you need to know how to manage and record your finances. Have you ever thought about investing in a corporation (stocks and bonds)? If so, you need to know how a business reports its financial information as well as how to analyze this information! (College Accounting is also available for college credit for juniors and seniors). In addition, computer software used in the accounting field will be introduced (QuickBooks and Excel). **This course may be used as a third Math credit.**

College Accounting - 0613

Full Year - 1 Credit Grades 11 - 12

Prerequisite: None

This course provides college-level introduction to accounting, fulfilling the needs of those planning to major in any business field at the college level. In addition, computer software use in the accounting field will be introduced (QuickBooks and Excel). **This course may be used as a third Math credit.**

Students (Grades 11-12 only) will have the option of taking Accounting for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Business of Music - 0632

Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: None

Interested in the business side of the music industry? When you think 'Music,' don't just think pop star--there are other careers to consider within the music industry. Want to know about these careers available in the industry? How does the music industry target various market segments and music genres? This course will explore the past, present, and future of the music industry as well as issues such as illegal downloading, censorship, copyrights, touring, and publishing. Case studies, analysis of current events, and research-based projects will be integrated throughout the course.

Business Ownership & Management - 0610

Full Year - 1 Credit

Grades 10 - 12

Prerequisite: None

Start your own business! Create a small business of your choice all the way from your business card to Grand Opening Day. This course is designed to provide students with a background in starting and managing a small business. Listen to local business owners share their success stories in class. Students will be taught the latest skills in etiquette and how to apply them in various business situations.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

College Business Law - 0608

Full Year - 1 Credit

Grades 11 - 12

Prerequisite: None

Do you like winning arguments? Do you know your rights as a minor? Can you tell a real contract from a scam? In this course, we take law and emphasize how it isn't just important for lawyers...it's important for everyone!

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

College Business Math - 0639

Full Year - 1 Credit Grades 11 - 12

Prerequisite: None

The fundamentals of applied mathematics in the field of accounting finance, marketing, and selling. Topics include banking, insurance, investments, time, value of money, credit, and U.S. vs. foreign currency. The use of arithmetic as a managerial tool and Microsoft Excel is stressed.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Computer Applications - 0611

Half Year - 1/2 Credit Grades 10 - 12

Prerequisite: None

This is an ideal course for the college-bound student! College requires certain computer skills. This course will introduce you to how word processing, database, spreadsheet, and presentation skills are used as tools for success at the college level and, subsequently, at work. Students will learn how to add some 'pizzazz' to their documents and presentations. This is a great course to compliment Computer Know-How for College & Careers, College & Career Prep and prepares you for Advanced Computer Applications.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Advanced Computer Applications - 0612

Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: Computer Applications

This course will prepare you for MOS Certification! A Microsoft Office Specialist (MOS) is an individual who has certified his/her skills in one or more of the Microsoft Office/Desktop Applications. This certification could be a valuable asset in any job search or career advancement. Upon completion of this course, students should qualify to take the MOS exam in Word, Excel, PowerPoint, or Access.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Entertainment Marketing - 0620

Full Year - 1 Credit Grades 10 - 12

Prerequisite: None

No matter what you find entertaining, marketing is a vital part of the industry! See how marketing influences people and how society is persuaded to spend their money! In this project-based class, you will create a new product, make advertisements, and design a new tourist attraction while applying marketing strategies learned in class. Students will also learn how marketers use colors and music to influence your spending. Come see how marketers get you interested in their products.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through the Suffolk County Community College Beacon Program.

Everyday Law - 0637

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: None

Have you ever thought your rights were being violated by your boss? Not sure if you are being scammed by cybercriminals? Have you ever read a warranty and realized it protects the company you bought the product from more than it protects you? If so, this is the class for you! Everyday Law provides an overview of common legal issues/questions. Students will learn about the legal implications in everyday transactions such as buying products, using warranties, getting a job, cyber law and e-commerce, and end of life issues like wills and trusts. In addition, we will spend time on ethical issues, and on developing some critical thinking skills along with conducting research on actual court cases that impact our everyday lives.

Fashion Marketing - 0629

Full Year - 1 Credit Grades 10 - 12

Prerequisite: None

If you're interested in clothing and fashion trends, then this is the course for you! You will learn principles of marketing and be able to apply them to the fashion/apparel and accessories industry. Analyze the marketing strategies of Ralph Lauren, Michael Kors, and Versace. Become well-versed in designer accessory terminology and explore various retail store layouts. Explore the psychology of promoting and selling in the fashion industry. Students will research fashion change through the decades and create and design their own retail stores, window displays, shopping bags, and so much more.

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Math Applications - 0609

Full Year - 1 Credit Grades 11 - 12

Prerequisite: None

This course will provide a foundational understanding for making informed personal financial decisions. Learn how to prepare a budget, determine auto loan interest, complete income tax forms, and evaluate stock and mutual funds. You will also learn how businesses use math to calculate store discounts, sales commissions, interest, taxes and depreciation. Computer simulations such as Virtual Finance and Microsoft Excel bring financial planning and business calculations to life. Emphasis is placed upon learning mathematical concepts through practical application to common business problems and personal finance. **This course may be used toward a third unit for Math.**

#Social Media - 0638

Half Year - 1/2 Credit Grades 11 - 12

Prerequisite: None

Social media has become a major trend today! Social media is a vital component of the success of many marketing campaigns. With content fueling your social marketing, we have arrived at the age of truly integrated marketing strategy, and it's being led by a new breed of marketers. It has changed the way we communicate and conduct business. It could be a useful tool or can destroy your chances for employment. Facebook, blogging, texting, tweeting on social media is real writing-learn how to use this powerful tool to your advantage. We will also explore how business use this as an advertising tool and the impact it has on consumer decision making.

Sports Marketing - 0622

Full Year - 1 Credit Grades 10 - 12

Prerequisite: None

Want to create your own sports team and compete against other teams in an on-line fantasy sports league? Students will learn the principles of marketing and apply them to sports projects. See how sports teams get your attention and how they target customers and develop marketing strategies. Students will create and market their own sports-related products. Students will have the opportunity to become the next George Steinbrenner or Jerry Jones by creating their own franchise—from designing the team's uniform to building a stadium.

Video	Game	Design	- 0616
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Half Year - 1/2 Credit Grades 10 - 12

Prerequisite: None

Want to gain experience in the growing video game industry? This course provides an introduction to computer programming for students with no previous programming experience. You will have the opportunity to research potential career opportunities in the gaming field as well as learn how to design, develop and market video games. Using the program Alice, as a tool that enables computer novices to create computer animations using a drag-and-drop interface, you will skip the initial frustrations normally associated with learning how to program computers. Topics include simple data types, control structures; an introduction to array and string data structures and algorithms; recursion; and event driven-programming.

Virtual Enterprise - 0628

Full Year - 1 Credit Grades 11 - 12

Prerequisite: MUST have taken at LEAST one of the following courses - Accounting, College Accounting, Business Ownership, Web Design, or any Marketing class.

Are you ready to manage an on-line business and compete with over 7500 "virtual businesses" around the world? Virtual Enterprises (VE) is a simulated business that is created and run by students. This program allows students to experience all facets of being an employee in an actual business environment. Students are involved in every aspect of running a business, including human resources, accounting, marketing and sales. In Virtual Enterprise you will conduct business with other virtual businesses, attend a trade show in New York City, and enter competitions!

Students (Grades 11-12 only) will have the option of taking this course for 3 college credits through Farmingdale State University.

Wall Street - 0636

Half Year - 1/2 Credit

Grades 11 - 12

Prerequisite: None

Imagine yourself being able to achieve all your dreams! This course will give you the opportunity to explore investment opportunities. Students will develop an introductory knowledge of the stock market (the ABC's of investing). We will also discuss stocks, mutual funds and 401(k) plans as retirement options. 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, and classroom activities.

Web Design - 0624

Half Year - 1/2 Credit Grades 10 - 12

Prerequisite: None

How would you like to communicate with the world? Whether you are a business with services to sell or an individual with a story to share, you can publish any kind of information on the World Wide Web. This course will teach you how to create simple web pages from scratch using Dreamweaver CC. You will also learn how to design creative web pages using Photoshop CC.

WORK- BASED LEARNING PROGRAM

Work Experience Coordinator



Allison Wiegand

<u>EARN COURSE CREDIT FOR HAVING A JOB ON-THE-BOOKS OR FOR VOLUNTEERING IN</u> SCHOOL OR THE COMMUNITY!

Interested students should see their counselors for details and an application.

All applications will be screened by the work-based learning coordinator to determine eligibility for the program. It is imperative that you turn in your completed application to the Work-Based Learning Coordinator or you will be dropped from the program and lose your chance for this credit. This is an INDEPENDENT study program and does not take up a class period! A personal coordinator will provide you with career-related instruction and counseling to help create occupational goals, encourage progress, answer questions, and solve job-related problems. Become a 21st century employee!

Career Exploration Internship Program (CEIP)	CEIP 0634 - 1 CREDIT CEIP 0635 - 1/2 CREDIT

- 108 hours of volunteer work in the building or the community qualifies for 1 credit.
- 54 hours of volunteer work in the building or the community qualifies for 1/2 credit.

Apply now and receive credit for volunteering!

General Education Work Experience (GEWE)	GEWE 0631 - 1 CREDIT (For any student	
	who is NOT working toward a 5-unit	
	sequence)	
	GEWE 0655 - 1/2 CREDIT	

- 300 hours of on-the-books, paid work qualifies for 1 credit.
- 150 hours of on-the-books, paid work qualifies for 1/2 credit.

Apply now and receive credit for working!

** PLEASE NOTE: A student can receive only 1 credit for CEIP AND 1 credit for GEWE or COOP throughout the whole high school experience for a total of two credits in the Work-Based Learning Program. A Student may be simultaneously enrolled in CEIP and GEWE or COOP for a full credit for each in the same school year as long as it is 2 different jobs. (If it is only 1 job, they may receive 1/2 credit in a given school year for CEIP one semester and 1/2 credit for GEWE the next semester.)

Cooperative Work Experience (COOP)	COOP 0625 - 1 Credit	
	(For any student who is working toward a 5-	
	unit CTE Sequence)	

- 300 hours of on-the-books, paid work qualifies the student for 1 credit.
- 150 hours of on-the-books, paid work qualifies the student for 1/2 credit.

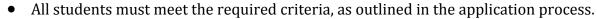


Career & Technical Education (CTE)

DEPARTMENT CHAIR

Lee Cillo

**<u>Please Note the Following</u>:



- **Personal Finance** is a **REQUIRED COURSE FOR ALL CTE ENDORSEMENTS**. (See Business Department for information on this course)
- Courses will be offered based on student enrollment.

*For CTE ENDORSEMENTS in **Business** please refer to page 19

** For CTE ENDORSEMENTS in **Technology** please refer to page 63

Automotive Technology - 3506 (Year 1); 3506A (Year 2)

Two Years - 5 Credits
Grades 11 - 12

ADDITIONAL <u>SUGGESTED</u> COURSEWORK: Business Ownership & Management (See Business Department courses for information)

Automotive Technology is a 2-year program that provides students opportunities to learn advanced automotive theory and apply it to practical skills pertaining to the automobile repair industry. Classroom and automotive lab situations will be used to teach the NATEF/ASE- (National Automotive Technicians Education Foundation/Automotive Service Excellence) based curriculum. Topics covered include: shop safety, hand tool usage and fasteners, basic electrical, brakes, steering and suspension, manual transmission and driveline, engine performance, engine repair, HVAC, automatic transmission, Automotive Industry History, and Automotive Shop Management. Many other shop-management and $21^{\rm st}$ century skills will be covered. Students will have the opportunity to learn in a state-of-the-art automotive facility. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking this course for college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Barbering - 3509 (Year 1); 3509A (Year 2)

Two Years - 4 Credits
Grades 10 - 12

ADDITIONAL <u>SUGGESTED</u> COURSEWORK: Business Ownership & Management (See Business Department courses for information)

Barbers are in high demand! Do you have what it takes to become a Master Barber? Take a realistic look inside the industry, from the traditional barbershop to the expanding, modern barbering industry. Cutting and styling techniques, facial grooming, shaving techniques, shampoos, rinses, and conditioning treatments are just a few of the skills you will learn from our Master Barbering instructor. In addition, you will learn the business and communication skills you will need to operate your own business. Successful completion of the program will prepare you to take the New York State Licensing exam. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking the BOM course for college credit through the Suffolk County Community College Beacon Program.

Home Design & Carpentry - 3502 (Year 1); 3502A (Year 2)

Two Years - 5 Credits Grades 11 - 12

ADDITIONAL <u>SUGGESTED</u> COURSEWORK: Business Ownership & Management (See Business Department courses for information)

The William Floyd Home Design & Carpentry Academy offers a two-year program that combines hands-on skill development and technical training providing students with a basic understanding of the competencies needed to perform as an entry level carpenter, carpenter's apprentice, or carpenter's helper. During Year 1, students will learn the fundamentals of construction and carpentry. In Year 2, students will continue to learn about building construction occupations as well as basic plumbing, electrical, and HVAC. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking the course for college credit through the State University of Delhi

Cosmetology - 3501 (Year 1); 3501A (Year 2)

Two Years - 6 Credits

Grades 11 - 12

ADDITIONAL <u>SUGGESTED</u> COURSEWORK: Business Ownership & Management (See Business Department courses for information)

HIGHLY RECOMMENDED COURSEWORK: General Chemistry

The William Floyd Cosmetology Academy offers a two-year Cosmetology licensing course. The 1,000 hour New York State licensing course includes instruction and practical experience in hairstyling, hair coloring, haircutting, skin care, nail technology, make-up, braiding, chemical texturizing and hair extensions. The program also includes visits by guest speakers, industry shows and other events. Our state-of-the-art cosmetology classroom utilizes the same equipment and materials found in a professional salon. Successful completion of our program qualifies students to apply for the New York State Cosmetology written and practical exams. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking the BOM course for college credit through the Suffolk County Community College Beacon Program.

Hospitality Services - 3503 (Year 1); 3503A (Year 2)

Two Years - 5 Credits

Grades 11 - 12

ADDITIONAL <u>REQUIRED</u> COURSEWORK: Business Ownership & Management (See Business Department courses for information)

The William Floyd Hospitality Services Academy offers a two-year course in Culinary Arts. The course of study includes classroom instruction and practical experience in the skills and theory needed to be employed in a variety of food service professions. Students will learn in our fully- equipped kitchen, which is equivalent to those found in restaurants around the word. Must pass industry assessment in order to receive this endorsement on diploma.

Successful completion of our program provides students with an opportunity to earn up to 7 advanced college credits through Suffolk County Community College's Beacon Program. Those credits may be applied to the following SCCC programs of study: Culinary, Baking or Hotel Management.

Students will have the option of taking the BOM course for college credit through the Suffolk County Community College Beacon Program.

Medical Assisting - 3507 (Year 1); 3507A (Year 2)

Two Years - 6 Credits Grades 11 - 12

Distinguished Pathway (Allied Health Careers/Nursing/Medicine)

ADDITIONAL <u>REQUIRED</u> COURSEWORK: Regents or Honors Chemistry (Preferably in Grade 10 or 11) <u>AND</u> at least one of the following: Anatomy & Physiology, AP Physics, AP Biology

Additional Suggested Coursework: Intro to Medicine and Calculus

General Pathway (Medical Assistant/Front Office)

ADDITIONAL REQUIRED COURSEWORK: General Chemistry (Preferably in Grade 10 or 11)

HIGHLY SUGGESTED Coursework: Regents Chemistry and/or Anatomy & Physiology

Additional Suggested Coursework: Computer Applications and Advanced Computer Applications

The Medical Assisting/Introduction to Health Professions Academy introduces students to a wide range of topics, including health care systems, health careers, anatomy and physiology, nutrition and diet therapy, infection control, vital signs, first aid and emergency care, CPR, EKG, pediatric and adult care, assisting with minor office surgery, laboratory skills and insurance, billing and administrative procedures. Students receive training on-site in our fully equipped classroom laboratory. Students completing the program will be eligible to take the national certification exam, the successful completion of which qualifies students to utilize their skills in any US state. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking courses for college credits through Farmingdale State University and the Suffolk County Community College Beacon Program.

Power Sports and Small Engines - 3508

Full Year - 2 Credits Grades 10 - 11

Prerequisite: Drawing & Design or Geometry in Constructions

ADDITIONAL <u>REQUIRED</u> COURSEWORK: Personal Finance, College & Career Prep, Drawing & Design OR Geometry in Construction, and 1 additional technology credit (Principles of Engineering or Electronics)

Students learn to maintain, diagnose and repair two and four stroke vehicles and power sports equipment. Through hands-on instruction, students learn about two and four stroke theory, engines, ignition and fuel systems, as well as safety, equipment and tools. Must pass industry assessment in order to receive this endorsement on diploma.

Students will have the option of taking the course for college credit through SUNY Canton

Basic Car Care: My First Car - 0834 Half Year - 1/2 Credit

Grades 10 - 12

Prerequisite: None

This basic car maintenance course is a personal interest course open to all sophomores, juniors, and seniors. Students would receive basic instruction in the following areas: safety and standards procedures, automotive electrical systems, cooling and fuel systems, basic maintenance and lubrication, standard use of automotive tools and equipment. Students will receive hands-on experience, i.e. checking oil, changing tires, and conducting other simple tasks that keep cars functioning.

Basic Small Engine Repair - 0835 Half Year - 1/2 Credit Grades 10 - 12

Prerequisite: None

This basic small engine repair course is a personal interest course open to all sophomores, juniors, and seniors. Students would receive basic instruction in the following areas: safety and standards procedures, principles of engine operation, engine components, and troubleshooting. Students will receive hands-on experience with various types of small engines.



English Department

DEPARTMENT CHAIR

Viveca Nargi

ENGLISH SEQUENCES

Four years of English is the Requirement for Graduation

Level	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Regents	English 9	English 10	English 11	Electives (1 Credit)
Honors	English 9 Honors	English 10 Honors	AP® English Language & Composition	AP® English Literature & Composition

^{**}All students are encouraged to participate in the District/Community Library Summer Reading Program

English 9 - 0101	Full Year - 1 Credit
	Grade 9

Prerequisite: None

This course provides basic instruction in composition, literature, and vocabulary building through a standards rich curriculum. Major units of study in literature include Romeo & Juliet, poetry and modern short stories. Students are expected to build a background in literature while perfecting the skills of reading, writing, listening and speaking. This course that will prepare students for the New York State English Regents to be taken at the end of Grade 11.

English 9 Honors - 0102	Full Year - 1 Credit
	Grade 9

Prerequisite: Meet the rigorous criteria set by the district

This course provides intensive instruction in composition, literature, and vocabulary building through a standards rich curriculum. Major units of study include, but are not limited to, the study of Romeo & Juliet, poetry and modern short stories. Students will build a background in literature while perfecting the skills of reading, writing, listening and speaking. This course will prepare students for the New York State English regents Exam to be taken at the end of Grade 11.

Students will be required to complete a summer project, which will be incorporated into the first quarter's grade.

English 10 - 0103

Full Year - 1 Credit Grade 10

Prerequisite: English 9

This course is designed to further expand the standards-based skills developed in Grade 9. Composition and literary analysis skills will be emphasized. In literature, Macbeth, world literature and short stories are studied. Students will also read and analyze original documents of an interdisciplinary nature. The course will prepare students for the New York State English Regents to be taken at the end of Grade 11.

English 10 Honors - 0104

Full Year - 1 Credit Grade 10

Prerequisite: Pass English 9 Honors with at least an 85. Students must receive a teacher recommendation.

This course is designed to build the skills necessary for success in AP Language and Composition (junior year) and the AP Literature (senior year) programs. To prepare students for these college-level courses, this rigorous course emphasizes the reasoning and analytical skills needed in both. Throughout this course, students will be engaged in literary analysis and writing about literature (AP Lit. prep) and in nonfiction and argument analysis and writing in nonfiction and argument (AP Lang. prep). This course will prepare students for the New York State English Regents to be taken at the end of Grade 11.

Students will be required to complete a summer project, which will be incorporated into the first quarter's grade.

English 11 - 0105

Full Year - 1 Credit

Grade 11

Prerequisite: English 10

This course offers students the opportunity to comprehend, analyze, evaluate, and communicate complex information in preparation for the Regents in English Language Arts. A student must pass the NYS Regents exam to satisfy the state requirements for a high school diploma. Emphasis in composition includes the literary analysis essay, persuasive essay, and the critical and evaluative essays. Emphasis in literature is on nonfiction texts, poetry, Shakespearean drama, and American novels and plays.

AP® English Language & Composition - 0117

Full Year - 1 Credit Grade 11

Prerequisite: Pass English 10 Honors with at least an 85. Students must receive a teacher recommendation and a passing grade on entrance exam.

This is a rigorous forty-week course designed to offer juniors the opportunity for advanced study in language and the art of writing. It is a college-level course for those who might benefit from the Advanced Placement Examination in English offered by the College Entrance Examination Board. The focus of the course will be on the style, structure, and content of major selections of literature, as well as the work of language theorists. Students will explore all aspects of writing, through the various possibilities of sentence construction, to the structuring of the paragraph and essay. Throughout the course, students will be encouraged to develop an individual style that is adaptable to different occasions, purposes, and audiences. Because the underlying philosophy is that writers must be readers as well, reading selections will be varied and drawn from all categories. All students are expected to take the Advanced Placement examination offered in May, as well as the New York State English Regents exam. The AP Exam cost is \$96. The Free/Reduce Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

Students will be required to complete a summer project, which will be incorporated into the first quarter's grade.

*Please Note: All 12th Grade English Electives will be offered based on student enrollment.

Career Minded Writing - 0122a	Half Year - 1/2 Credit
	Grade 12 Elective

Prerequisite: English 11

This is the first semester of a two-semester course which focuses on the importance of developing essential 21st century communication skills. This course emphasizes reading, writing and presentation in a variety of real-world business, professional and technical contexts. Required readings will include business and trade magazines, technical journals, and contemporary nonfiction texts.

*Please Note: This course should be taken in place of Business English and was previous called Technical Writing.

Career Minded Writing - 0122b Half Year - 1/2 Credit
Grade 12 Elective

Prerequisite: 0122a

This is the second semester of a two-semester course which focuses on the importance of developing essential 21st century communication skills. This course emphasizes reading, writing and presentation in a variety of real-world business, professional and technical contexts. Required readings will include business and trade magazines, technical journals, and contemporary nonfiction texts.

*Please Note: This course should be taken in place of Business English and was previous called Technical Writing.

Children's Literature Through the Ages - 0113	Half Year - 1/2 Credit
	Grade 12 Spring Elective

Prerequisite: English 12 Fall Elective

This course explores the development of literature written especially for young children and adolescents as it has progressed from the oral traditions of the early middle ages to the contemporary children's book. The course includes the study of folklore, fantasy, realistic and historical fiction, poetry and picture books. Texts are explored and synthesized through multiple perspectives.

Contemporary Literature and Composition - 0109a Half Year - 1/2 Credit			Grade 12 Elective
	C	ontemporary Literature and Composition - 0109a	•

Prerequisite: English 11

This is the first semester of a two-semester course designed to introduce students to a variety of literary genres as well as the skills needed for successful public speaking. The course includes a focus on building the literacy and research skills necessary to compose a well-reasoned and properly cited research paper. The course also focuses on building the literacy skills necessary for college level analysis of modern poetry and short fiction. Woven into each unit is continued training in effective prose writing that requires students to demonstrate maturity in thought and style.

Contemporary Literature and Composition - 0109b

Half Year - 1/2 Credit Grade 12 Elective

Prerequisite: Contemporary Literature and Composition 0109a

This is the second semester of Contemporary Literature and Composition, which continues to introduce students to a variety of literary genres as well as the skills needed for successful public speaking. The course includes a focus on building the literacy, research and presentation skills necessary to hold a well-reasoned debate. The course also focuses on building the literacy skills necessary for college level analysis of modern novels. Woven into each unit of study is continued training in effective prose writing that requires students to demonstrate maturity in thought and style.

Creative Writing - 0114

Half Year - 1/2 Credit Grade 12 Fall Elective

Prerequisite: English 11

This course will use the traditional writing workshop format to foster student skills in writing short fiction, poetry, and creative nonfiction. There will be an emphasis on class discussions of student work, as well as critical reading and study of classical and contemporary writers. This course will use peer evaluations to foster student skills in writing. In addition, the course will strive to integrate guest speakers and lectures from the surrounding academic and art communities.

English 12A - 0123a

Half Year - 1/2 Credit Grade 12 Elective

Prerequisite: English 11

This is the first semester of a two-semester course designed to support the development of strategic reading and writing skills. This course uses a contemporary approach, including exploration of high-interest topics and analysis of real world texts, to motivate students and expose them to effective instructional principles. Coursework encompasses a set of literacy expectations that will enable students to comprehend, analyze, evaluate, and communicate complex information.

English 12B - 0123b

Half Year - 1/2 Credit Grade 12 Elective

Prerequisite: English 12A

This is the second semester of English 12, which continues to prepare students for the literacy demands of college and career. This course uses a contemporary approach, including exploration of high-interest topics and analysis of real world texts, to motivate students and expose them to effective instructional principles. Coursework encompasses a set of literacy expectations that will enable students to comprehend, analyze, evaluate, and communicate complex information.

Heroes, Myths, and Legends - 0124F

Half Year - 1/2 Credit Grade 12 Fall Elective

Prerequisite: English 11

This is course is designed to introduce, explore and examine the origins, universality, and enduring significance of heroic myths and legends that have helped humans make sense of their world and shape their societies. This course will employ cross cultural analysis of diverse texts in multiple mediums in order to consider the commonalities embedded in the heroic cycle as well as the human experience.

Science Fiction and Fantasy - 0125S

Half Year - 1/2 Credit Grade 12 Spring Elective

Prerequisite: English 12 Fall Elective

This course will focus on science fiction and fantasy as genres that blend literary art with scientific and philosophical speculation. This course is designed to introduce and explore the roots of and needs for classic science fiction and fantasy as well modern works in these genres. The course requires students to analyze the common themes of various texts that posit alternate or eventual allegorical realities in order to comment on enduring and complex societal issues.

Survey of British Literature - 0108a

Half Year – 1/2 Credit Grade 12 Elective

Prerequisite: English 11

This is the first semester of a two-semester course designed to introduce students to a variety of literary genres as well as the skills needed for successful public speaking. Areas of study include an introduction to the foundations of literature, which will begin with a focus on Sophocles' Oedipus trilogy. Study of literature from the classical era is followed by critical analysis of the Anglo-Saxon epic Beowulf and then shifts to a study of literature from the Medieval era. Students will develop knowledge of the religious, political and social aspects of British society through the literature studied as they build the literacy skills necessary for college level reading, writing, listening and speaking. Embedded into each unit of study is focused training in effective prose writing that requires students to demonstrate maturity in thought and style.

Survey of British Literature - 0108b

Half Year - 1/2 Credit Grade 12 Elective

Prerequisite: Survey of British Literature A

This is the second semester of Survey of British Literature, which is designed to introduce students to a variety of literary genres as well as the skills needed for successful public speaking. Areas of study include critical analysis of British literature from the Renaissance Era through the Restoration period. Students will develop knowledge of the religious, political and social aspects of British society through the literature studied as they build the literacy skills necessary for college level reading, writing, listening and speaking. Embedded into each unit of study is focused training in effective prose writing that requires students to demonstrate maturity in thought and style.

AP® English Literature and Composition - 0118

Full Year - 1 Credit Grade 12

Prerequisite: Pass English Language and Composition or English 11 with at least an 85. Student must receive a recommendation from the teacher and have passing grade on the entrance exam.

This is a rigorous forty-week course designed for seniors. It is a college-level course for those who might benefit from the Advanced Placement Examination in English offered by the College Entrance Examination Board. Students will read the works of recognized authors. They will become familiar with the terminology and techniques of literary criticism, and they will learn to demonstrate the techniques of composition and analyze the elements of literature. All students are expected to take the Advanced Placement examination offered in May.

The AP Exam cost is \$96. The Free/Reduce Lunch cost is \$53. These costs are subject to change as per

The AP Exam cost is \$96. The Free/Reduce Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

Students will be required to complete a summer project, which will be incorporated into the first quarter's grade.

<u>Health Department</u>

DEPARTMENT CHAIR

Brian Babst

Health Education

1801 Half Year - 1/2 Credit

1802 Alternate Day Full Year - 1/2 Credit

Grades 9 - 12

Required Course for Graduation (SENIORS receive first priority)

The goal of this twenty-week course is designed to meet the New York State graduation requirement and provide health knowledge and skills to promote health- enhancing behaviors in order to reduce health risks. The curriculum addresses health issues facing society today. Mental Health, Drugs; Alcohol and Tobacco Prevention Education, Community Health, Family Life Education, and Disease and Disorders are focused on specifically.

Introduction to Medicine - 1808

Half Year - 1/2 Credit

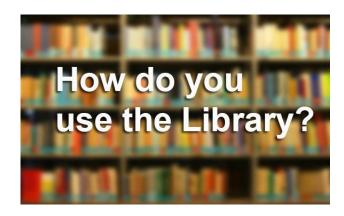
Grades 10 - 12

Prerequisite: Health Education

This course will begin with offering students National Certification in First Aid, CPR and use of the AED. The course will then progress to an introduction in Gross Anatomy, Physiology, Kinesiology, Exercise Science and end with introduction to the Medical Professions. Students in this program may qualify for college credit.



Library Information Department



The William Floyd High School Library Program is designed to help students meet graduation requirements in all curriculum areas and to provide students with materials relative to their interests. The library is open to students in two equally important ways. Teachers may schedule time for their classes to use the library and its resources through collaboration with one of the librarians. Students may also utilize the library on their own during their study hall, lunch and after school extra help sessions. All students who sign in during free periods must have their school I.D. and plan to spend their time well.

Librarians collaborate with subject-area teachers to create, design and develop lessons that meet the needs of each student in order to address and emphasize the New York State learning standards. Through library-based units, students learn to use a variety of resources including both print and electronic; they also develop life-long research skills that strengthen knowledge and understanding across the curriculum. The High School Library book collection is tailored to support curriculum-area learning and reference needs and provides reading resources on all subjects, as well as award winning fiction. Thirty-eight computers allow online learning opportunities and access to a virtual reference collection which offer resources ranging from career and college interest surveys to literary criticism and magazine, newspaper, and encyclopedia articles.

Library-based lessons culminate in the development of projects that demonstrate student learning. Our health students, for example, create Individual Health Plans tailored to their own family's history. U.S. History students use a PowerPoint driven Regents Preparation Review created by the librarians and their social studies teachers to help them master the Regents exam. English classes learn about the content of a great research paper, the proper format for a paper, or create web pages for characters they've studied in class. Librarians teach students to utilize current technology in order to produce sophisticated class projects and maximize student learning. These lessons and skills will aid students in college and in the work force, which is increasingly technologically focused.

Languages Other Than English (LOTE) Department



DEPARTMENT CHAIR

Carol Janowicz



LOTE SEQUENCES

8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Spanish 8	Spanish I	Spanish II	Spanish III	Spanish IV
Italian 8	Italian I	Italian II	Italian III	Italian IV or V
*Spanish 8H	Spanish II Accel	Spanish III	Pre-AP Spanish	AP Spanish
*Italian 8H	Italian II Accel	Italian III	Italian IV	Italian V
*Native Language Arts (Spanish)	Native Language Arts II	Spanish IV or AP Spanish or Italian I	AP Spanish or Italian I	AP Spanish or Italian I

**8thgrade students may earn one unit of high school credit based upon final course grade in their honors or native language class, teacher recommendation, and performance on the Checkpoint A Exam.

ITALIAN SEQUENCE

Italian I - 0511 Full Year - 1 Credit Grades 9 - 12

Prerequisite: Successful completion of 8th grade Italian

Level 1 focuses on the survival skills outlined in Checkpoint A of the State Syllabus. Employing extensive oral/aural activity, students are placed in real life situations using the Italian language. With the aid of authentic materials, students will simulate everyday life in an Italian environment through role-playing, dramatizations, and other oral exercises. All students are required to take the Checkpoint A examination at the end of this course.

Italian II - 0512	Full Year - 1 Credit
	Grades 9 - 12

Prerequisite: Italian I

Level 2 embraces the first half of the proficiencies outlined in Checkpoint B of the State Syllabus. While maintaining emphasis on oral survival skills, this course will also involve the students in readings of a more complex nature and in the basics of Italian composition.

Italian III - 0513

Full Year - 1 Credit Grades 10 - 12

Prerequisite: Italian II

Level 3 Italian covers the second half of the proficiencies outlined in Checkpoint B of the State Syllabus. This course continues with the emphasis on communication skills. The students will be expected to demonstrate comprehension of lengthy auditory and reading passages. Students will also engage in creative and guided composition. All aspects of the course will center on real life situations, with utilization of authentic materials such as Italian newspapers, magazines, films and video programs. All students are required to take the Checkpoint B examination at the end of this course.

Ita	lian	IV –	0514

Full Year - 1 Credit Grades 11 - 12

Prerequisite: Italian III

This course concentrates on the conversational aspects of the Italian language as outlined in Checkpoint C of the State Syllabus. This course continues to build oral and written proficiency. Survival Italian will be combined with reading a survey of Italian literature. Authentic materials will be utilized to provide a better understanding of the Italian language and culture.

Students will have the option of taking this course for college credits through St. John's University College Advantage Program and the Suffolk County Community College Beacon Program.

Italian V - 0515

Full Year - 1 Credit

Grades 12

Prerequisite: Italian IV

This course completes the Checkpoint C curriculum of the State Syllabus. The course combines the continued study of works of literature with increased oral/aural activities, such as dramatizations and panel discussions. Emphasis is placed on the students' ability to write critically, creatively, and correctly.

Students will have the option of taking this course for college credits through St. John's University College Advantage Program and the Suffolk County Community College Beacon Program.

Spanish Sequence

Spanish I - 0506

Full Year - 1 Credit

Grades 9 - 12

Prerequisite: Successful completion of 8th grade Spanish

Level 1 focuses on the survival skills outlined in Checkpoint A of the State Syllabus. Employing extensive oral/aural activity, the student is placed into real life situations using the Spanish language. With the aid of authentic materials, the student will simulate everyday life in a Spanish environment through role-playing, dramatizations, and other oral exercises. All students are required to take the Checkpoint A examination at the end of this course.

Spanish II - 0507

Full Year - 1 Credit

Grades 9 - 12

Prerequisite: Spanish I

Level 2 embraces the first half of the proficiencies outlined in Checkpoint B of the State Syllabus. While maintaining emphasis on oral survival skills, this course will also involve the students in readings of a more complex nature, and in the basics of Spanish composition.

Spanish III - 0508 Full Year - 1 Credit Grades 10 - 12

Prerequisite: Spanish II

Level 3 Spanish covers the second half of the proficiencies outlined in Checkpoint B of the State Syllabus. This course continues with the emphasis on communication skills. The students will be expected to demonstrate comprehension of lengthy auditory and reading passages. Students will also engage in creative and guided composition. All aspects of the course will center on real life situations, with utilization of authentic materials such as Spanish newspapers, magazines, films and video programs. All students are required to take the Checkpoint B examination at the end of this course.

Spanish IV - 0509	Full Year - 1 Credit
	Grades 11 - 12

Prerequisite: Spanish III or Native Language Arts II

This course concentrates on the conversational aspects of the Spanish language as outlined in Checkpoint C of the State Syllabus. This course continues to build oral and written proficiency. Survival Spanish will be combined with reading a survey of Spanish literature. Authentic materials will be utilized to provide a better understanding of the Spanish language and culture.

Students will have the option of taking this course for college credits through St. John's University College Advantage Program and the Suffolk County Community College Beacon Program.

Native Language Arts II - 0520	Full Year - 1 Credit
	Grades 9 - 12

Prerequisite: Native Language Arts I or recommendation from the Department Chair based on previous study.

This course is designed for Spanish speaking students to further develop native literacy skills. Students will read and respond to literature and other writings representative of Spanish-speaking societies. Emphasis is placed on the strengthening of speaking, reading, listening and writing skills. Instruction is based on activities that will assist students to convey meaning through writing, using appropriate grammar, sentence structure, and tone. Students will take the Checkpoint B examination in Spanish at the end of this course. This course will be conducted completely in Spanish.

Pre-AP Spanish Language & Culture - 0521	Full Year - 1 Credit
	Grades 10 - 12

Prerequisite: Spanish III OR Native Language Arts II with a score of at least 85 on the Checkpoint

Pre-AP Spanish Language and Culture is a preparatory course that will afford students an additional year of study for the AP Spanish Language and Culture Exam. Emphasis will be placed on advanced vocabulary expansion, to enable the students to express themselves critically and speak for extended periods on a variety of topics; analysis and interpretation of advanced, authentic text; persuasive writing and improved comprehension. Students will explore the six main themes put forth by College Board and engage in Checkpoint C appropriate conversation.

**New Course pending budget approval and student enrollment

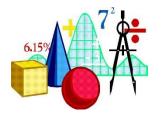
APR SI	nanish	Language	& Cui	lture –	0510
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Full Year - 1 Credit Grades 12

Prerequisite: Successful completion of Pre-AP Language and Culture and Teacher Recommendation.

This course is intended for students with an extensive background in Spanish, who are interested in continuing an intensive, culture-rich course. Conducted almost entirely in Spanish, this course will further the development of all four skill areas: speaking, listening, reading and writing. Emphasis will be placed on the development of better oral/aural comprehension. In addition, cultural awareness will be enhanced by using a wide variety of literature, authentic material, and other resources. Basic grammar structures and usage will be reviewed and more sophisticated alternatives will be introduced. This course offers the opportunity for student to earn college credits based on meeting course requirements. Upon completion of this course, it is anticipated that the students will take the AP exam in May. The AP exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.





Mathematics Department

DEPARTMENT CHAIR

Joseph Coleman

Mathematics Sequences

Minimum of Three years of Mathematics is the Requirement for Graduation

Pathway	8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Regents	Algebra I	Intro to Geometry	Geometry or Intro to Algebra II	Intro to Algebra II or Algebra II	Algebra II or Elective
g .	J	Geometry or Geometry in Constructions	Intro to Algebra II or Algebra II	Algebra II or Precalculus or Elective	Calculus Honors or AP Calculus AB or Elective
Advanced Regents	Algebra I	Geometry	Algebra II	Precalculus or Elective	Calculus Honors or AP Calculus AB or Elective
Honors	Algebra I Honors	Geometry Honors	Algebra II Honors	AP Calculus Prep	AP Calculus AB or AP Calculus BC

Computer Science Sequences

Pathway	10 th Grade	11 th Grade	12 th Grade
General	Intro to Computer Science (MUST be taking Intro to Algebra II or above concurrently)	Intro to Computer Science or AP Computer Science Principles	AP Computer Science A
Advanced	AP Computer Science Principles (MUST be taking Algebra II Concurrently)	AP Computer Science Principles or AP Computer Science A	AP Computer Science A or other elective

*Regents Diploma - Passing grade on one Mathematics Regents
**Advanced Regents Diploma - Passing Grade on Algebra I, Geometry and Algebra II Regents

Algebra I 9 - 0325	Full Year - 1 Credit
	Grade 9
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Prerequisite: None

This one-year course will run from September to June, with students taking a midterm exam in January and the Algebra I Regents in June. Algebra 1 is designed to give students a foundation for all future mathematics courses. The fundamentals of algebraic problem-solving are explained. Students will explore: foundations of Algebra, solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, radical expressions and equations, and data analysis and probability. Upon successful completion of the Algebra curriculum, students will go on to a Geometry course.

Geometry 9 - 0328

Full Year - 1 Credit

Grade 9

Prerequisite: Algebra I

This one-year course will run from September to June with students taking a midterm exam in January and the Geometry Regents in June. The units covered in this course are: Congruence, Proofs and Constructions, Similarity Proof and Trigonometry, Extending to Three Dimensions, Connecting Algebra and Geometry through Coordinates, Circles with and without Coordinates and Application of Probability. Upon successful completion, the students will go on to Algebra II or Introduction to Algebra II.

Geometry 9 Honors - 0322

Full Year - 1 Credit Grade 9

Prerequisite: Algebra I Honors with a Regents grade of 85 or higher and/or teacher recommendation.

This one-year course will run from September to June with students taking the Geometry Regents in June in addition to an honors midterm examination in January. The topics that will be covered in this course are: Shapes, Geometric Relationships, Transformational and Coordinate Geometry, Constructions, Locus, Informal and Formal Proofs, Number Sense and Operations, Measurement, and Algebra. Upon successful completion of Geometry Honors, students will go on to Algebra II Honors.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Geometry in Construction - 0335

Full Year - 1 Credit

Grade 9

Prerequisite: Algebra I with a Regents grade of 70 or higher and/or teacher recommendation.

In this Geometry course you will never ask, "Why do I have to learn this?" or "When am I ever going to use this?" Geometry comes alive with real world applications--combining learning geometry with creating small woodworking projects. You will be also exposed to construction careers such as engineering, architecture, interior design and landscape architecture. Learn safety, problem solving, tool use, and drawing interpretations. **Students must be enrolled in Geometry as well as the Technology portion**. Classes are offered in a block session. Students will earn both credits. Enrollment is limited. This course is subject to enrollment and budget constraints.

Introduction to Geometry 9 - 0333

Full Year - 1 Credit

Grade 9

Prerequisite: Algebra I

This one-year course will run from September to June, with students taking a final exam in June. It is designed to give students an introduction to the Geometry topics they will see the following year to give them a solid foundation to build upon in order to be successful in the Geometry course. Upon successful completion of this course, students will go on to Geometry.

Algebra I - 0323

Full Year - 1 Credit

Grade 10-12

Prerequisite: None

This one-year course will run from September to June, with students taking a midterm exam in January and the Algebra I Regents in June. Algebra 1 is designed to give students a foundation for all future mathematics courses. The fundamentals of algebraic problem-solving are explained. Students will explore: foundations of Algebra, solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, radical expressions and equations, and data analysis and probability. Upon successful completion of the Algebra curriculum, students will go on to a Geometry course.

Introduction to Geometry - 0327 Full Year - 1 Credit Grade 10 - 12

Prerequisite: Algebra I

This one-year course will run from September to June, with students taking a final exam in June. It is designed to give students an introduction to the Geometry topics they will see the following year to give them a solid foundation to build upon in order to be successful in the Geometry course. Upon successful completion of this course, students will go on to Geometry.

Geometry - 0326	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: Algebra I

This one year course for students in Grades 10 -12 will run from September to June with students taking a midterm exam in January and the Geometry Regents in June. The topics that will be covered in this course are: Shapes, Geometric Relationships, Transformational and Coordinate Geometry, Constructions, Locus, Informal and Formal Proofs, Number Sense and Operations, Measurement, and Algebra. Upon successful completion, students will go on to Introduction to Algebra II or Algebra II.

Introduction to Algebra II – 0308	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: Introduction to Geometry or Geometry

This one-year course will run from September to June, with students taking a midterm in January and a final exam in June. The topics covered in this course are Polynomials, Rational Numbers, Real Numbers and Radicals, Relations and Functions, Quadratic Functions, Complex numbers, Sequences and Series, and Exponential and Logarithmic Functions. Upon successful completion of this course, students will go on to Algebra II.

Algebra II - 0329	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: Geometry or Introduction to Algebra II with teacher recommendation.

This one-year course will run from September to June, with students taking a midterm exam in January and the Algebra II Regents in June. The units that will be covered in this course are: Polynomials, Rational expressions, Radicals, Trigonometric Functions, Modeling with Functions, and Making Inferences and Conclusions with Data. Upon successful completion of Algebra II, students will go on to Precalculus.

Algebra II Honors - 0330	Full Year - 1 Credit
	Grade 10

Prerequisite: Geometry Honors with a Regents grade of 85 or higher and/or teacher recommendation.

This one-year course will run from September to June, with students taking a midterm exam in January and the Algebra II Regents in June. The units that will be covered in this course are: Polynomials, Rational expressions, Radicals, Trigonometric Functions, Modeling with Functions, and Making Inferences and Conclusions with Data.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Precalculus - 0318	Full Year - 1 Credit
	Grade 11-12

Prerequisite: Algebra II

This course content includes selected topics in Advanced Algebra, Function Relationships and Analysis, Exponential and Logarithmic Functions, Trigonometric Functions, Graphs, and Equations, Conics, Polar Coordinates, and Matrices. Students will take a departmental midterm in January and final in June. Upon successful completion of this course, students will go onto Calculus or AP Calculus AB (by teacher recommendation only).

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

AP Calculus Prep - 0319

Full Year - 1 Credit

Grade 11

Prerequisite: Algebra II Honors

This is an AP Calculus BC prep course that is designed to help students develop the skills needed to be successful on the AP exam they will take the following year. Topics include Advanced Algebra, Exponential and Logarithmic Functions, Trigonometry, Polars and Parametrics, Limits, Continuity, Differentiation and its Applications, and an introduction to Integration. Upon the successful completion of this course, students will go on to AP Calculus BC, AB, or Non-AP Calculus.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Calculus - 0321

Full Year - 1 Credit

Grade 12

Prerequisite: Precalculus or AP Calculus Prep

This course is designed to be a first year, college level course in Calculus. Course content includes: Cartesian Coordinates, Equations of Curves, Derivatives of a Function, Differentiation of Algebraic Functions, Ratios and Differentials, Indefinite Integrals, Definite Integrals, Application of the Fundamental Theorem, Extreme Values, Exponential and Log Functions, Trigonometric Functions, the Mean Value Theorem, Integration of Standard forms, and Polar Coordinates.

Students will have the option of taking this course for college credits through the St. John's College Advantage Program.

AP® CALCULUS AB - 0320

Full Year - 1 Credit

Grade 12

Prerequisite: Precalculus with teacher recommendation or AP Calculus Prep

This course is intended to prepare students for the Advance Placement examination which is given in May. It is the equivalent of taking a first semester Calculus course in college. Topics include: Limits, Derivatives of Functions, Applications of the Derivative, Indefinite Integrals, Definite Integrals, Application of the Fundamental Theorem, The Mean Value Theorem, Applications of Integration, and Area and Volume of Solids of Revolution. ALL STUDENTS ARE EXPECTED TO TAKE THE ADVANCED PLACEMENT EXAMINATION AT THE END OF THIS COURSE. The AP Exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to

*Students will be required to complete a summer assignment, which will be incorporated into the first quarter grade.

AP® CALCULUS BC - 0320BC

change as per federal and state guidelines.

Full Year - 1 Credit

Grade 12

Prerequisite: AP Calculus Prep with teacher recommendation

This course is intended to prepare students for the Advance Placement examination, which is given in May. It is the equivalent of taking two semesters of Calculus in college. This course covers all the topics in AP Calculus AB with the addition of Integration by Parts and with Partial Fractions, Improper Integrals, Polar and Parametric Derivatives and Applications, Series Convergence Tests, and Taylor/Maclaurin Series. ALL STUDENTS ARE EXPECTED TO TAKE THE ADVANCED PLACEMENT EXAMINATION AT THE END OF THIS COURSE. The AP Exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

*Students will be required to complete a summer assignment, which will be incorporated into the first quarter grade.

Statistics - 0310 Full Year - 1 Credit Grade 11 - 12

Prerequisite: None

This course may be used as a third year of mathematics required for graduation. This course is for students interested in Social Sciences, Health Sciences, Business, and Industry. Course content includes: Sample Space, Statistical Models, Binomial and Normal Distribution, T-Distribution, and Chi-Square Distribution. **This is an elective course that can be used as a 3rd math credit.**

College Statistics - 0310C	Full Year - 1 Credit
	Grade 11.12

Prerequisite: Algebra II

This course is designed to be a first-year, college-level course in Statistics for students interested in Social Sciences, Health Sciences, Business, and Industry. Course content includes: Sample Space, Statistical Models, Binomial and Normal Distribution, T-Distribution, and Chi-Square Distribution.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Math for the College Bound - 0317	Full Year – 1 Credit Grade 11 – 12

Prerequisite: None

This one-year course will run from September to June, with students taking a midterm exam in January and a final exam in June. This course is designed to help students prepare for college math placement exams. Topics to be covered include Integers, Rational/Irrational Numbers, Properties of Real Numbers, Basic and Advanced Algebra, Problem Solving, and some Precalculus topics. **This is an elective course that can be used as a 3**rd **math credit.**

Computer Science Courses:



Introduction to Computer Science - 0334	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: Introduction to Algebra II or above

This one year course for students in Grades 10 -12 will run from September to June with students taking a midterm exam in January and a final examination in June. This course is intended as an introduction to computer science and computer programming. No prior computer programming experience is necessary for students enrolling in the course. This course serves as a foundation for computational problem solving, and as a solid base and stepping stone to those students who wish to explore a major in Computer Science. It is a framework for understanding the computer's applications, role, and impact on society. In addition, the course provides students with the skills necessary to apply the elements of computer programming and the fundamental concepts of computer science to develop, design, code, test, and execute a computer program. **This is an elective course that can be used as a 3rd math credit.**

AP® Computer Science Principles - 0336	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: Introduction to Computer Science OR Algebra II (10^{th} graders must be enrolled in the Algebra II course concurrently.)

This course introduces students to the central ideas of computer science and develops the ideas and practices of computational thinking. The course emphasizes the impact advances in computing have on people and society. Students investigate computational innovations, examine the ethical implications of new technologies, and develop computational artifacts using the same creative processes artists, writers, computer scientists, and engineers use to bring ideas to life. ALL STUDENTS ARE EXPECTED TO TAKE THE ADVANCED PLACEMENT EXAMINATION AT THE END OF THIS COURSE and SUBMIT BOTH PERFORMANCE TASKS. The AP Exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

*Students will be required to complete a summer assignment, which will be incorporated into the first quarter grade.

**New Course pending budget approval and student enrollment

AP® Computer Science A - 0316	Full Year - 1 Credit
	Grade 11 - 12

Prerequisite: Introduction to Computer Science course or previous coding experience **Recommended Coursework:** Algebra II or Precalculus or AP Calculus Prep

This course is designed as an equivalent of a first semester college course in Computer Science. Course content includes: An emphasis on problem solving and algorithm development with object- oriented programming methodology, utilizing the Java programming language. It also includes the study of data structures and abstraction. ALL STUDENTS ARE EXPECTED TO TAKE THE ADVANCED PLACEMENT EXAMINATION AT THE END OF THIS COURSE. The AP Exam cost is \$96. The Free/Reduced Lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

*Students will be required to complete a summer assignment, which will be incorporated into the first quarter grade.

Music Department COORDINATOR of MUSIC

George Ober

**Please Note: Courses will be offered based on student enrollment.

Concert Band - 1001

Full Year - 1 Credit

Grade 9 - 10

Prerequisite: Recommendation from previous year's instructor

The Concert Band is the course for all wind instrument players and percussionists entering their first year in the high school band program. Students will learn rehearsal and performance fundamentals while studying Level IV concert band literature as outlined in the New York State School Music Association manual. Students are required to perform at local concerts and participate in the annual NYSSMA Major Organization Festival. A weekly lesson is also required of all band members. This course may be used to meet the one unit New York State Arts requirement for graduation

Wind Symphony - 1003

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Recommendation from previous year's instructor

Membership is by audition and recommendation of the previous year's instructor. The Wind Ensemble is the course for all 10th, 11th, and 12th grade wind instrument players and percussionists who desire to learn advanced rehearsal and performance techniques while studying Level VI concert band literature as outlined in the New York State School Music Association manual. Students are required to perform at local concerts and participate in the annual NYSSMA Major Organization Festival. Band members are also required to participate in marching band and learn the fundamentals of parade marching and field drill design maneuvers. A weekly lesson is also required of all band members.

Concert Orchestra - 1016

Full Year - 1 Credit

Grade 9 - 10

Prerequisite: Recommendation from previous year's instructor

Concert Orchestra is the course for all string instrument players entering the 9th and 10th grades in the high school orchestra program. Students will learn rehearsal and performance techniques while studying level IV and V concert orchestra literature as outlined in the New York State School Music Association manual. Students are required to perform at local concerts and participate in the annual NYSSMA Major Organization Festival. A weekly lesson is also required of all orchestra members. This course may be used to meet the one unit New York State Arts requirement for graduation.

Symphonic Orchestra - 1004

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Recommendation from previous year's instructor

Symphonic Orchestra is the course for all string instrument players entering 11th and 12th grades in the high school orchestra program. Students will learn rehearsal and performance techniques and be required to learn solos. Repertoire is chosen from Level V and VI concert orchestra literature as outlined in the New York State School Music Association manual. Students are required to perform at local concerts and participate in the annual NYSSMA Major Organization Festival. A weekly lesson is also required of all orchestra members.

Concert Choir - 1006

Full Year - 1 Credit Boys Grade 9 - 12 Girls Grades 11-12

Prerequisite: Recommendation from previous year's instructor

The William Floyd Concert Choir explores and performs vocal music from all ages and styles. Students are required to attend a weekly voice lesson in order to improve skills and learn solo repertoire. Students will have an opportunity to be selected to audition for participation in the various All-County, All-State and All-Eastern choruses. Attendance at the following functions is required: Winter and Spring Concerts, NYSSMA Major Organization, and other public performances (notification one month prior to event). This course may be used to meet the one unit New York State Fine Arts requirement for graduation.

High School Chorale - 1005

Full Year - 1 Credit Grade 9 - 10

Prerequisite: Recommendation from previous year's instructor

The William Floyd Women's Choir explores and performs vocal music from all ages and styles. Students are required to attend a weekly voice lesson in order to improve skills and learn solo repertoire. Students will have an opportunity to be selected to audition for participation in the various All-County, All-State, and All-Eastern choruses. Attendance at the following functions is required: Winter and Spring Concerts, NYSSMA Major Organization, and other public performances (notification one month prior to event). **This course may be used to meet the one unit New York State Fine Arts requirement for graduation.**

Music in Our Lives - 1012

Full Year - 1 Credit

Grade 9 - 12

Prerequisite: None

Music in Our Lives is an elective music course designed to fulfill the graduation requirement. The course will focus on the basic elements of music. A primary goal of this course is to elicit a meaningful response to a wide range of musical styles, to heighten each students' aesthetic experience and to use one's own intellect and imagination in order to better understand music's role in the history of civilization. This course fulfills the one unit New York State Fine Arts requirement for graduation.

Music in Our Lives - 1035 Guitar

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: Music in Our Lives and/or permission of instructor

Students who have completed Music In Our Lives or have some guitar experience are eligible for taking this class with teacher recommendation. Students with prior guitar experience must see the instructor for an evaluation of their skills. MIOL-Guitar will continue to build upon the skills and concepts acquired in Music In Our Lives. Appropriate music suited to individual skill levels will be prepared.

Music Theory I - 1007

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: A basic understanding of staff notation and participation in one of the performing groups (orchestra, band and chorus).

This course is designed for students who are considering studying music beyond high school or those who have a sincere desire to study the structure of music in more detail. This course will introduce students to the basic rudiments of music theory. Major and minor scales, rhythmic and pitch notation, key signatures, intervals and triads will be studied. Class activities will include sight singing and dictation. Compositions of melodic and rhythmic speaking pieces will be explored. This course is strongly recommended for students planning to study music in college for a career in music.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Music Theory II - 1008

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successful completion of Music Theory I or a successful challenge of Music Theory I.

Theory II is a course which explores intermediate levels of study in harmonic and melodic analysis, counterpoint, as well as continued development of sight singing and dictation skills. Keyboard activities will be included where appropriate to the topic. A composition in four-part texture will be explored. This course is strongly recommended for students planning to study music in college for a career in music.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Music Theory III - Advanced Placement (AP®) - 1009

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successful completion of Music Theory II or a successful challenge of Music Theory II.

Theory III-Advanced Placement is a course which explores advanced, college-level study in melodic, harmonic, and rhythmic analysis, counterpoint, secondary dominants, modulation, transposition, figured bass, realization, harmonization of a melody, score reading, instrumental and vocal voice leading and composition, as well as further development of sight singing and dictation skills. Keyboard skills will be further developed as will composition in four-part texture. Students in this course will be exposed to a level of study suitable for the Advanced Placement Exam and may elect to take the exam at the commencement of the course. This course is strongly recommended for students planning to study music in college for a career in music.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Piano I - 1010

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

Piano I is open to all students and recommended for all music majors. This course is designed to teach fundamental keyboard techniques including basic note reading, ear-training and the acquisition of all the basic elements that lead to an artistic performance. At the completion of this course, students will have acquired enough skill to play simple arrangements and accompaniments. Students who have some keyboard experience should see the instructor for an evaluation of their skills. In some cases, students may be permitted to take Piano II with instructor approval.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Piano II - 1011

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: Piano I or permission of instructor.

Students who have some keyboard experience should see the instructor for an evaluation of their skills. In some cases, students may be permitted to take Piano II with instructor approval. Piano II will continue to build upon the skills and concepts acquired in Piano I. Appropriate solo material suited to individual skill levels will be prepared. Acceptable performance of music reflective of NYSSMA Level I and Level II will be required.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Piano III - 1017

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: Piano II or permission of instructor.

Students will be required to perform all scales and basic keyboard progressions in all keys. Emphasis will be placed on the performance of simple accompaniment and harmonization of melody. Composition of an original keyboard piece will be required. Acceptable performance of music reflective of NYSSMA Level I and Level II will be required.

Students will have the option of taking this course for college credits through the Suffolk County Community College Beacon Program.

Select Choir - 1020 (After-School Course)

Full Year - 1/2 Credit

Grade 9 - 12

Prerequisite: Membership in Concert Choir or Women's Choir or by recommendation of the Select Choir instructor. Membership in the Select Choir is by audition only.

The Select Chorus is a select ensemble of students which specializes in the performance of smaller choral ensemble literature. Madrigals, pop tunes and vocal jazz styles will be performed. The group meets after school hours and performs at various school and community functions. One half-credit can be earned if performance and attendance requirements are met.

Jazz Ensemble - 1021 (After-School Course) Full Year - 1/2 Credit

Grade 9 - 12

Prerequisite: Membership in Band, or by recommendation of the Jazz Ensemble instructor. Membership in the Jazz Ensemble is by audition only.

Jazz Ensemble is a small, select ensemble specializing in the performance of jazz and popular music. Students will be encouraged to develop technique in all pop idioms especially improvisation. The Jazz Ensemble meets one evening a week for two hours. The Jazz Ensemble performs at various festivals as well as many school and community functions throughout the year. One half-credit can be earned if performance and attendance requirements are met.

Vocal Ensemble - 1026 (After-School Course)

Full Year - 1/2 Credit

Grade 9 - 12

Prerequisite: Membership in Concert Choir or Women's Choir, or by recommendation of the Vocal Ensemble instructor. Membership in the Vocal Ensemble is by audition only.

The Vocal Ensemble is a select ensemble of students which specializes in the performance of smaller choral ensemble literature. Madrigals, pop tunes and vocal jazz styles will be performed. The group meets after school hours and performs at various school and community functions. One half-credit can be earned if performance and attendance requirements are met.

Chamber Orchestra - 1019 (After-School Course)

Full Year - 1/2 Credit

Grade 9 - 12

Prerequisite: Membership in Orchestra or by recommendation of the Chamber Orchestra instructor. Membership in the Chamber Orchestra is by audition only.

The Chamber Orchestra is a select ensemble of students which specializes in the performance of smaller chamber orchestra literature. The group meets after school hours and performs at various school and community functions. One half-credit can be earned if performance and attendance requirements are met.

NAVAL SCIENCE

The Naval Science Program can best be described as a citizenship program which is co-sponsored by the William Floyd School District and the United States Navy. The program is staffed by Naval Science Instructors who are retired Navy personnel and certified by both the U.S. Navy and the New York State Education Department to perform their duties as NJROTC instructors and administrators. The four-year NJROTC program is designed to build leadership and citizenship in participating cadets. This is done through a broad social science academic approach and a practical, guided leadership experience in naval organization and administration of the unit. The curriculum emphasizes the behavioral aspects of leadership as well as the relationship of the seas to American history, world geography, international relations, and economics. Military conduct, appearance, and drill, as well as the wearing of the Navy uniform, are utilized to emphasize self-discipline and teamwork concepts.

While each year of Naval Science is designed to stand independently, there is a continuity of purpose throughout the program. Each year, the course assists in building a basis for more advanced study of the Navy and sea power as it relates to the nation. This course offering is co-educational and includes extracurricular activities such as drill team, color guard, at-sea cruises in U.S. Navy vessels and visits to naval bases along the Eastern seaboard. Cadets are absolutely under no obligation to enlist in a military service as a result of enrollment in NJROTC. Naval Science courses may be taken for Regents or Local credit and satisfy State Education Department requirements for a 3-year course sequence.

Full Year - 1 Credit

Grade 9 - 12

Prerequisite: None

In Naval Science I, cadets receive initial education on naval information, naval organization, career opportunities, navigation, seamanship, and military drill. Cadets are provided with Navy uniforms and are instructed on the proper wear and care of them. Cadets are taught military drill, marching, and ceremonial procedures in order to instill teamwork and self-discipline in each cadet.

NAVAI	SCIENCE	II - 1805
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Full Year - 1 Credit

Grade 10 - 12

Prerequisite: None

Naval Science II is a follow-up of Naval Science I with emphasis on the development of leadership skills. Having already satisfactorily completed the basic introduction to military drill, cadets now participate as drill leaders and are introduced to the use of dummy drill rifles and military dress swords. Maritime History is continued and the study of meteorology, oceanography, seamanship, navigation, and aviation are presented. Navy organization and administrative techniques are emphasized.

NAVAL	SCIEN	CE III -	1806
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Full Year - 1 Credit

Grade 11 - 12

Prerequisite: None

Naval Science III is a follow-up of Naval Science II. Third year cadets are expected to take an active part in planning the activities of the unit and assist in leading the cadet company through the yearly cadet activities. The academic syllabus includes Navy history as it relates to World War II, meteorology, astronomy, and the role of the U.S. Navy in world affairs.

NAVAL SCIENCE IV - 1807

Full Year - 1 Credit

Grade 12

Prerequisite: None

In Naval Science IV, cadets are expected to use the leadership skills they have acquired to lead, inspire, and motivate the younger cadets. They are assigned as class leaders and are tasked with helping the new cadets learn the ropes. Naval Science IV cadets improve their administrative and organizational skills by assisting with the myriad of administrative, supply, operational functions, and reports involved with operating the NJROTC unit.

PHYSICAL EDUCATION

DEPARTMENT CHAIR

Brian Babst

Students must earn 2 credits in Physical Education in high school to earn a high school diploma. A half credit is granted for a full year of Physical Education scheduled every other day. Activity units, including but not limited to those listed below, may be required or elected, and range in length from 5 to 10 weeks. Written and performance tests may be required in all instructional units. Grades will be numerical and will be based on participation, performance and knowledge testing. A final grade will be computed by averaging the grades for each marking period. A minimum final average of 65 must be attained to receive credit for the year.

Students with restrictions (temporary or permanent) which limit full participation in the regular activity program may earn credit in one of the following ways:

- audit the regularly scheduled class*
- reschedule into a modified class which provides activity within the specified limitations*
- complete written assignments relevant to program content*

*By Special Permission Only

Traditional Physical Education (BOYS) - 1100	Full Year - 1/2 Credit
*Semester – 1111 (Special Permission Only)	Grade 9 - 12

This program exposes students to a wide variety of suitable activities. Some of the activities include:

Aerobics	Handball	Team Handball
Adventure Activities	NYS Physical Fitness Test	Tennis
Badminton	Soccer	Track and Field
Basketball	Softball	Volleyball
Bowling	Speedball	Walking Wellness
Flag or Touch Football	Spasketball	Weight Training
Golf	Table Tennis	

Each of the individual activities offered will depend upon variables such as staff, class size, and facilities.

Traditional Physical Education (GIRLS) - 1105	Full Year - 1/2 Credit
*Semester – 1112 (Special Permission Only)	Grade 9 – 12

This program is designed to provide the student with the opportunity to experience Team Sports. The Traditional Activities include:

Football	Basketball	Softball
Volleyball	Badminton	Hockey
Pickle Ball	Ultimate Frisbee	

Traditional Physical Activity and Fitness Activities (GIRLS) – 1105C

Full Year - 1/2 Credit Grade 10 - 12

This program is designed to provide the student with the opportunity to experience both Team Sports and Fitness Activities. In addition to the activities above, the Fitness Activities include:

Yoga	Step Aerobics	Core Training
Wellness Center Workouts	Zumba	Body Toning

College Athletic Prep/Fitness (CO-ED) - 1106

Full Year - 1/2 Credit Grade 11

Objective: This course is designed for high school juniors who are interested in competing at the college-level in athletics. This course will blend classroom time with physical training that is sport- specific. The course will include wide variety of fitness activities while guiding students through the eligibility process.

Fitness Component: Agility & Speed Training, Flexibility, Plyometric Exercises, Weight Training and Core Training.

Classroom Component: Provide Guidance with SAT Prep, College Essay Writing, NCAA Clearing House, Financial Aid, and Nutrition Plan.

Fitness Activities Only (Girls) - 1105F

Full Year - 1/2 Credit

Grade 10 - 12

This program is designed for the student who enjoys Fitness Activities rather than participation in Sports. This course promotes lifelong fitness activities. The student will be involved in Personal Fitness Assessment, Fitness Program Design, Evaluation Techniques as well as participation in:

Yoga	Step Aerobics	Core Training
Wellness Center Workouts	Physioball	Kick Boxing
Power Walking	Body Toning Program	

Fitness Activities Only (Boys) - 1100F

Full Year - 1/2 Credit

Grade 10 - 12

This program is designed for the student who enjoys Fitness Activities rather than participation in Sports. The student will be involved in Personal Fitness Assessment, Fitness Program Design, Evaluation Techniques, as well as participation in:

Agility & Speed Training	Flexibility	CrossFit
Step Aerobics	Core Training	Plyometrics
Weight Training		

Project Adventure (CO-ED) - 1107

Full Year - 1/2 Credit

Grade 10 - 12

For sophomores, juniors and seniors. This course involves innovative games and group problem-solving initiatives which encourage students to develop greater self-confidence, while at the same time acquiring a sense of trust and commitment to their classmates. Students will first participate in low element activities and then progress at their own pace, which will test their limits physically, mentally, and emotionally. Students will also be involved in other fitness and physical education activities. Please Note: Students must be enrolled in this class prior to end of 2^{nd} quarter.



SCIENCE

DEPARTMENT CHAIR

Lisa Lackemann

Science Sequences

Minimum of Three years of Science is the Requirement for Graduation

Level	8 th Grade	9th Grade	10 th Grade	11 th Grade	12 th Grade
Regents	Living	Earth Science	Electives	Electives	Electives
	Environment	Regents			
Advanced	Living	Earth Science	Chemistry	Physics	Electives
Regents	Environment	Regents	Regents or	Regents or	
			Electives	AP Electives	
				or Electives	
Honors	Living	Earth Science	Chemistry	Physics	AP Electives
	Environment	Honors	Honors	Regents or	
	Honors			AP Electives	

Living Environment 9 - 0405	Full Year - 1 Credit
	Grade 9
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Prerequisite: None

This course is based on the Living Environment Core Curriculum of the New York State Learning Standards. The course of study provides an in-depth study of life, structure and function, relationships and interactions of a variety of organisms. The concept of interdependence of all life on Earth is interwoven throughout the curriculum, which includes units on ecology, evolution, genetics, reproduction and development, homeostasis, and ecology. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of the course. This course meets 7 periods per week.

Earth Science 9 - 0401	Full Year - 1 Credit
	Grade 9

Prerequisite: Living Environment

This course of study includes astronomy, earth's origin, structure, composition, surface features, and atmosphere. The curriculum is based on the Physical Setting/Earth Science Core Curriculum of New York State, which aims to develop an understanding of certain processes basic to Earth Science by means of student investigations. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of this course. This course meets 7 periods per week.

Earth Science Honors 9 - 0436

Full Year - 1 Credit

Grade 9

Prerequisite: Living Environment Honors

Student must meet the criteria outlined in the William Floyd Secondary Honors criteria. This course of study includes astronomy, earth's origin, structure composition, surface features, atmosphere and research based projects and investigations. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of this course. This course meets 7 periods per week.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Living Environment - 0406

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: None

This course is based on the Living Environment Core Curriculum of the New York State Learning Standards. The course of study provides an in-depth study of life, structure and function, relationships and interactions of a variety of organisms. The concept of interdependence of all life on Earth is interwoven throughout the curriculum, which includes units on ecology, evolution, genetics, reproduction and development, homeostasis, and ecology. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of the course. This course meets 7 periods per week.

Earth Science - 0402

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: Living Environment

This course of study includes astronomy, earth's origin, structure, composition, surface features, and atmosphere. The curriculum is based on the Physical Setting/Earth Science Core Curriculum of New York State, which aims to develop an understanding of certain processes basic to Earth Science by means of student investigations. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of this course. This course meets 7 periods per week.

Earth Science (Non-Lab) - 0402NL

Full Year - 1 Credit

Grade 11-12

Prerequisite: Passing Living Environment Regents and has taken and previously failed Earth Science. Must have administrative approval

This course covers the basic concepts in Earth Science. The course structure contains a lecture/lab component without additional lab period.

Chemistry - 0409

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: Living Environment and a grade of 80 or better in Earth Science. Strong math skills are required and student should have taken or be currently enrolled in Introduction to Algebra II or Algebra II.

This course is based on the Physical Setting/Chemistry Core Curriculum of New York State. The course of study includes matter and energy, atomic structure, bonding, periodic table, mathematics of chemistry, organic chemistry, and application of the principles of reactions. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of the course. This course meets 7 periods per week.

Chemistry Honors - 0408

Full Year - 1 Credit

Grade 10

Prerequisite: Living Environment Honors and Earth Science Honors with teacher recommendation.

This course is based on the Physical Setting/Chemistry Core Curriculum of New York State. The course of study includes matter and energy, atomic structure, bonding, periodic table, mathematics of chemistry, organic chemistry, and application of the principles of reactions. In addition, concepts for the SAT II Chemistry exam are incorporated. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of the course. This course meets 7 periods per week.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

AP® Chemistry - 0410

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successfully completed Algebra II and enrolled in Precalculus. Satisfactory completion of Chemistry Honors with an 85 average or Regents Chemistry with a 90 average.

This course is the equivalent of a college course in freshman Chemistry. This class meets 7 periods per week. This course will be the equivalent of college level freshman Chemistry. It is recommended that students take the AP exam, which is administered in May. **The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53.** *These costs are subject to change as per federal and state guidelines.*

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

AP® Biology - 0410

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successfully completed Algebra II and enrolled in Precalculus. Satisfactory completion of Chemistry Honors with an 85 average or Regents Chemistry with a 90 average.

This course is the equivalent of a college course in freshman Biology. The Advanced Placement Exam will be administered at the end of the year. This course will meet 7 periods per week. It is recommended that students take the AP exam which is administered in May. The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

AP® Environmental Science - 0424

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successfully completed Algebra II and enrolled in Precalculus. Satisfactory completion of Chemistry Honors with an 85 average or Regents Chemistry with a 90 average.

The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will also identify and analyze environmental problems, and examine alternative solutions for resolving and/or preventing them. The course will focus on 'real science' behind environmental problems and issues. Laboratory and field studies are important elements of the course. This course meets 7 periods per week. It is recommended that students take the AP exam, which is administered in May. **The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines**.

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Physics - 0411

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Successful completion of Living Environment and Earth Science, a grade of 85 or better in chemistry, and a grade of 80 or better in the three-year Regents Math sequence.

This course is based on the Physical Setting/Physics Core Curriculum of the New York State Learning Standards. The course of study includes matter at rest and in motion, heat energy, waves, electricity, sound, light, and nuclear structure. A 30 lab minimum is required to sit for the Regents exam. All students meeting the lab requirement are required to take a Regents examination at the end of this course. This course meets 7 periods per week.

AP® Physics I - 0442

Full Year - 1 Credit Grade 11 - 12

Prerequisite: Successfully completed Algebra II and enrolled in Precalculus. Satisfactory completion of Chemistry Honors with an 85 average or Regents Chemistry with a 90 average.

This course is the equivalent to a first-semester college course in algebra-based physics. This course meets 7 periods per week. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. It is recommended that students take the AP exam, which is administered in May. **The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53.** *These costs are subject to change as per federal and state guidelines.*

*Students will be required to complete a summer assignment which will be incorporated into the first quarter grade.

Anatomy & Physiology - 0415

Full Year - 1 Credit

Grade 11 - 12

Prerequisite: Regents Living Environment and Regents Chemistry. Students must be enrolled or have completed Intro to Medicine.

This course is designed for students who are interested in a career in the health sciences. Classroom work will deal with the functions of human organs and systems. Dissections are an integral part of the program.

Introduction to Research - 0455

Full Year - 1 Credit

Grade 9 - 12

Prerequisite: Successful completion of Regents Algebra I and Living Environment. Students must have a strong desire to do research projects.

This full year course meets every day in a small-group class and provides a general overview of research in the natural sciences and behavioral science. Students will be introduced to procedures and methodologies used by researchers. Topics will include the scientific method, survey design and statistics. Students will work individually to complete an independent research project in which they apply their new skills. Students will be required to submit their project into the William Floyd Annual STEM Symposium.

Introduction to Research - 0455 I

Full Year - 1 Credit

Grade 9 - 12

Independent Study

Prerequisite: Successful completion of Regents Algebra I and Living Environment. Students must have a strong desire to do research projects.

This full year course follows the same general outline as Introduction to Research, but students meet during the extra help period or a free period to review procedures and scientific methodologies used by researchers. Students will be required to submit their project into the William Floyd Annual STEM Symposium.

Advanced Research II - 0456

Full Year - 1 Credit Grade 10 - 12

Prerequisite: Introduction to Research

This course meets formally every day for the full year, and students are required to devote time to working independently outside of the allotted classroom time. In this small-group class, students will learn about how to conduct research in science and engineering while actually designing and carrying out an independent research project suitable for entry into a science symposium. Students will be guided through all aspects of the research process including the literature review, design of the method, data collection and analysis and preparation for symposiums, including the William Floyd Annual STEM Symposium. This course can be taken more than once for credit.

Advanced Research II - 0456I Independent Study

Full Year - 1 Credit

Grade 10 - 12

Prerequisite: Introduction to Research

This full year course follows the same general outline as Advanced Research II, but students meet during extra help period or a free period to learn about how to conduct research in science and engineering while actually designing and carrying out an independent research project suitable for entry into a science symposium. Students will be guided through all aspects of the research process including the literature review, design of the method, data collection and analysis and preparation for symposiums, including the William Floyd Annual STEM Symposium. This course can be taken more than once for credit.

General Chemistry - 0454

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This course presents an overview of the major understandings and fundamental concepts in chemistry. Emphasis will be placed on practical, hands-on applications of chemistry in everyday life. Topics include the scientific method, matter and energy, the atom, the periodic table, bonding, and chemical reactions.

Astronomy - 0413

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This course deals with distinguishing stars and constellations; finding sky objects by the use of terrestrial coordinates; study of the planets by means of a trip through the solar system; and a basic understanding of the way a telescope works with the possible construction of telescopic instruments.

Environmental Science - 0414

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This course aims to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course aims to: identify and analyze environmental problems (both natural and human-made), evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them.

Forensics I - 0416

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This course is a natural extension of all students' science education with an emphasis on real life applications. This course uses the knowledge gained from previous science courses to investigate the activities utilized in a crime lab. These include laboratory exercises in fingerprinting, ballistics, serology, hair and fiber examination, anthropology, botany, document and handwriting analysis, and other analytical procedures. The investigation of DNA for typing and profiling will also be included.

Forensics II - 0416B Half Year - 1/2 Credit Grade 10 - 12

Prerequisite: Forensics I

This course is designed around the idea that in the real world all learning is interrelated and interdependent. This class blends all sciences with the core subject areas. Students will be asked to read, research, hypothesize, interview, compute, and use deductive reasoning to propose crime solutions. The intention of this class is the continuation of study into the real world of forensics with emphasis on more complex topics such as DNA fingerprinting, ballistics, toxicology, and chromatography.

Marine Science - 0418	Half Year - 1/2 Credit
	Grade 10 - 12

Prerequisite: None

In this course students will study the physical characteristics of the oceans, life that lives in these vast areas, and how man in the future will utilize the oceans of the world to benefit mankind. Students demonstrate their proficiency through topical investigations, class discussion and participation, quarterly examinations, completing a major project or report, and taking a final examination. This is a one-semester course.

Meteorology - 0419	Half Year - 1/2 Credit
	Grade 10 - 12

Prerequisite: None

In this course students will be studying weather phenomena such as blizzards, hurricanes, thunderstorms and tornadoes. In this course both nature's violent outbursts and the more mundane day-to-day atmosphere stability, forms of condensation and precipitation, air pressure and winds, air masses, and weather analysis and forecasting will be covered. Students demonstrate their proficiency through topical investigations, class discussion and participation, quarterly examinations, keeping daily weather logs, and taking a final examination. Students will be collecting and comparing data with the guidance of NOAA and the Brookhaven National Laboratory.



Social Studies

DEPARTMENT CHAIR

Craig Clasen

Social Studies Sequences

Four years of Social Studies is the Requirement for Graduation

Level	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Regents	Global History	Global History	U.S. History &	Economics
	& Geography	& Geography	Government	(1/2 Year)
	(1A and 1B)	(2A and 2B)		AND
				Participation in
		_		Government
			\	(1/2 Year)
Qualifying Regents Students Can Choose AP Courses with Teacher Recommendation				
Honors	World History	AP World	AP U.S. History	AP U.S. Gov't &
	AP Prep	History		Politics and/or
				AP Economics

	Half Year – 1/2 Credit Grade 9 Fall
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Prerequisite: None

First semester of a four-semester study in world history and geography up to the fall of the Roman Empire. The fall semester begins with the Paleolithic Era and the Neolithic Revolution, the development of the first civilizations, the rise of belief systems, and continues with an examination of classical societies. The course emphasizes the unifying themes, social studies skills and practices, and key ideas and conceptual understandings as described in the New York State Social Studies Framework.

Global History & Geography 1b - 0201b	Half Year – 1/2 Credit Grade 9 Spring
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Prerequisite: Global H & G 1a

Second semester of a four-semester study in world history and geography up to the Age of the Enlightenment. The spring semester begins with the Byzantine Empire, feudalism of the Middle Ages, the rise of trans regional trade networks, then continues to the Scientific Revolution and the Enlightenment. The course emphasizes the unifying themes, social studies skills and practices, and key ideas and conceptual understandings as described in the New York State Social Studies Framework.

World History AP Prep - 0202

Full Year - 1 Credit

Grade 9

Prerequisite: Teacher recommendation, six consecutive quarters with a 90 or better average in English and Social Studies, and proficiency on an AP history entrance exam.

World History AP Prep is an especially rigorous course offered to invited freshmen who intend to enroll in AP World History during their sophomore year. Students are routinely required to independently complete college-level reading and writing activities. The course involves the study of the first half of the AP World History curriculum, which provides balanced coverage of five major geographical regions of the globe. Students will apply the skills needed for analyzing, and interpreting historical evidence in formulation and defense of an argument.

*Student enrollment in World History AP Prep is contingent upon completion of a summer assignment prior to the start of the course.

Global History & Geography 2a - 0203a

Half Year - 1/2 Credit

Grade 10 Fall

Prerequisite: Global H & G 1a and 1b

Third semester of a four-semester study of world history and geography. The fall semester begins with a snapshot of the world circa 1750 and continues to late 19th and early 20th century imperialism. Several concepts are woven throughout the course including industrialization, revolution, nationalism, and imperialism. The course emphasizes the unifying themes, social studies skills and practices, and key ideas and conceptual understandings as described in the New York State Social Studies Framework.

Global History & Geography 2b - 0203b

Half Year - 1/2 Credit

Grade 10 Spring

Prerequisite: Global H & G 1a, 1b, and 2a

Fourth semester of a four-semester study of world history and geography from World War I to the present. Several concepts are woven throughout the course including global conflict, decolonization, globalization and contemporary world issues. The course emphasizes the unifying themes, social studies skills and practices, and key ideas and conceptual understandings as described in the New York State Social Studies Framework. Students are required to take the Global History & Geography Regents Exam in June.

AP® World History - 0207

Full Year - 1 Credit

Grade 10

Prerequisite: Teacher recommendation and completion of World History AP Prep with an 80 or better average or Global History & Government I with a 90 or better average.

AP World History is offered to qualified students who wish to complete studies equivalent to an introductory world history course at the college level. The course continues the second half of world history from 1750 to the present day. AP World History encompasses the history of the five major geographical regions of the globe with special focus on historical developments and processes that cross multiple regions. The course focuses on developing students' abilities to think conceptually about world history and apply historical thinking skills as they learn about the past.

Students are expected to take the Advanced Placement World History Exam administered in May and are required to take the Global History & Geography Regents Exam in June. Student enrollment in AP World History is contingent upon completion of a summer assignment prior to the start of the course. **The AP Exam cost is \$96.** The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

United States History & Government - 0205

Full Year - 1 Credit Grade 11

Prerequisite: Global History & Geography 2 or AP World History.

Grade 11 begins with the colonial and constitutional foundations of the United States and explores the government structure and functions written in the Constitution. The development of the nation and the political, social, and economic factors that led to the challenges our nation faced are addressed. Industrialization, urbanization, and the accompanying problems are examined, along with America's emergence as a world power, the two world wars of the 20th century, the Cold War and the place of the United States in an increasingly globalized and interconnected world. The course emphasizes the unifying themes, social studies skills and practices, and key ideas and conceptual understandings as described in the New York State Social Studies Framework. Students are required to take the United States History & Government Regents Exam in June.

Full Year - 1 Credit

NOTE: This course has an extra period writing lab that meets every other day.

Grade 11

Prerequisite: Teacher recommendation and completion of AP World History with an 80 or better average or Global History & Government 2 with a 90 or better average.

AP United States History is offered to qualified students who wish to complete studies equivalent to an introductory two- semester college course in United States History. The course focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Several themes will provide areas of historical inquiry for investigation throughout the course. These themes require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. Students are expected to take the AP United States History Exam administered in May and are required to take the United States History & Government Regents Exam in June. Student enrollment in AP US History is contingent upon completion of a summer assignment prior to the start of the course.

The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

Economics - 0209

Half Year - 1/2 Credit

Grade 12

Prerequisite: None

This course is designed to be a culminating study focusing on New York State's learning standards on economics, the free enterprise system, and finance. The fundamental economic concepts of scarcity, productivity, supply and demand, and global interdependence will be examined. The role of the consumer, business, labor, and government will also be studied. Economics provides a unique opportunity for students to combine knowledge of the theoretical with practical, real-life decisions about employment options, consumer choices, and personal finance. Students are required to complete both a personal budget project and an investment project. Successful completion of this course is a NYS requirement for graduation.

Participation in Government - 0210

Half Year - 1/2 Credit

Grade 12

Prerequisite: None

This course is designed to be a culminating study focusing on New York State's learning standards on civics, citizenship, and government. Fundamental to Participation in Government is a course of study that has students define, analyze, and discuss contemporary issues and policies at the local, state, national, and international levels. The course reflects an issue-based approach to public policy, the tools and skills needed for community-based learning experiences, and the content knowledge needed for effective citizenship. Students are required to complete both community-based learning experiences and a public policy issue research paper. Successful completion of this course is a NYS requirement for graduation.

AP® United States Government & Politics - 0208

Full Year - 1 Credit

Grade 12

Prerequisite: Teacher recommendation and completion of AP U.S. History with an 80 or better average or U.S. History & Government with a 90 or better average.

This course will focus on a variety of topics, including the constitutional foundations of the American Government, the political culture of citizens, political parties, special interest groups and the mass media. The institutions of government, public policy, and citizens' rights will also be studied. The course demands upon students are equivalent to an introductory political science course at the college level. Students are expected to take the AP U.S. Government & Politics Exam administered in May.

The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

AP® Macroeconomics - 0214

Full Year - 1 Credit

NOTE: This course requires mathematic and algebraic problem solving skills.

Grade 12

Prerequisite: Teacher recommendation and completion of AP U.S. History with an 80 or better average or U.S. History & Government with a 90 or better average.

This course gives students a thorough understanding of the principles of economics that apply to decisions made by both consumers and producers within the economic system. Emphasis is placed on the nature and function of product markets and the role of the government in overseeing the economy. Students will also become familiar with measures of economic growth and international economics, including the impact of scarcity on the interdependence of nations. The course demands upon students are equivalent to an introductory economics course at the college level. Students are expected to take the AP Macroeconomics Exam administered in May.

The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per

The AP Exam cost is \$96. The Free/Reduced lunch cost is \$53. These costs are subject to change as per federal and state guidelines.

Psychology - 0211

Half Year - 1/2 Credit

Grade 12

Prerequisite: None

This elective course will present a thorough investigation of the study of human behavior with emphasis placed on the theories of personality and degrees of mental illness. Application is made to clinical problems as well as everyday life-stress situations. The course is implemented through class and small group instruction and individual and class projects.

Criminal Justice - 0212

Half Year - 1/2 Credit

Grade 12

Prerequisite: None

This elective course investigates the criminal justice process in the United States. Units of study include police work, the rights of the accused, the trial process, and the penal system. When possible, field trips to the Suffolk County Jail are arranged; and guest speakers from law enforcement and the court system are invited to speak on special topics.

Technology Education

Technology Education is the application of the latest scientific discoveries to improve the quality of people's daily lives. For everyone entering the job market, the ability to operate and comprehend today's technologies is critical. Technology Education has been established to introduce students to the latest technologies currently utilized by business and industry and to explore and develop skills through an active hands-on approach in a project oriented curriculum. Our projects are designed to incorporate learning, challenge students, and to be fun.

Incorporated in our program are many forms of computer technology and career exploration. Students will have the opportunity to learn career-oriented applications of technology, including Computer Aided Design, Computer Animation, Video Editing and more. Technology Education helps students develop skills, both interpersonal and job related, which are necessary for them to become active and productive members of the community. We do this by providing a positive learning environment where students are encouraged and expected to achieve their highest potential.

CTE DIPLOMA DESIGNATION

The *William Floyd High School Technology Department* provides students with the opportunity to obtain CTE Endorsements in Architectural Drafting and Engineering. Students in these programs learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college programs. Students can earn the distinction of CTE Endorsement by following one of the pathways listed below:

Architectural Drafting:

<u>Required Courses</u>: Personal Finance, Design & Drawing OR Geometry in Construction, Computer Aided Design, Advanced Computer Aided Design, Architectural Problems, and Architectural Design

Engineering:

<u>Required Courses</u>: Personal Finance, Design & Drawing OR Geometry in Construction, Computer Aided Design, Advanced Computer Aided Design, Principles of Engineering, and Robotics.

Recommended Courses: Precalculus and Physics

Must pass industry assessment in order to receive this endorsement on diploma, participate in work-based learning activities and complete a Career Plan and Employability Profile which is done throughout their required coursework.

In addition, the following technology classes may be used to satisfy general education graduation requirements:

Electricity and Applied Electronics	A third unit of Math or Science
Principles of Engineering	A third unit of Math or Science
Design and Drawing & Geometry	One unit of Fine Arts Requirement
in Construction	



TECHNOLOGY

DEPARTMENT CHAIR

Lee Cillo

The Technology Education Department provides students with the opportunity to earn a *5-credit sequence in Technology Education* as an alternative to the 3-credit requirement in LOTE for an *Advanced Regents Diploma*.

TECHNOLOGY EDUCATION 5-UNIT SEQUENCE

Required Courses:

Design and Drawing (1 unit) / OR Geometry in Construction (1 unit)

Electronics (1unit)

Personal Finance (1/2 unit) (See course description in Business section)



2.5 Additional Units of Technology Electives:

Advances Computer Aided Design (1/2 Credit)	Advanced Computer Aided Design (1/2 Credit)	Advanced Woodworking and Carpentry (1/2 Credit)
Architectural Design (1 Credit)	Architectural Problems (1 Credit)	Transportation Systems (1/2 Credit)
Advanced Transportation Systems (1/2 Credit)	Basic Woodworking (1/2 Credit)	CNC Communication Systems (1/2 Credit)
Computer Aided Design (1/2 Credit)	Computer Animation & Multimedia (1/2 Credit)	Design & Drawing (1 Credit)
D.I.Y. Home Improvements (1/2 Credit)	D.I.Y. Fixer Upper (1/2 Credit)	Electricity & Applied Electronics (1 Credit)
Geometry in Construction (1 Math Credit & 1 Tech Credit)	Media Production Technology (1/2 Credit)	Principles of Engineering (1 Credit)
Robotics(1/2 Credit)*		

**Please Note: Courses will be offered based on student enrollment.

Architectural Problems - 0802	Full Year - 1 Credit
	Grade 10 - 12
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Prerequisite: None

This course will introduce students to the interesting field of Architecture. Students will learn to draw site foundations, framing, floor plans, exterior elevations, and 3-D renderings using industry standard programs AutoCAD and Revit. Topics such as residential architecture, construction techniques and careers in the field of architecture are all topics that will be addressed. Designs will be conveyed through several mediums including manual drafting, computer-aided design, and model making. Students will have the opportunity to utilize advanced computer aided machines like Laser engraver, CNC mill, an0d 3-D printers to create working models and prototypes. Successful completion of this course is required for advancement to Architectural Design.

Students will have the option of taking this course for college credits through the Farmingdale State University in the High School Program.

Architectural Design - 0803

Full Year - 1 Credit Grade 10 - 12

Prerequisite: Architectural Problems

This course is for the student who wants to further his/her knowledge and skills in the field of Architecture. Areas of study will include the planning and design of single family dwellings and small commercial buildings, and additional current topics in architecture. The creative and technical skills needed in order to accomplish this will be taught through the completion of detailed, scaled drawings and models relating to all phases of construction. Upon successful completion of this course, students will have designed and drawn a complete, finished set of working drawings for a house of their choice.

Activities include:

- Sketching - Blueprinting - Floor plan design - Modeling - Exterior elevations

Basic Woodworking - 0826	Basic	Wood	working	- 0826
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Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This course explores the field of basic woodworking in a series of hands-on activities and projects. These activities will demonstrate processes through designing, planning, constructing and evaluating. In our applied technology laboratories, students will be challenged to participate in authentic learning tasks and start solving problems through instruction and self-directed inquiry. This course will help align students to become college and career ready. If you have a general interest in this particular field or if you have plans to join our CTE Carpentry program, this is a great course for you!

Advanced Woodworking & Carpentry - 0821

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: Basic Woodworking

One of the most important activities in a society is the making of useful products and buildings. You will study manufacturing and construction technology. Working individually or in a small group, students will organize and operate a manufacturing company to produce a product. In addition, students will learn the proper procedures and techniques necessary to be able to construct a small building to scale. This course is designed to provide students with hands-on experience and is taught in a lab-centered environment.

CNC Communications Systems - 0831

Half Year - 1/2 Credit

Grade 10 - 12

Co-requisite: Principles of Engineering and/or CAD and Advanced CAD

This course provides an exploration of the basics in machining, raw materials, use of hand tools, safety and maintenance. Communication between user software and machine code will be emphasized with topics that include an overview of measurement techniques, materials, safety, machine tool math, quality control and maintenance.

Computer Aided Design (CAD) - 0811

Half Year - 1/2 Credit

Grade 10 - 12

Recommended Coursework: Drawing and Design or Geometry in Construction

This course provides students the opportunity to explore the use of computer aided drafting tools used in a wide array of careers in the areas of design, architecture, engineering, interior design, etc. The students will learn the fundamentals of the industry-standard program, AutoCAD. The course focuses on teaching students traditional drafting techniques using the newest forms of technology.

All projects in this course revolve around developing problem-solving skills. Students will have the opportunity to be creative and create projects utilizing advanced computer aided machines like Laser engraver, CNC mill, and 3D printers.

Advanced Computer Aided Design (Advanced CAD) - 0812

Half Year - 1/2 Credit Grade 10 - 12

Prerequisite: Computer Aided Design

This is an advanced course in drafting principles and applications. This is an appropriate, advanced course for any student who may pursue a career in Architectural, Manufacturing or Engineering Technology. Students will construct various advanced 3-D and 2-D drawings using SolidWorks software. This is a state-of-the-art industrial, advanced technology course. This course is designed to help students develop visual and graphic communication skills while taking a problem solving approach to various projects. Students will have the opportunity to utilize advanced computer-aided machines like Laser engraver, CNC mill, and 3-D printers to create working models and prototypes.

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: None

This class introduces students to creating models and animations using 3D Max, which is the same program used by professionals to create special effects, computer generated animation, and video game graphics used in the entertainment industry today. The animations created will range from single-object models and expand to full-scene animation production. The students will be given specific objects to create and be encouraged to use their imaginations to make each animation more realistic. Throughout the course, students will develop their eye as an animator, as well as the essential skills for creating animations in a 3-D space perspective.

Advanced Computer Animation - 0815

Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: Computer Animation & Multimedia

This course is for students who have taken Computer Animation and Multimedia and wish to continue their studies in the field of Computer Animation. It will further the students' understanding of the artistic and technical elements associated with creating three-dimensional computer-generated imagery. Along with the reinforcement of the materials covered in the introductory class, the student will gain greater understanding of the complete animation production pipeline. This advanced animation course will teach students the techniques used by professionals in the field of Advanced 3D Computer-Generated Imagery. It will emphasize modeling techniques using patches, meshes, sub-divisions surfaces, non-uniform rational splines, and polygonal tools. Included will be advanced techniques in character animation, dynamic scene design, particle dynamics, inverse kinematics, texturing, lighting, and rendering.

Design & Drawing - 0814

Full Year - 1 Credit

Grade 9 - 12

Prerequisite: None

This course is required for CTE programs (Carpentry and Automotive) and is the foundation for all future technology/CTE courses. Prerequisite: None. This introductory technology class is the foundation for all technology classes. This class will prepare students with the necessary skills to progress further within the technology/CTE program. Students will learn a variety of mechanical drawing techniques. This class will focus on the production of exciting, real world products/ projects by introducing multiple graphic design software--for example, AutoCad, Google SketchUp, Photoshop, SolidWorks, and 3D StudioMax. Students are encouraged to innovate and design their projects using hand drawings and computers. **This course may be used to meet the one unit New York State Fine Arts requirement for graduation.**

D.I.Y. Home Improvements - 0832 Half Year - 1/2 Credit Grade 9 - 12

Prerequisite: None

Do it yourself (DIY) is the method of building, modifying, or repairing things without the direct aid of experts or professionals. Students will have the opportunity to bring something from home they would like to refurbish or repair. Students will also learn basic home maintenance and repair.

D.I.Y. Fixer Upper - 0833	Half Year - 1/2 Credit Grade 9 - 12

Prerequisite: D.I.Y.: Home Improvements

In level II, students will work on individual projects as well as have the opportunity to work on refurbishing projects for staff/community. Projects will include indoor and outdoor design.

Electricity and Applied Electronics - 0805	Full Year - 1 Credit
	Grade 10 - 12

Prerequisite: None

Electricity and Applied Electronics is a one-year course which explores the field of basic electricity and applied electronics through a series of activities. These activities will demonstrate processes of circuit design, circuit layouts, fabrications, basic troubleshooting, residential wiring, and basic automotive electricity. In our applied technology laboratories, students will be challenged to participate in authentic learning tasks and start solving problems through instruction and self- directed inquiry. This course will help align students to become college-and career-ready. If you have a general interest in this particular field or if you have plans to join one of our CTE programs, this is a great course for you! (NOT A COMPUTER COURSE) **This course may be used as a third unit of Math or Science.**

Geometry in Construction – 0814B	Full Year - 2 Credits (1 Technology/1Math)
	Grade 9

Prerequisite: Algebra I

In this Geometry course you will never ask, "Why do I have to learn this?" or "When am I ever going to use this?" Geometry comes alive with real world, hands on applications. You will learn Regents Geometry through woodworking and construction based projects. You will also be exposed to construction careers such as engineering, architecture, carpentry and other tradesmen careers. Learn safety, problem solving, tool usage, and drawing interpretations. Students must be enrolled in Geometry as well as the Technology portion. Classes are offered in a block session. Students will earn both credits. Enrollment is limited. This course satisfies NYS Fine Arts Requirement. This course is subject to enrollment and budget constraints.

Media Production Technology - 0807	Half Year – 1/2 Credit Grade 10 – 12
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Prerequisite: None

Media production is a hands-on, active learning class which focuses on the design and production of a variety of media formats. The course is designed to provide students with the basic skills necessary to plan, produce, record, and edit presentations, including video productions, A/V presentations, and web pages. Students will have the opportunity to work independently and in small groups.

Activities included:

- Digital Video Production Video Special Effects Web Page Animation
- Digital Photography Multimedia Presentations

Principles of Engineering - 0817 Full Year - 1 Credit Grade 10 - 12

Suggested Coursework: Algebra I and Physics

What is an engineer? What do they do? How does an engineer solve design problems? Would I like to be an engineer? These questions are important to a student considering engineering as a possible career. Principles of Engineering is an activities-oriented course designed to provide students with the answers to those questions and more. Students will be introduced to the principles, skills, techniques, and tools used by those in the field of engineering. Principles of Engineering is designed to give students a basic understanding of physics and help them apply it to real-life situations. Throughout the course, the student will investigate the principles of engineering. They will build, evaluate, measure, monitor, and use models to simulate real-life engineering problems. Principles of Engineering will also allow students to integrate and apply math and science with technology to solve real world problems. Activities to include: robotics, mouse-trap cars, pneumatic arms, designs using Solid Works, and Auto Cad. **This course may be used as a third unit of Math or Science.**

Students will have the option of taking this course for college credits through the Farmingdale State University in the High School Program.

Robotics - 0830	Half Year - 1/2 Credit
	Grade 10 - 12

Corequisite: Principles of Engineering and/or CAD and Advanced CAD.

This course is designed to introduce students to the basics of VEX Robotics platform and the Arduino Platform as it teaches science, technology, engineering, and mathematics (STEM). Students will learn how to use feedback from sensors, applied mathematics and measurement to program their robot to navigate in its environment. Students will have the opportunity to complete multiple challenges involving guided research, problem solving, working in teams, and design documentation by means of an Engineer's Notebook.

Students will have the option of taking this course for college credits through the Farmingdale State University in the High School Program.

Tran	nsportation Systems - 0824	Half Year – 1/2 Credit Grade 10 – 12
		Grade 10 - 12

Prerequisite: None

In this course students will learn about the basics of land, marine, and aerospace engines and about the Transportation Systems involved in each of the three areas. Students will disassemble and rebuild a small gasoline engine in order to gain an understanding of engine operation. Systems such as power, cooling, suspension, braking, electrical, ignition, drive train and more will be covered. A hands-on, term project in the marine and/or aerospace topics will help reinforce the advanced systems needed for flight and/or propulsion. Engine maintenance, repair and tune up will be performed on your engine. Proper and safe use of related tools and equipment will be stressed.

Some topics in this course include:

- -Engine Operation 2 & 4 Cycle -Steam Engines -Diesel Engines -Principles of Flight
- -Ignition Systems -Rotary Engines -Aerospace Engines -Railroad Systems
- -Troubleshooting Engine Problems -Marine Engines -Types of Boat Hulls -Consumer Information

Advanced Tr	ransportation S	vstems - 0827
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Half Year - 1/2 Credit

Grade 10 - 12

Prerequisite: Transportation Systems OR Power Sports & Small Engines

This class covers advanced topics relating to land, marine, and air transportation, with major emphasis on the automobiles system functions. Systems such as power, cooling, suspension, braking, electrical, ignition, drive train and more will be covered. A hands-on term project in the marine and/or aerospace topics will help reinforce the advanced systems needed for flight and/or propulsion.



WILLIAM FLOYD INTERSCHOLASTIC ATHLETICS

FALL SPORTS	WINTER SPORTS	SPRING SPORTS
Varsity Football	Varsity Girls Basketball	Varsity Baseball
JV Football	JV Girls Basketball	JV Baseball
JV-9 Football	Varsity Boys Basketball	Varsity Boys Lacrosse
Varsity Field Hockey	JV Boys Basketball	JV Boys Lacrosse
JV Field Hockey	Varsity Wrestling	Varsity Girls Lacrosse
Varsity Girls Soccer	JV Wrestling	JV Girls Lacrosse
JV Girls Soccer	Varsity Boys Bowling	Varsity Softball
Varsity Boys Soccer	Varsity Girls Track	JV Softball
JV Boys Soccer	Varsity Boys Track	Varsity Girls Spring Track
Varsity Girls Gymnastics	Varsity Cheerleading	Varsity Boys Spring Track
Varsity Boys Cross Country	JV Cheerleading	Varsity Boys Tennis
	Varsity Girls Cross	
	Country	
	Varsity Girls Tennis	
	JV Girls Tennis	
	Varsity Cheerleading	
	JV Cheerleading	
	JV Field Hockey	
	JV Field Hockey	
	Varsity Girls Swimming	
	Varsity Boys Golf	
	Varsity Girls Volleyball	
	JV Girls Volleyball	

