



West Islip High School

Course Book

2023 – 2024



An International Baccalaureate World School



**West Islip High School
2023-2024 Course Book**

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INTRODUCTION

Welcome to the West Islip Course Selection Guide for the 2023-2024 school year. Students in West Islip High School have the opportunity to select courses from a wide variety of subject areas that reflect their unique interests and talents. This guide has been created so that each student can, with the help of parents, teachers, and school counselors, select a course of study which will enable the student to make the most of the opportunities available at West Islip High School. Please review carefully before selecting a tentative program in preparation for your scheduling conference with your counselor.

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WEST ISLIP HIGH SCHOOL GRADUATION REQUIREMENTS

Content Area	Local Diploma	Regents Diploma	Regents Diploma with Advanced Designation
English	4	4	4
Social Studies	4	4	4
Mathematics	4	4	4
Science	3	3	3
World Language	1*	1	3**
Art/Music	1	1	1
Health	.5	.5	.5
Physical Education	2	2	2
Electives	2.5	2.5	.5
TOTAL CREDITS	22	22	22

**Students with disabilities may be exempt from the World Language requirement if so indicated on their IEP.*

***Students may substitute a designated five-credit sequence of courses in Art, Business, Music, or Technology for the three-year sequence of World Language courses.*

***Multiple Pathways to Graduation (4+1):** Students must pass four required assessments: Math, English, Science, and Social Studies. Successful completion of an additional pathway assessment in either STEM, Humanities, Arts, Biliteracy, Career and Technical Education, or CDOS (see below) may be used to satisfy the requirement of the fifth Regents Exam. Students wishing to explore additional pathways to graduation must speak to their school counselor.

CDOS: Career Development & Occupational Studies commencement credential – recognizes students’ preparation for entry-level work through mastery of the CDOS learning standards. Students may receive this credential upon completion of a career plan, employability profile, and 216 hours of career preparation experiences, including at least 54 hours of school supported work-based learning. Students wishing to explore the CDOS credential must speak to their school counselor.

Honors Distinction on Regents Diplomas:

- *Regents Diploma with Honors or Regents Diploma with Advanced Designation with Honors* is awarded if the overall average required Regents exams is **90% or higher**.
- *Mastery in Math* is awarded if the scores on three mathematics Regents exams are **85% or higher**.
- *Mastery in Science* is awarded if the scores on three science Regents exams are **85% or higher**.

Community & School Involvement Program (CSIP) Requirement

This is a local requirement for students entering 9th grade beginning September 2018. CSIP promotes extracurricular opportunities and encourages students to become creative, active participants in our school, community, and society. West Islip High School students are required to earn 10 units of community involvement each year in grades 9 through 12 for a total of 25 points by the end of their senior year.



Assessment Requirements for Graduation

Regents Diploma Required Regents Exams 4-5 Required Assessments* Passing Score = 65 for Regents Exams	Regents Diploma with Advanced Designation Required Regents Exams 8-9 Required Assessments* Passing Score = 65 for Regents Exams
English Language Arts Regents	English Language Arts Regents
One Mathematics exam: Algebra or Geometry or Algebra II	Three Mathematics Exams: Algebra and Geometry and Algebra II
Global History and Geography II Regents	Global History and Geography II Regents
U.S. History Regents	U.S. History Regents
One Science Regents Exam: Earth Science or Living Environment or Chemistry or Physics	Two Science Regents Exams: Living Environment and Earth Science or Chemistry or Physics
World Language Regional Assessment FLACS Checkpoint A Exam	World Language Regional Assessment FLACS Checkpoint B Exam

Assessment Requirements for Local Diploma (for students qualify)

Regents Exam or passing score on a department approved alternate:	# of exams	Passing Score
English Language Arts Regents	1	55*^
Math	1	55*^
Science	1	55*^
Social Studies	1	55*^
Pathway	1 or CDOS**	55* ^ (If Regents exam)

*Compensatory Safety Net: Scores of 45-54 on any required Regents exam (except ELA and Mathematics) can be compensated by a score of 65 or above on another required Regents exam including ELA and mathematics.

^Students with a disability who are unable to obtain a passing score on these examinations may seek a local diploma by Superintendent's Determination.

**CDOS: Career Development & Occupational Studies commencement credential – recognizes students' preparation for entry-level work through mastery of the CDOS learning standards. Students may receive this credential upon completion of a career plan, employability profile, and 216 hours of career preparation experiences, including at least 54 hours of school supported work-based learning.



SCHOOL COUNSELING SERVICES

Office hours 7:00 a.m. – 3:00 p.m.

(631) 504-5830

West Islip School Counseling Mission Statement

The West Islip Counseling Department is committed to creating a safe and positive environment where students will receive academic, social, and emotional support to foster their abilities to achieve their highest potential. West Islip School Counselors promote lifelong success by implementing strategies to enhance academic growth, healthy decision-making, and personal and career achievements. School Counselors support students in developing awareness and sensitivity of individual differences to become interconnected within the global community.

The West Islip School District offers a comprehensive program of school counseling services to all students, their parents, and members of the school community. At West Islip High School, school counselors guide students through all phases of the secondary school experience. Assistance in decision-making and problem solving helps students realize their personal, academic and social potential. Services also include post-secondary educational planning, course scheduling information, and group instruction. The counseling program utilizes a developmental approach to promote student growth and success.

Counseling services are diversified and address the special needs of each grade level. Keeping individual students in mind, every effort is made to maintain program continuity. Each student is assigned to a school counselor who works with the student and monitors his/her progress throughout the school year. Whenever possible, student conferences are scheduled during lunch or study hall to avoid interruption of class work.

The counseling staff is also available for the following:

- Counseling to individuals and small groups of students
- Providing referrals for community service programs and organizations
- Coordinating parent-teacher-student conferences
- Assisting in the preparation of referrals for psychological evaluation and other special services
- Interpreting standardized test scores
- Administering interest inventories
- Providing vocational and career counseling
- Planning an annual review of each student's progress and future plans
- Introducing new students and their families to the school and community
- Assisting students in maintaining the appropriate academic schedule
- Providing a comprehensive program for post-secondary planning

Parents are encouraged to call the Counseling Office to schedule an appointment with their child's counselor.

Transcripts

All courses taken, including summer school or repeated courses, will be listed on a student's transcript. Transcripts for college purposes will include only the highest Regents result if taken multiple times.

Transfer Students

To be considered an Academic Leader, a graduating senior must have spent at least four (4) semesters at West Islip High School. A grade conversion chart will be applied to grades of students who transfer from a school which uses an alternate grading method.

CLASS RANKING (for students entering West Islip High School in September 2017 and thereafter)

Beginning with the entering ninth grade class of 2017-2018, all courses will be weighted equally to promote a learning environment focused on substantive outcomes, mastering new skills, and exploring new ideas. At the end of seven semesters, the grade point averages for seniors will be calculated. Ten students will be chosen based upon their academic performance from which two Academic Leaders will be selected by the Academic Leader/Honored Speaker Selection Committee.

The following criteria will be used by the committee to determine the Academic Leaders: • Academic record • Extra-curricular activities • Honor Societies • Community Service • Disciplinary Record • Attendance Record • Enrollment History • Interview.

WEST ISLIP HIGH SCHOOL SCHEDULING PROCESS

- Students will make course request selections with their school counselor and parents will approve selections within five (5) days of their scheduling conference.
- Once the course request window has closed, no changes will be permitted until schedules become available.
- No schedule changes are permitted for the first five (5) school days each school year and students are expected to follow their schedule of requested courses during this time.
- Schedule changes will be allowed after day 5 of school for acceptable reasons. We are unable to accommodate teacher requests, specific periods, friend requests, specific lunch periods, late arrival, or early dismissal, or other reasons determined by administration.
- No course additions will be permitted after the 10th day of school.
- The deadline for level changes and dropping full-year courses is the last day of Quarter 1. For Semester courses, the deadline is the conclusion of the five (5) week mark in each semester.
- 12th grade students may receive early release if they have fulfilled graduation requirements, are in good standing, and provide evidence of employment, internships, or training that justifies early release.
- All 12th grade students must maintain a course load of 6.5 credits plus physical education.
- **Any classes dropped after the drop deadline will result in either a “Withdrawn Passing” (WP) or a “Withdrawn Failing” (WF) appearing on the student’s transcript. Dropping a class after five weeks will result in an automatic “Withdrawn Failing.” There will be an opportunity for a student to appeal should extenuating circumstances exist.** The Principal will make the final determination. This policy does not apply to changing academic levels for the same courses (e.g. Chemistry H → Chemistry R).

***Please note that all courses will be offered subject to minimum enrollment and adequate funding for the 2023-2024 school year.**

WEST ISLIP SCHOOL DISTRICT ACADEMIC INTEGRITY POLICY

West Islip School District is committed to maximizing the success of each student’s learning and personal development so he or she becomes a successful part of society. Academic integrity is a set of values and skills that promote personal integrity and good practice in teaching, learning and assessment. To fulfill these expectations, students must be prepared to accept responsibility for their actions.

Academic integrity is influenced and shaped by a variety of factors including peer pressure, culture, parental expectations, role modeling and taught skills. Academic dishonesty is an action intended to obtain or assist in obtaining credit for work which is not one’s own. Examples of a breach of academic integrity include but are not limited to the following:

- Plagiarism - the representation of the ideas or work of another person as the candidate’s own. A student may be academically dishonest through malicious or negligent plagiarism.
- Collusion – supporting malpractice by another candidate, as in allowing one’s work to be copied or submitted for assessment by another
- Duplicating work to meet the requirements of more than one class
- Cheating
- Fabricating data for an assignment
- Taking unauthorized material or electronic devices into the examination room
- Disrupting an examination by an act of misconduct, such as distracting another student
- Exchanging, supporting or attempting to support, the passing on of information that is or could be related to the examination
- Failing to comply with the instructions of the teacher or other members of the school’s staff responsible for the administration of the examination
- Impersonating another candidate
- Stealing examination papers
- Any other behavior that gains an unfair advantage for a student of that affects the results of another candidate

Consequences for academic dishonesty can be found in the Code of Conduct.

WEST ISLIP HIGH SCHOOL ATTENDANCE POLICY

Philosophy Statement

New York State Education Law requires that the students enrolled in West Islip School District attend school every school day. The educational program offered by this District is predicated upon the presence of the student and requires continuity of instruction and classroom participation. The regular contact of students with one another in the classroom and their participation in a well-planned instructional activity under the tutelage of a competent teacher are vital to this purpose. Absences have a highly adverse effect on the student as well as the entire educational program. Therefore, the Board of Education urges all parents to make every effort for their children to be in attendance. Refer to the Student Handbook for the complete Board of Education Policy and Regulations.

Attendance & Course Credit

Attendance shall be taken each instructional period, commensurate with rules established by the State Education Department. The course teacher shall make entries into the established system to register attendance and include all absences, tardiness and early departures.

Regular attendance is expected in all classes, and is considered essential for student success for purposes of this policy.

The Board of Education recognizes the important relationship between class attendance and student performance. Consequently, a student's final grade may be based on classroom participation as well as student performance on homework, tests, papers, projects, etc. Classroom participation means that a student is in class and prepared to work.

Any student who absents himself/herself from more than eighteen classes in a full year course, nine classes in a half year or alternating day course, or twenty-seven classes in a lab course may not receive credit for the course. However, if a student earns a passing grade, credit will not be denied for the course(s). (Note: For seniors, loss of credit could jeopardize graduation.)

Transfers and students re-enrolling after having left school will be expected to attend a minimum of 85% of the scheduled class meetings during their time of enrollment as a condition for course credit pursuant to this policy. Absences will be prorated according to the possible number of class meetings pursuant to this policy.

Students will be considered in attendance if the student is:

- a) Physically present in the classroom or working under the direction of the classroom teacher during the class scheduled meeting time; or
- b) Working pursuant to approved independent study program; or
- c) Receiving approved alternative/home instruction.

BOCES ATTENDANCE:

Loss of credit in a BOCES program will be determined by the attendance policy established by Eastern Suffolk BOCES. Students in West Islip must have no more than (ten) total absences in order to continue with BOCES after the first year.

APPEALS PROCESS:

Should a parent/guardian believe that extenuating circumstances exist, an appeal in regard to loss of course credit can be made directly to the building principal.

WEST ISLIP HIGH SCHOOL HONOR SOCIETIES

The following Honor Societies are offered to students at West Islip High School. Interested students should speak to their classroom teachers for information on the following:

Art Honor Society
Business Honor Society (DECA)
National English Honor Society (NEHS)
National Honor Society

National Math Honor Society
Science Honor Society
Tri-M Music Honor Society
World Language Honor Society

Applications will be reviewed by the Faculty Review Committee who have final determination over induction of new members.

[For more information about Honor Societies at WIHS, click here.](#)

PRINCIPAL'S LIST AND HONOR ROLL

At the end of quarters 1, 2, and 3, students who meet the required GPA are placed on either the Principal's List or the Honor Roll. For the Principal's List, students must earn a GPA (Term Grade) of 90 or higher for each quarter. For the Honor Roll, students must earn a GPA (Term Grade) of 85 to 89.99. *Notes: Physical Education is not calculated in the GPA. GPAs are not rounded up to attain Principal's List and Honor Roll status.

WEST ISLIP PROGRAM & ACADEMY OVERVIEW

ADVANCED PLACEMENT

The Advanced Placement (AP) program offers college level courses to students for a more challenging classroom experience, thereby better preparing them for college. Students who enroll in AP courses are expected to take AP examinations. Pursuant to Board Policy 8242 and Regulation 8242-R, students who choose not to take the related Advanced Placement examination for a course will have their final transcript amended to read "no exam taken." Examinations are prepared and graded by the Advanced Placement Program, a division of the College Entrance Examination Board in Princeton, New Jersey. For the 2023-2024 academic year, the District will cover the costs for all AP exams, pending budget approval.

Colleges vary in their policies concerning the granting of college credit or placement for specific grades earned on AP examinations. A student must check the college catalog to determine the policy of any specific college.

COURSE	GRADES	PAGE
ADVANCED PLACEMENT ART AND DESIGN (0760)	11 or 12	15
ADVANCED PLACEMENT BIOLOGY (0434)	11 or 12	43
ADVANCED PLACEMENT CALCULUS BC (0381)	12	36
ADVANCED PLACEMENT CALCULUS AB (0358)	12	36
ADVANCED PLACEMENT CHEMISTRY (0442)	11 or 12	43
ADVANCED PLACEMENT COMPUTER SCIENCE A (0360)	11 or 12	36
ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (0359)	9-12	36
ADVANCED PLACEMENT EUROPEAN HISTORY (0262)	10	49
ADVANCED PLACEMENT GOVERNMENT AND POLITICS (0252)	12	49
ADVANCED PLACEMENT LANGUAGE AND COMPOSITION (0128)	12	28
ADVANCED PLACEMENT LITERATURE AND COMPOSITION (0179)	11	28

ADVANCED PLACEMENT MACRO/MICRO ECONOMICS (0247)	12	49
ADVANCED PLACEMENT MUSIC THEORY (0905)	10-12	40
ADVANCED PLACEMENT PHYSICS 1 (0436)	11 or 12	43
ADVANCED PLACEMENT PHYSICS 2 (0440)	12	44
ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE (0584)	12	55
ADVANCED PLACEMENT STATISTICS (0398)	11 or 12	36

CAREER AND TECHNICAL EDUCATION (CTE)

Career and Technical Education (CTE) offers our students an opportunity to apply academic concepts to real-world situations; prepare for industry-based assessments or certifications; and the opportunity to earn college credit or advanced standing while still in high school; and work-based learning opportunities where students demonstrate mastery of skills essential in the workplace.

As of 2015, students in approved programs have had the opportunity to make use of a CTE graduation pathway. To use the CTE 4 + 1 graduation pathway option, students must successfully complete an approved program (including a 3-part technical skills assessment). CTE includes courses in the following content areas: Agricultural education, Business & Marketing education, Family & Consumer Sciences education, Health Occupations education, Technology education; and Trade, Technical & Industrial education. CTE Courses available at West Islip High School are listed below by department.

For more information about our CTE programs, see the presentation here: [NYS CTE Program Presentation](#)

CISCO NETWORKING ACADEMY

Cisco provides coursework for a complete range of basic through advanced networking concepts - from making cables, to such complex concepts as medium to large network design and troubleshooting.

The Cisco Networking Academy is a two year program offered at West Islip High School. The program is designed to provide each student with the skills needed to design, build, and maintain small to medium-size networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer-networking field. Upon completion of the Academy courses students will be prepared to take the Cisco Certified Network Associate (CCNA) Certification Exam

DUAL COLLEGE ENROLLMENT

West Islip High School enters into articulation agreements with numerous colleges to offer our students an opportunity to experience college level curriculum and potentially earn college credit. Though the fee associated with earning college credit varies, the cost is significantly less than it would be as a traditionally matriculated college student. Below is an overview of our dual enrollment courses:

COURSE	COLLEGE	COLLEGE CREDITS
AMERICAN SIGN LANGUAGE 111/112 (0532)	Adelphi University	6 Credits
CHILD DEVELOPMENT (0828)	Adelphi University	3 Credits
COLLEGE ACCOUNTING (0634)	LIU - Post Campus	3 Credits
COLLEGE BUSINESS LAW (0610)	Farmingdale State College	3 Credits
COLLEGE MARKETING (0654)	LIU - Post Campus	3 Credits
COLLEGE SPORTS MANAGEMENT (0659)	Farmingdale State College	3 Credits
DIGITAL PHOTOGRAPHY I (1263) & II (1267)	Suffolk County Community College	3 Credits*
GRAPHIC DESIGN I (0757) & II (0758)	Suffolk County Community College	3 Credits**

PUBLIC SPEAKING, DRAMA AND DEBATE (0166)	Suffolk County Community College	3 Credits
SPANISH 111/112 (0582)	Adelphi University	6 Credits
VARIOUS COURSES ^{***}	Syracuse University	Varies ^{***}
VIDEO PRODUCTION (1265)	Suffolk County Community College	3 Credits
VIRTUAL ENTERPRISE (0697)	LIU - Post Campus	6 Credits

^{*} Students must complete both Digital Photography I & II in order to be eligible for 3 credits from SCCC

^{**} Students must complete both Graphic Design I and II in the same year to earn 3 SCCC credits

^{***} For detailed information on our Syracuse University Project Advance Courses, please refer to the subsequent section titled: Syracuse University Project Advance (SUPA)

SYRACUSE UNIVERSITY PROJECT ADVANCE (SUPA)

This program offers qualified high school students the opportunity to enroll in challenging Syracuse University freshman courses during their senior year of high school. Control of the academic aspects of PROJECT ADVANCE courses, including course syllabi, textbooks, assignments, grading practices, and like matter, resides with the university faculty. *A student tuition cost of \$345 for this three-credit course, or \$115 per credit, is required during 2023-2024, but is subject to change.*

Established in 1972, Syracuse University Project Advance is a premier concurrent enrollment program and one of the oldest and largest programs of its kind in the United States. Through our program, qualified high school students have the opportunity to take Syracuse University courses during their regular high school day and earn college credit.

There are numerous benefits to enrolling in a Syracuse University course while in high school. By experiencing the rigor and expectations of university coursework, students can prepare for the academic challenges of college while receiving significant savings on tuition. Additionally, students can develop the academic skills that will help students succeed in college and have the opportunity to explore stimulating classes that may inspire a new college or career path. The vast majority of students also can transfer their course credits to the college of their choice.

For more information about the SUPA program, visit <https://supa.syr.edu/>.

COURSE	DEPARTMENT	CREDITS
AMERICAN HISTORY 101/102 (0225)	Social Studies	6 Credits
ECONOMICS 203 (0242)	Social Studies	3 Credits
ENG 181 - CLASS AND LITERARY TEXTS (0182)	English	3 Credits
WRT 105 – PRACTICES OF ACADEMIC WRITING (0180)	English	3 Credits

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

The International Baccalaureate (IB) Diploma Programme is a rigorous, demanding course of studies which offers 11th and 12th grade students the opportunity to earn the IB Diploma. The program is offered in over 2000 public and private schools located in 125 countries around the world. All courses are taught at the university level and the program is widely recognized for preparing students well for success in college and beyond.

To earn the IB Diploma, students must:

- Complete and test in six IB subject areas; 3HL/3SL
- Write an extended essay which summarizes the student's independent research in an area they choose, guided by a faculty member;
- Complete ongoing and meaningful creativity, action and service (CAS); and
- Complete a course in independent, critical thinking called the Theory of Knowledge.

This program of study offers an approach to learning, integrated across disciplines, with an emphasis on meeting the challenges of living in a global, technological society. IB Higher Level (HL) courses require intensive study over two years and generally reflect

a student's areas of interest and academic strength. IB Standard Level (SL) courses are less demanding but are still on par with introductory college level courses.

Successful students are most often:

- Willing to challenge themselves academically and intellectually
- Able to speak and write the English language clearly and effectively
- Capable of analytical, critical thinking
- Open and tolerant of new ideas, cultures and beliefs
- Willing to participate in school and community activities
- Able to develop and use information effectively
- Above all, be willing to deal with the precision of thought and pace of a highly demanding academic curriculum

IB General Diploma Program Requirements

1. All Diploma Program candidates must study and be examined in six subject areas during their senior, and in some cases, their junior year. A minimum of three subjects must be at the Higher Level (HL).
2. All Higher Level (HL) and Standard Level (SL) courses are graded on a scale of 1–7 points. In order to earn the IB Diploma, students must earn a minimum total score of 24 points. Students may earn up to an additional 3 points based upon the IB's assessment of the Theory of Knowledge Essay and their Extended Essay. Diplomas are awarded in July, after students have received their high school diplomas.
3. All Diploma candidates must complete the Extended Essay satisfactorily. This essay involves an in-depth study of a single topic of approximately 4,000 words in length. It must be started in the junior year and ready for final revision by the beginning of the senior year. This is an independent assignment, guided by a faculty member who serves as the student's mentor over the course of the project. The Extended Essay allows students to specialize in a specific subject area and provides valuable experience performing university level research.
4. All Diploma candidates must satisfactorily complete ongoing and meaningful CAS (Community, Action and Service). This consists of time devoted to activities involving communities as local as West Islip or as global as the entire planet. Time devoted to athletic pursuits may be used to satisfy the "action" requirements of the program, subject to the approval of the West Islip CAS Coordinator. CAS hours may begin at the end of the student's sophomore year but must be completed by December of the student's senior year. The West Islip CAS Coordinator must approve student hours prior to the commencement of each activity.
5. All Diploma Candidates must complete the Theory of Knowledge course satisfactorily. This course is an internally and externally assessed interdisciplinary component which explores different conceptions of knowledge found across various subject areas.
6. Complete all IB requirements as per IB handbook.

***For the 2023-24 academic year, the District will cover the costs for the International Baccalaureate Programme, pending budget approval.**

***Students who enroll in IB courses are expected to take the IB examinations. Pursuant to Board Policy 8242 and Regulation 8242-R, students who choose not to take the related IB examination for a course will have their final transcript amended to read "no exam taken."**

West Islip School District International Baccalaureate Diploma Programme Course Offerings

COURSE	GRADE	COURSE LENGTH	CREDIT
IB THEORY OF KNOWLEDGE	11 & 12	2 years	.5/year
IB BUSINESS AND MANAGEMENT SL	11 or 12	1 year	1
IB BUSINESS AND MANAGEMENT HL 1 & 2	11 & 12	2 years	2
IB ENGLISH HL 1 & 2	11 & 12	2 years	2
IB FILM SL	11 or 12	1 year	1
IB LITERATURE SL	11 or 12	1 year	1
IB MATHEMATICS ANALYSIS & APPROACHES	11 or 12	1 year	1
IB MATHEMATICS APPLICATIONS & INTERPRETATIONS	11 or 12	1 year	1

IB MUSIC SL	11 or 12	1 year	1
IB MUSIC HL	11 & 12	2 years	2
IB CHEMISTRY SL	11 or 12	1 year	1
IB BIOLOGY HL 1 & 2	11 & 12	2 years	2
IB ENVIRONMENTAL SYSTEMS SL	11 or 12	1 year	1
IB HISTORY OF THE AMERICAS HL 1 & 2	11 & 12	2 years	2
IB PSYCHOLOGY SL 1 & 2	11 & 12	2 years	2
IB SPANISH SL 1 & 2	11 & 12	2 years	2
IB SPANISH HL 1 & 2	11 & 12	2 years	2
IB ITALIAN SL 1 & 2	11 & 12	2 years	2
IB ITALIAN HL 1 & 2	11 & 12	2 years	2
IB SPORTS AND EXERCISE	11 or 12	1 year	1
IB PHYSICS SL	11 or 12	1 year	1

[Click here for detailed IB course descriptions](#)

IB THEORY OF KNOWLEDGE (IB001/IB002)

2 Years – Credit - .5/year

Prerequisite: The student must be enrolled in the IB Diploma program.

The Theory of Knowledge course is one of the three core requirements for obtaining the International Baccalaureate Diploma. It is offered every other day over the course of the student's junior and senior years. The purpose of the course is to provide a coherent view of knowledge. It draws upon information from all of the courses and activities the student pursues as part of the IB Diploma Program. Enrollment in this course is limited to IB Diploma candidates.

The central question this course seeks to answer is "How do we know what we know?" By examining the foundations of their knowledge base critically, it is hoped students will learn to distinguish warranted true beliefs from opinions unsupported by fact. The overall goal of the course is to enable students to become self-sufficient, independently reasoning adults. We believe a solid understanding of knowledge issues, along with their relevance and proper applications, is indispensable to achieving this goal.

The organization of the course will center around three major topics:

1. *knowledge issues*, such as the sources of knowledge and the means of justifying claims to knowledge;
2. *ways of knowing*, such as the validity of the senses, the limits (if any) of reason, and the role of the emotions (if any) in the acquisition and validation of knowledge; and
3. *areas of knowledge*, with a focus specifically upon principles which unite subjects.

A theme which will flow through the course will be that of integration. This will be true particularly for the third topic, *areas of knowledge*, but it will be stressed in *knowledge issues* and *ways of knowing* as well. The course will emphasize certain fundamental questions which cut across all areas of knowledge and which can serve as integrating themes for IB students. It is hoped students will increase their knowledge and overall retention by using these integrating themes as a classificatory schema.

IB external assessment will consist of a taped presentation made by the student regarding an issue concerning the nature and validity of knowledge, along with a paper of approximately 1,600 words which explores a knowledge issue in depth. West Islip assessment will consist of journal evaluations, tests, papers and a presentation.

WIHS MUSIC CONSERVATORY PROGRAM

The West Islip High School Music Conservatory program is designed to recognize student commitment and achievement in musical performance and includes academic, leadership, and performance-based components connected to our music curriculum. This program will afford students the opportunity to gain the necessary skills in preparing for a career in music and/or entering a music college or conservatory.

To complete the four year program, 9th Grade students must register for:

MUSIC THEORY I & PERFORMANCE MUSIC GROUP (Band, Chorus or Orchestra)

Prerequisites for 9th Grade registration:

- Vocal or instrumental experience
- Strong interest in developing compositional skills

- Completed and/or scheduled to perform a NYSSMA solo at Level 3 or higher
- Permission of the instructor

PROGRAM OVERVIEW:

9th Grade – Music Theory I and enrollment in band, chorus or orchestra.

10th Grade – AP Music Theory and enrollment in band, chorus or orchestra.

11th Grade – IB Higher Level (HL) and enrollment in band, chorus or orchestra or IB Standard Level (SL) and enrollment in band, chorus or orchestra Performance Group Music and Music Theory I and are prerequisites for the IB Music Program.

12th Grade – IB Music HL or Music Technology and enrollment in band, chorus or orchestra.

WEST ISLIP SCHOOL DISTRICT STEM ACADEMY

[Link to STEM Academy Pathway Graphic](#)

Vision

Inspire future STEM leaders by preparing students to think critically and work collaboratively in Science, Technology, Engineering, and Mathematics.

Mission

STEM Academy classes will foster innovation through a cooperative culture and rigorous course work in STEM fields. Students will develop a depth of learning and a strong work ethic in highly challenging courses that will accelerate their learning in STEM. Through a student driven and interdisciplinary learning environment, STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science.

SCIENCE PATHWAY

Science Elective

Course descriptions can be found in the Science Section of the course catalog.

TECHNOLOGY/ENGINEERING PATHWAY

Engineering Elective

Course descriptions can be found in the Engineering Technology Section of the course catalog.

MATHEMATICS PATHWAY

AP Statistics or Everyday Statistics

Course descriptions can be found in the Mathematics Section of the course catalog.

COMPUTER SCIENCE PATHWAY

AP Computer Science A or Java

Course descriptions can be found in the Mathematics Section of the course catalog.

More information is available on the district website and in the Engineering Technology, Mathematics, and Science sections of this document.

ART DEPARTMENT

ADVANCED PLACEMENT ART AND DESIGN (0760)

Year – Credit 1

Prerequisite: Studio in Art, Drawing and Painting I and II. Oil Painting and Water Color are strongly recommended.

The AP Program in Studio Art is intended for highly motivated students who are seriously interested in the study of art. Students should be made aware that AP work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested.

ADVERTISING DESIGN I (0736) & II (0732)

Sem. or Year – Credit ½, 1

Prerequisite: Graphic Design I and II

Advertising I and II builds upon the foundation from Graphic Design. It further challenges the student with concepts of advanced layout, typography, large scale digital art, packaging design and the requirements, and limitations of the graphic arts processes. Emphasis is placed on portfolio development and career guidance. May be taken for one semester for ½ credit.

DRAWING AND PAINTING I (0708) & II (0712)

Sem. or Year – Credit ½, 1

Prerequisite: Successful completion of Studio-In-Art I and II

Students approach drawing and painting through the use of multimedia and the introduction of many different subject matters. Different techniques are used in creating both realistic and abstract art. Stress on strengthening drawing and painting skills is featured. This course is the key to the first steps in building a serious art portfolio. Grades 10-12.

GRAPHIC DESIGN I (0757) & II (0758)

Sem. or Year – Credit ½, 1

Prerequisite: Successful completion of Studio-In-Art I and II

The curriculum will focus on teaching students the basics of digital art and how to use technology to create. Focus will be placed not only on the mechanics of the Apple computer, both hardware and software (including Adobe), but also on the various steps involved in graphic art. Students will learn to conceptualize ideas, create designs and produce them. Real world skills will play a vital role in the class, since the curriculum mirrors actual skills used in the graphic design and multimedia fields. Language arts skills are incorporated as well. Students will learn about printing and photo imaging, as well as typography. This course will lay the foundations for Advertising Design I & II. May be taken for one semester. *Upon successful completion of Graphic Design I and Graphic Design II, students will have the opportunity to earn 3 college credits through Suffolk CCC.*

OIL PAINTING (0740)

Sem. – Credit ½

Prerequisite: Drawing and Painting I and II

Students study this time-honored art by exploring color and manipulating brushes and painting knives. Many styles and techniques are introduced. This course is important for portfolio building and is necessary to proceed to AP Art.

SKILLS IN ART I (0750) & II (0754)

Sem. or Year – Credit ½, 1

This course is for students who wish to meet the art requirement but who do not believe that they will continue their study of art beyond one year. Students are exposed to all different types of art mediums that include but are not limited to: oil pastels, watercolor/acrylic paints, printmaking, colored markers/pencils, and so much more! In this class, students are encouraged to be creative and to achieve their best. May be taken for one semester for ½ credit. 1 credit fulfills the art requirement for graduation.

STUDIO IN ART I (0701) & II (0704)

Sem. or Year – Credit ½, 1

An introduction to the skills and understandings needed as a background for all other art courses. This course is a prerequisite for all other art courses. May be taken for one semester only for ½ credit. 1 credit fulfills the art requirement for graduation.

WATER COLOR (0744)

Sem. – Credit ½

Prerequisite: Drawing and Painting I and II

Although a little more effort is needed to learn the skills related to watercolor painting, the final results are very rewarding. Traditional and experimental approaches are used in this exciting medium. This course is very important for portfolio building, and is recommended to proceed to AP Art & Design.

BUSINESS EDUCATION DEPARTMENT

ACCOUNTING (0628)

Year – Credit 1

Recommended for students in grades 10 through 12

This course is designed to cover the complete Accounting Cycle (Journalize, Post, Preparation, and Interpretation of Financial Statements) through the use of a variety of exercises and a final practice set. This course stresses the principles and procedures needed to build a beginning foundation in accounting fundamentals. Accounting is the “language of business” and is a necessary course for, but not limited to, all students who intend to major in business on the college level. Everyone who engages in economic activity will benefit from understanding the nature, significance, and limitations of accounting information.

BUSINESS AND PERSONAL LAW (0636)

Year - Credit 1

Recommended for students in grades 10 through 12

This is a course that students will find practical and interesting. This class will provide students with an understanding of our civil and criminal legal systems. Students develop an understanding of the law as it relates to day-to-day activities. It will help them become careful and astute consumers by becoming knowledgeable about crimes, torts, contracts, employment laws, marriage, personal property and many other legal documents. Students will acquire the confidence and knowledge necessary to contend with legal problems they may encounter in their business or personal lives. Guest speakers offer enriched learning experiences.

CAREER AND FINANCIAL MANAGEMENT (0600)

Year – Credit 1

Start taking control of your future and get a jumpstart on your dream career! This full-year course will prepare students to succeed in personal finance and career readiness. An emphasis on workplace skills, human relation skills, technology, and career planning will provide the student with a strong foundation in workplace competencies. Students will explore a chosen career and evaluate their suitability for that career based upon an investigation of their own goals, interests and abilities. Students will create a career portfolio and acquire the skills necessary to successfully master an interview. Personal financial planning will assist students in securing their financial future and achieve their goals. Students will gain the necessary skills and insights to become knowledgeable consumers who will make informed decisions involving checking, saving, budgeting, investing, credit, and money management. For students taking any of the 5 unit sequences in Career and Technical Education, this is a required course.

COLLEGE ACCOUNTING (0634)

Year – Credit 1

Recommended for students in grades 10 through 12

College Accounting is a college level course for academically talented and motivated students. Continued development of the principles and concepts introduced in Accounting I will help students build their skill levels. College Accounting is an accelerated accounting course particularly of value for students who plan to study accounting, business administration, or a related field while in college. The following topics are included: analysis, interpretation and preparation of financial statements for proprietorships, partnerships and corporations. Students will receive career-readiness preparation which includes instruction in MS Excel and Quickbooks accounting software. Upon successful completion of this course, students will have the opportunity to earn up to three college credits through LIU - Post Campus at a reduced cost of \$290. Recommended for students who plan to pursue a business major in college.

COLLEGE BUSINESS LAW (0610)

½ Year – Credit ½

Recommended for students in grades 11 or 12

College Business Law is a college level accelerated law course for academically talented and highly motivated college-bound students intending to major in business, particularly of value for those who have an interest in understanding how laws today affect people in their everyday lives. Students will engage in the study of the origin of our legal system, ethics/morals, and how they relate to our legal system, tort law, business crimes, contract law, and real and personal properties. Businesses operate within a clear, but complex legal environment and in order to become an effective business leader, one needs to understand that environment. Students will develop legal reasoning skills and an appreciation for the business benefits and constraints of our legal system. Students will learn the basics of court and trial procedure and how to minimize their business’s legal risks, prepare legal plans, and learn how to maximize legal protections by participating in a mock trial. Students enrolled in this course will have the opportunity to earn three undergraduate credits in conjunction with the “University in the High School Program” offered by SUNY Farmingdale State College at a reduced cost of \$150.

COLLEGE FRESHMAN SEMINAR (0678)

Fall – Credit ½

Recommended for 12th graders who plan to attend a four-year college

College Freshman Seminar has proven to be a beneficial course designed to support student success in college. This comprehensive course will help students who plan to attend a four-year college in their college planning, application, and decision-making process. Topics to be explored include: personality assessment, career exploration, college selection, choosing a college major, financial aid and scholarships, personal finance, time management, using research tools, decision making, independent living, and college-readiness.

COLLEGE MARKETING (0654)

Year – Credit 1

Recommended for students in grades 11 or 12

College Marketing is a college-level course for academically talented and highly motivated students. Have you ever wondered how a product makes it to market, how a business decides what type of advertising to use, and who the ideal customer is? College Marketing provides the student with knowledge of the basic elements of marketing, including consumer markets, product planning and development, branding and packaging, pricing strategies, market research, promotional mix, channels of distribution, and corporate social responsibility. Critical thinking skills, problem solving, communications, and human relations will be incorporated into the curriculum. College Marketing is a course of particular value for students who plan to study marketing, sports marketing, business administration, or related fields. Upon successful completion of this course, students will have the opportunity to earn up to three college credits through LIU - Post Campus at a reduced cost of \$290. Recommended for students who plan to pursue a business major in college.

COLLEGE SPORTS MANAGEMENT (0659)

Year – Credit 1

Recommended for students in grades 11 or 12

This course investigates the scope of the sports industry; a growing business enterprise in the United States and in much of the world. Functions of management, including skills and attributes required of a sport manager, and roles of a manager are examined and researched. Attention focuses on how the managerial process relates to sports organizations and their products. Students will become acquainted with career opportunities in this field. Students enrolled in this course will have the opportunity to earn three undergraduate credits in conjunction with the “University in the High School Program” offered by SUNY Farmingdale State College at a reduced cost of \$150. Recommended for students who plan to pursue a business major in college.

FASHION MARKETING (0650)

Sem. – Credit ½

Fashion is a part of our everyday lives. Everyone wears clothes and, therefore, buys clothes. Styles change from year-to-year and from season-to-season, creating new trends and demand for certain fashions. It is important to recognize the impact that the fashion industry has on our lives. Fashion Marketing will introduce students to the marketing strategies used to develop, distribute, and showcase today’s fashion. Real-life scenarios and projects will prepare students for a career in the marketing industry. Guest speakers and hands-on experiences are part of this exciting course.

MICROSOFT EXCEL FOR COLLEGE AND CAREER (0665)

Sem. – Credit ½

This semester course utilizes Microsoft Office 365 with a major emphasis on the use of Excel in the world of finance, economics, accounting and statistics. Students will become proficient in essential Office programs including budgeting and money management using Excel, investigating financial planning topics and participating in case-study simulations. This course is mentioned by graduates as most beneficial to them in college, internships and in the workplace.

This course is suggested as a follow-up to middle school Computer Essentials.

SOCIAL MEDIA MARKETING AND ETHICS (0653)

Sem. – Credit ½

Have an Instagram account? What about Twitter? Learning how to interact responsibly on social media platforms is crucial to surviving and thriving in this age of digital communication. This course will introduce social media platforms and show how to use these resources socially, ethically, and professionally. Social media is changing how business is conducted around the world in almost every industry. This course is designed to help the student understand how marketing has changed due to the rise of social media with emphasis on understanding consumers’ social interactions, examining various social media channels available to marketers, and learning how to build social marketing strategies. As social media is heavily technology-driven, emerging topics in e-commerce, mobile marketing, and ethics will be emphasized.

SPORTS AND ENTERTAINMENT MARKETING (0652)

Year – Credit 1

This full-year course will introduce students to principles of marketing utilizing the specific environments of the sports and entertainment industries. Students enrolled in this course will create and manage their own sports team using a Fantasy Sports software program. Students work on continuous projects encompassing research, event promotion, merchandising, packaging, product marketing, promotion, publicity and sales. Real-life scenarios allow students to participate in decision-making and event marketing which will prepare them for a career in the marketing industry. Guest speakers and hands-on experiences are part of this exciting course.

VIRTUAL ENTERPRISE (0697)

Year - Credit 1

Recommended for students in grades 11 or 12

Virtual Enterprise (VE) is designed as a capstone course and is the accumulation of all of the skills learned in accounting, marketing, web design, and financial management. VE is a unique hands-on course that allows for aspiring entrepreneurs to create their own corporations and experience how a business firm really works. Students take on the role of office employees (CEO, HR Manager, VP, etc.) and will be involved in actual "on-the-job" work experiences, including sales, marketing, accounting, and personnel management. Firms from different schools will interact with each other in a global business environment, and buy products from one another using virtual currency gained from the sale of each other's products. This class provides an engaging, fast-paced atmosphere to help students further develop their business and professional skills. Opportunities are provided for students to present their work, experience real-world competition, network with peers, and connect with college and business partners. Upon successful completion of this course, students will have the opportunity to earn up to six college credits through LIU - Post Campus at a reduced cost of \$580.

WALL STREET: INVESTING IN A GLOBAL ECONOMY (0680)

Semester - Credit ½

Recommended for students in grades 10 through 12

Wall Street introduces students to the fundamentals of financial planning and basic investment guidelines. Students will learn how to create a budget, explore various investment strategies, read and comprehend financial information, understand America's business structure, identify how and why a company issues stock, understand mutual funds and types of bonds, and create an investment portfolio. In addition, students will use their knowledge to invest \$100,000 in The Stock Market Game, an interactive, internet-based program designed to assist in the study of securities markets.

WEB DESIGN AND DEVELOPMENT (0696)

Sem. – Credit ½

The Web Design curriculum is an introduction to the design, creation, and maintenance of web pages and websites. Students will explore their creative talent and learn how to create and upload web pages using Google Sites, HTML and java scripts. Students will learn how to create and maintain quality web pages, and to maintain images. The course progresses from introductory work on web design to a culminating project in which students design and develop a website for local businesses.

INTERNATIONAL BACCALAUREATE PROGRAMME **DIPLOMA AND CERTIFICATE PROGRAMS**

IB BUSINESS AND MANAGEMENT

1 or 2 Year Course

IB BUSINESS & MANAGEMENT SL (IB601)

Grade 11 or 12

Year – Credit 1

The IB Business and Management SL course is designed to give students a foundation in management principles, leadership practices, and skills to develop an awareness of ethical and social responsibility issues that exist in business. The course includes the study of business functions, management processes, and decision-making. It examines how business decisions are influenced by factors internal and external to organizations, and how these decisions impact its stakeholders. Real world business problems and cases are discussed. IB Business and Management SL is a rigorous and critical study of the ways in which individuals and groups interact in a dynamic environment. Successful completion of this course will allow the learner to assimilate the principles of business and management, and to become critical and effective participants in local and world affairs.

IB BUSINESS & MANAGEMENT HL 1 (IB602)**Grade 11****2 years – Credit 1**

IB Business and Management HL1 is the first half of the HL program. This business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students will learn to analyze, discuss, and evaluate business activities at local, national and international levels. These skills are particularly relevant when examining the case study and when researching and writing the internal assessment components. The type of thinking encouraged by this approach will provide a bridge between the Diploma Program Business and Management course and higher education or employment. The course encourages the appreciation of ethical concerns, the ability to think critically, making ethically sound decisions, and to think strategically. The Business Management course allows students to develop their understanding of interdisciplinary concepts from a business management perspective.

IB BUSINESS & MANAGEMENT HL 2 (IB603)**Grade 12****2 years – Credit 1**

Prerequisite: IB Business and Management HL 1

This second half of the two-year HL course is designed to expand student knowledge of the business world. Building on topics discussed in HL1, students will focus on critical thinking, strategy and decision making, and business ethics. Topics of instruction will include: Business Organization and Environment, Marketing, Human Resource Management, Finance, and Operations Management. The IB Business and Management course is designed to develop an understanding of business theory, provide a foundation in management principles and practices, and to develop an awareness of the ethical and social responsibility issues that exist in business and other organizations both domestically and internationally.

5-UNIT SEQUENCES OF BUSINESS AND MARKETING EDUCATION

ALL MUST INCLUDE: *One (1) credit of Career and Financial Management (0600) plus four (4) credits in any one of the clusters listed below:*

Business Law Cluster	Credits		Credits
Social Media Marketing and Ethics	½	Excel for College and Career	½
Web Design	½	College Accounting	1
Business and Personal Law	1	College Business Law	½
College Freshman Seminar	½	IB Business and Management SL or HL	1
Accounting	1		
Accounting/Finance Cluster			
Social Media Marketing and Ethics	½	Excel for College and Career	½
Accounting	1	College Accounting	1
Business and Personal Law	1	College Business Law	½
Wall Street	½	IB Business and Management SL or HL	1–2
College Sports Management	1	College Freshman Seminar	½
Marketing Cluster			
Social Media Marketing and Ethics	½	Excel for College and Career	½
Fashion Marketing	½	College Marketing	1
Sports and Entertainment Marketing	1	College Accounting	1
Accounting	1	College Business Law	½
Business and Personal Law	1	IB Business and Management SL or HL	1–2
College Sports Management	1	College Freshman Seminar	½

Business Management Cluster			
Social Media Marketing and Ethics	½	Excel for College and Career	½
Business and Personal Law	1	College Business Law	½
College Accounting	1	College Marketing	1
College Freshman Seminar	½	IB Business and Management SL or HL	1–2
College Sports Management	1	Accounting	1

CAREER AND TECHNICAL EDUCATION (CTE)

ENGINEERING TECHNOLOGY DEPARTMENT **ENGINEERING TECHNOLOGY COURSE FLOWCHART**

AUTOMOTIVE TECHNOLOGY

The automotive technology program is designed to provide students with a basic understanding of the various subsystems inside an automobile. Safety and proper use of tools and machinery is stressed. Students will gain hands-on skills working on full size vehicles, as well as small engines, and modeled automotive systems.

ADVANCED AUTOMOTIVE SERVICING (1257)

Year – Credit 1

Prerequisite: Automotive Technology I/II

This is an advanced automotive course that continues to focus on diagnostic concepts, diagnostic procedures, and use of diagnostic equipment. Topics such as computer diagnosis and engine diagnosis are explored. Upon completion of the course students will be prepared to create a resume, research career opportunities in the automotive industry and understand options for post-secondary training.

AUTOMOTIVE TECHNOLOGY I/II (1255/1256)

Sem./Year – Credit ½ / 1

Prerequisite: Intro to Automotive Technology

This advanced course allows students to learn further maintenance and repair of automotive vehicles and systems. Skills using cutting torches, ARC, MIG, TIG welding, and plasma cutting will be introduced and practiced. This course will focus on diagnostic thought process, diagnostic procedures, and use of diagnostic equipment.

INTRO TO AUTOMOTIVE TECHNOLOGY (1250)

Sem. – Credit ½

Prerequisite: Transportation Systems

This course will provide an in-depth study of engine designs as well as a focus on vehicle maintenance. Students will perform various lab activities and learn how to use diagnostic equipment, maintain and repair automobiles.

TRANSPORTATION SYSTEMS (1208)

Sem. – Credit ½

This course will explore vehicle subsystems such as steering, suspension and drivetrain. Students will perform problem solving activities that use a variety of tools and testing equipment.

ENGINEERING DESIGN

Students will learn drafting procedures and techniques to produce a variety of drawings using standard and computer-based equipment. Computer-Aided Design (CAD) is also examined in great detail and students are taught how to produce printed documents, digital document management, 3D prototypes and computer-machined parts.

ARCHITECTURE (1212)

Year – Credit 1

Prerequisite: Design and Drawing for Production

This course focuses on design as it relates to architecture and construction. Students are required to produce floor plans, site plans, and elevation plans. Students have an opportunity to build scale models and original floor plans. This course provides an introduction to architectural drawing using computer-aided design software.

COMPUTER AIDED DESIGN (1220)

Year – Credit 1

Prerequisite: Design and Drawing for Production

Students will use design software to produce mechanical drawings with an emphasis placed on the continuation of the competencies established in Design and Drawing for Production. An introduction to Computer Aided Machining (CAM) and rapid prototyping using a 3D Printer will also be covered. This method of 3D design prepares students for how industry uses CAD in real world design projects.

DESIGN & DRAWING FOR PRODUCTION (1228)

Year – Credit 1

****This course may be used to meet the Art requirement for graduation.***

This course is designed to introduce students to technical drawing, machine and hand tool skills, problem solving and production methods. Students will learn drafting procedures to create working drawings, apply math and science concepts to their designs, which will prepare them to build and test a variety of models. Students will be introduced to design software and create digital drawings and laser cut designs. Students will study the design process to solve unique design problems. **This course is required for all 9th Grade STEM Academy students.**

PRINCIPLES OF ENGINEERING (1264)

Year – Credit 1

Prerequisites: Design and Drawing for Production, Computer-Aided Design, 10th grade Regents math and science or teacher recommendation required.

This course is a hands-on, laboratory-based course integrating science, technology, engineering, and mathematics (STEM) which introduces students to concepts of engineering. Students will be introduced to the engineering design model to ensure a well-designed and engineered system. 3D modeling software will be used to generate designs. Students will learn to select the appropriate process to produce their designs with the 3D printer, CNC milling machine and through conventional manufacturing. This course meets the third year requirement for math or science.

ROBOTICS (1274)

Year – Credit 1

Prerequisite: Design and Drawing for Production

Recommended: Computer Aided Design

This course will introduce students to electro-mechanical control systems and programming through the design of robots. Students will design and test robotic systems with specific requirements that will introduce them to design issues related to mechanics, sensors and control of a mobile robot. Primary learning topics for this course include: understanding robotic principles, computer programming, movement systems (electro-mechanical, hydraulic, and pneumatic), open and closed feedback sensing systems, and the many uses of robots. Students will learn to use the tools and techniques necessary for the design, mechanical and electronic construction of their robot. This course is recommended for all students interested in a Technology sequence in the STEM Academy or learning about robotics.

INFORMATION TECHNOLOGY

COMPUTER INFORMATION TECHNOLOGY I/II (1268/1270)

Sem. – Credit ½

This course will provide students with the fundamental concepts related to computer hardware and introduce students to computer electronics. Students will learn how a computer works and will work with computer components. The topics covered will include the history of computers and their impact on society, software, personal computer problem diagnosis, networking, and the Internet. Computer Information Technology II will place emphasis on mastering skills in troubleshooting common problems, operating systems, networking, computer and network security and the use of computers as technical tools.

CISCO NETWORKING ACADEMY

Cisco provides coursework for a complete range of basic through advanced networking concepts - from making cables, to such complex concepts as medium to large network design and troubleshooting.

The Cisco Networking Academy is a two year program offered at West Islip High School. The program is designed to provide each student with the skills needed to design, build, and maintain small to medium-size networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer-networking field. Upon completion of the Academy courses students will be prepared to take the Cisco Certified Network Associate (CCNA) Certification Exam.

CNA I - INTRODUCTION TO NETWORKING (1272)

Year – Credit 1

This course will provide students with advanced concepts related to computer hardware, software and networking technologies. Students will continue to develop the skills necessary to prepare them for the future in the Information Technology field. In semester I, students will gain in-depth knowledge about industry standards, network topologies, IP addressing, networking components, and basic network design.

CNA II - SWITCHING, ROUTING, & WIRELESS ESSENTIALS (1273)

Year – Credit 1

CNA II builds upon the networking foundations developed in CNA I. In CNA II, students will begin router configuration and work with routing protocols. Upon completion of CCNA II, students will be prepared to take the Cisco Certified Network Associates (CCNA) Certification Exam.

STEM ACADEMY

[Link to STEM Academy Pathway Graphic](#)

Vision

Inspire future STEM leaders by preparing students to think critically and work collaboratively in Science, Technology, Engineering, and Mathematics.

Mission

STEM Academy classes will foster innovation through a cooperative culture and rigorous course work in STEM fields. Students will develop a depth of learning and a strong work ethic in highly challenging courses that will accelerate their learning in STEM. Through a student driven and interdisciplinary learning environment, STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science.

Descriptions of Required Courses

✓Required for all STEM pathways

*Enrollment in a World Language course is required

Grade 9

✓DESIGN AND DRAWING FOR PRODUCTION

Course description can be found in the Engineering Technology Section of the course catalog.

✓STEM SKILLS (0498)

Year – Credit 1

This one year course is a required class for ninth grade students who have been accepted into the STEM Academy. STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science. The course includes introductory research and problem solving skills necessary for advanced exploration in the STEM pathways. Students conclude the course with a culminating research project that integrates science, engineering, math and computer science.

Grade 10

✓AP COMPUTER SCIENCE PRINCIPLES

Course description can be found in the Math section of the course catalog.

Science Pathway

✓BIOTECHNOLOGY RESEARCH

Course description can be found in the Science section of the course catalog.

Technology/Engineering Pathway, Mathematics Pathway, Computer Science Pathway

✓COMPUTER AIDED DESIGN (CAD)

Course description can be found in the Engineering Technology section of the course catalog.

Grade 11

✓11TH GRADE STEM RESEARCH (0472)

Year - Credit 1

11th Grade STEM Research is a required course for juniors enrolled in the STEM Academy. The course will guide students to choose a real-world problem that they can use the skills gained in their STEM courses to solve. This course (year 1) will focus on teaching additional STEM skills needed for research in all STEM fields as well as literature review, research plan/engineering design, and data collection. Solving real-world problems using STEM skills takes thoughtful planning and time to execute a well designed experiment so that enough data can be collected to draw meaningful conclusions. Students will meet both with their subject pathway teachers as well as in a large group setting throughout the year. Students will ideally work in teams consisting of students focused in each area of STEM so they get a true sense of the real interactions between STEM professionals. Outside counsel in the forms of mentors for students will be pursued depending on the appropriateness for each project chosen by student teams.

Grade 12

✓12TH GRADE STEM RESEARCH (0474)

Year - Credit 1

12th Grade STEM Research is a required course for seniors enrolled in the STEM Academy. Students have the opportunity to continue their previous research project or begin a new focus of research on real-world problems. This course will focus on teaching additional STEM skills needed for research in all STEM fields as well as literature review, research plan/engineering design, and data collection. Solving real-world problems using STEM skills takes thoughtful planning and time to execute a well designed experiment so that enough data can be collected to draw meaningful conclusions. Students will meet both with their subject pathway teachers as well as in a large group setting throughout the year. Students will ideally work in teams consisting of students focused in each area of STEM so they get a true sense of the real interactions between STEM professionals. Outside counsel in the forms of mentors for students will be pursued depending on the appropriateness for each project chosen by student teams.

Science Pathway

Science Elective

Course descriptions can be found in the Science Section of the course catalog.

Technology/Engineering Pathway

Engineering Elective

Course descriptions can be found in the Engineering Technology Section of the course catalog.

Mathematics Pathway

AP Stat or Everyday Stat

Course descriptions can be found in the Mathematics Section of the course catalog.

Computer Science Pathway

AP Computer Science A or Java

Course descriptions can be found in the Mathematics Section of the course catalog.

CAREER AND TECHNICAL FIELDS

DIGITAL PHOTOGRAPHY I (1263)

Sem. – Credit ½

This course provides students with the opportunity to learn basic skills for digital photography. Topics covered are types of digital cameras, computer technology supporting a digital darkroom, digital file management, shooting and post process processing digital photographs, photographic composition, and image correction and presenting digital photographs in printed and digital formats. This class fosters creativity and exploration, which makes the program an excellent and enjoyable learning experience. *Upon successful completion of Digital Photography I and Digital Photography II, students will have the opportunity to earn three college credits for a reduced cost of \$171, through the Beacon Program at Suffolk County Community College.*

DIGITAL PHOTOGRAPHY II (1267)

Sem. – Credit ½

Prerequisite: Digital Photography I

This course is a continuation of the skills started in Digital Photography I. Topics covered are advanced digital darkroom techniques, shooting studio photographs, lighting techniques, lens selection, and advanced image correction. This class fosters creativity and exploration, which makes the program an excellent and enjoyable learning experience. *Upon successful completion of Digital Photography I and Digital Photography II, students will have the opportunity to earn three college credits for a reduced cost of \$171, through the Beacon Program at Suffolk County Community College.*

ELECTRONICS I - BASIC ELECTRICITY (1236)

Fall Sem. – Credit ½

This course investigates the fundamental concepts of electricity and electronics that involve direct current (dc), alternating current (ac), series and parallel resistive circuits, magnetism, inductance and capacitance. Students will conduct a series of lab experiments that will explore the nature of these electrical fundamentals. Students will also use Arduino Microcontroller boards to apply digital capabilities to problem solving tasks. An introduction to the coding language C will be provided as a means to instruct the Arduino microcontroller boards to execute defined tasks. Hands-on experiments and projects will act as the strategy for understanding microcontroller processing.

ELECTRONICS II - DIGITAL ELECTRONICS (1237)

Spring Sem. – Credit ½

Prerequisite: Basic Electricity

This course provides an introduction to the control of engineering systems using microprocessors, microcontroller boards, input and output devices. Within this context, students will be introduced to the fundamentals of C+ programming, as a controlling language, for microcontroller integration with sensors and output devices.

INTRODUCTION TO TRADES (1254)

Year – Credit 1

This is a skills based course that introduces students to the tools and process behind basic construction skills. Students will explore lessons and hands-on activities in residential building construction, electrical wiring and plumbing. Students will also develop their skills in craftsmanship through various building projects. The goal of this course is to prepare students to be well informed, future homeowners.

VIDEO PRODUCTION (1265)

Year – Credit 1

Prerequisite: Digital Photography I

Introduction to pre-production, production and postproduction techniques of digital filmmaking with emphasis on principles of narrative film practices. Digital camcorders, computer-based non-linear editing and other equipment are available. The class is highly collaborative, student centered and results driven. *Upon successful completion of this course, students will have the opportunity to earn three college credits for a reduced cost of \$171, through the Beacon Program at Suffolk County Community College.*

5 UNIT SEQUENCES OF ENGINEERING TECHNOLOGY

Automotive Technology Cluster	<u>Credits</u>
Transportation Systems	1/2
Introduction to Automotive Technology	1/2
Automotive Technology I/II	1
Advanced Automotive Servicing	1
Introducing to Trades*	1
Design and Drawing for Production*	1
<u>Total</u>	5
Engineering Technology Cluster	
Design and Drawing for Production	1
Computer Aided Design	1
Robotics	1
Architecture	1
Principles of Engineering	1
<u>Total</u>	5
Architectural Design Cluster	
Design and Drawing for Production	1
Computer Aided Design	1
Architecture	1
11th Grade STEM Research	1
12th Grade STEM Research	1
<u>Total</u>	5
Information Technology Cluster	
Computer Information Technology I/II	1
Cisco Networking Academy I**	1
Cisco Networking Academy III/IV**	1
Electricity/Electronics*	1/2
Digital Photography*	1/2
Principles of Engineering or Robotics*	1
<u>Total</u>	5

*Can be replaced with any other Engineering Technology course elective.

**Cisco Networking I and II may run in alternate years, depending on student enrollment.

FAMILY AND CONSUMER SCIENCE

These courses are offered for grades 9-12

FASHION DESIGN: CLOTHING AND TEXTILES (0812)

Sem. – Credit ½

By learning clothing construction skills through hands-on projects, students will be able to increase their own wardrobe, evaluate the quality of ready-made garments and be better consumers. In this course students will also study clothing as it relates to culture, history, social, and economic situations; and explore clothing and textiles as a medium for artistic expression. Careers which deal with clothing and textiles will also be explored through field trips to appropriate venues when possible.

This course may be used towards the art/music requirement for graduation.

INTRODUCTION TO CULINARY ARTS (0808)

Sem. – Credit ½

This course will help students develop an understanding of sound nutritional concepts through the many hands-on experiences related to food and nutrition. Students will plan, select, purchase, store, prepare, serve food and food products and study basic nutrition. Sanitation and food safety, and the use and care of equipment will also be introduced. Students will have the opportunity to examine the wide variety of career paths in the food preparation and nutrition fields and identify the knowledge and skills necessary for success within these fields.

The following courses are offered for grades 10-12:

ADVANCED CHILD STUDY (0829)

Year – Credit 1

Do you want to be a teacher or work with children in your future career? This course is designed for seniors who have already completed Early Childhood Education I and Child Development. Students will continue their education in Child Education through projects, activities, lessons and professional training. Student portfolios will continue to be developed. Students will also have the opportunity to participate in a 150 Hour work study at a local preschool/day care center and be eligible to sit for a Career & Technical Skills Certification in Early Childhood Education. Students that complete all requirements listed will be eligible for a New York State Career & Technical Education Endorsement Seal on their High School Diploma.

Course Content:

- Preschool Structure
- Creating Themes and Units of Study (curriculum)
- Parent-teacher Conferences
- Children with Disabilities (Special Education services)
- Early Intervention
- Assessments in Preschool
- Kindergarten Readiness
- Careers in Early Childhood

CHILD DEVELOPMENT (0828)

Year – Credit 1

Aren't babies and children wonderful? Parenting and child development is an important area of study for those who want to enjoy and understand children to the fullest. If children are in their future as part of a career or as a parent, students will enjoy this course. Students will have an opportunity to work with four-year-old children in our playschool lab, observing their growth, development, and behavior. For those who plan to pursue a career working with children or studies in education at the college level, this course is the perfect fit, and will be valuable in developing a portfolio of materials for college program acceptance and/or career advancement. Students will have the option of receiving three undergraduate credits offered by Adelphi University (\$390.00/three credits).

CTE WORK STUDY (0899)

$\frac{1}{2}$ year – $\frac{1}{2}$ credit or

1 year – 1 credit

This work-based learning course engages students to work collaboratively with local employers to provide structured learning experiences. This course requires the student to complete either an internship of 150 hours ($\frac{1}{2}$ credit), or an internship of 300 hours (1 credit). Most students in this course should be actively pursuing a New York State Career & Technical Education (CTE) sequence in either Business or Early Childhood Education. Students will also be required to meet for one period per week with their faculty advisor.

EARLY CHILDHOOD EDUCATION I (0804)

Year – Credit 1

Would you like an opportunity to work with young children? In our Early Childhood Education course students will work as a “student teacher” with four-year-old children in our playschool lab. Students will write detailed lesson plans and design activities similar to those in college education courses in order to conduct age-appropriate art, music, math, science, story and game activities with them. In addition, they will explore other career opportunities for working with children besides education and develop strong skills needed for success in any workplace in which children are the focus. For those who plan to pursue a career in these related fields, this course will be valuable in developing a portfolio of materials for college program acceptance and/or career advancement



ENGLISH LANGUAGE ARTS
[Click here to view the English flowchart](#)



ENGLISH GATEWAY 9 (0106)

Year – Credit 1

English Gateway 9, which provides an examination of literature from around the world, is aligned with the Next Generation English Language Arts Standards and will serve as a gateway to success in all upper level English classes including Advanced Placement and International Baccalaureate programs. As readers, students will explore fiction and nonfiction texts, paying close attention to the literary elements and techniques used by writers to create meaning. As writers, students will work through the steps in the writing process as they write narratives, arguments, informative/explanatory texts and complete a grade level research project. Furthermore, students will learn to communicate their ideas in a cogent, effective manner as they collaborate with their peers. Students will begin preparation for the New York State Regents examination in English Language Arts which will be administered in grade 11.



ENGLISH GATEWAY 10 (0112)

Year – Credit 1

English Gateway 10, which is aligned with the Next Generation English Language Arts Standards, will continue to serve as a gateway to success in all upper level English classes. Students will identify textual evidence and analyze the development of a text through style analysis. Additionally, students will continue to work extensively in writing argument papers with the inclusion of rhetorical language and will explore increasingly challenging texts. All students will complete a research paper and prepare for the New York State Regents examination in English Language Arts which will be administered in grade 11.



ADVANCED PLACEMENT LITERATURE AND COMPOSITION (0179)

Year – Credit 1

AP English Literature and Composition, which is intended for 11th grade students, engages students in the careful reading and critical analysis of sophisticated literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as rhetorical techniques such as the use of figurative language, imagery, symbolism, and tone. Emphasis is placed on students' ability to challenge ideas and incorporate the codes and conventions of challenging texts into their thinking. Students read increasingly sophisticated literature and write with more stylistic sophistication than in English 11. All students will write a college essay in preparation for the college application process that takes place in their senior year. Students are also expected to take the AP examination in Literature and Composition in May, as well as the New York State Regents examination in English Language Arts.



ENGLISH 11R (0120)



ENGLISH GATEWAY 11 (0110)

Year – Credit 1

In 11th Grade, literature is used as the vehicle for helping students finalize their preparation for the New York State Regents Examination in English Language Arts. As readers, students will explore multiple genres, with an emphasis on the short story, novel, drama, and on nonfiction pieces. Within each genre, students will identify textual evidence, analyze the development of a text, identify a writer's point of view, determine the meanings of content area and Tier II vocabulary, and develop strategies for reading increasingly complex texts. As writers, students will write a synthesis essay, comparative genre essay, and a position paper. Students will continue to hone their ability to write arguments, informative/explanatory texts, and narratives using more sophisticated techniques such as irony. Furthermore, students will complete a grade level research project and a college essay in preparation for the college application process that takes place in the senior year.



ADVANCED PLACEMENT LANGUAGE AND COMPOSITION (0128)

Year – Credit 1

The overall goal of this course is to engage students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and reading will make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students will read increasingly complex texts with understanding and write with sufficient richness and complexity to communicate with mature readers. Students

are expected to take the AP Examination in Language and Composition in May. Teachers will also provide a review of the college essay to support students as they navigate the college application process.

Note: All students must take a full year of English in the 12th grade, regardless of the number of English courses completed in Grades 9-11. Students who are not enrolled in AP Language & Composition, 12IB, or World Literature, must enroll in English 12R and an English department elective.



ENGLISH 12R (0126)

Sem. – Credit ½

This senior survey course will focus on developing students as independent readers and writers. Students will explore the personal narrative essay form and will implement aspects of narrative writing when they craft a historical fiction piece based on their research of an intriguing period in history. A multitude of genres will be addressed, with an emphasis on nonfiction. Students will continue to explore how sophisticated arguments are crafted and will try to emulate these techniques in their own writing. There will be an emphasis on writing for different purposes and audiences to prepare students for the myriad writing tasks they will face in college and beyond. Teachers will also provide a review of the college essay to support students as they navigate the college application process. Senior English assessments include: College/Personal Essay; Historical Fiction Narrative; Literary/Nonfiction Analysis; My Senior Footprint (Research and Presentation).



WORLD LITERATURE 12H (0127)

Year – Credit 1

Students in this full-year course will examine and analyze challenging and diverse literature from around the world. They will have ongoing opportunities to engage in reflective writing practices, research-driven pieces, and creative writing. Students will utilize documentaries to jumpstart worldly conversations. Teachers will also provide a review of the college essay to support students as they navigate the college application process.

IMPORTANT NOTICE TO STUDENTS AND PARENTS REGARDING SUPA

College courses offered on a high school campus must meet the same criteria as those offered on the college campus in content and instruction. Therefore, print texts will expose students to challenging and controversial topics including gender and sexuality. Visual texts (films) will expose students to sex, nudity, profanity, violence, and drug use. While these elements are present in the films, they are not the focus. Students will be taught analytic methods and provided with academic tools to help them evaluate all course-related texts as well as those they encounter throughout their lives. The goal is for our students to be critical readers and thinkers who understand the messages conveyed in texts and are cognizant of the methods used to convey these ideas so that they can employ sound reasoning and draw their own conclusions. If you are considering registering for this course, you will be asked to review the course syllabus in advance.

Enrollment in Syracuse University Project Advance signifies your knowledge and acceptance of the course requirements.



WRT 105 – PRACTICES OF ACADEMIC WRITING (0180)

(Concurrent Enrollment Model)

Sem. – Credit WIHS ½ - SU 3

Note: Students may be subject to a writing review.

In Academic Writing, particular attention is paid to writing as a means of learning and of encouraging active analytical engagement. Students also learn to write supported arguments using appropriate conventions of documentation. Learning how to write formal academic analysis and argument begins with learning how to think reflectively (and communally) in various kinds of informal written modes, such as reading logs, class correspondences, and response papers. Academic Writing gives students intensive practice in writing understood as a process: formal papers go through multiple-drafting, reader response of some kind, revision and editing. Students are asked to participate in collaborative methods, such as peer workshops and group projects. Students read from an illustrative range of complex texts, drawn from various disciplines and genres, not only to understand the ideas in the texts, but also to respond, refine, or refute those ideas. Strategies such as annotation, summary, paraphrase, and log entries show students how writing can become a means for reading more flexibly, deeply, and critically – and a way of defining one's self in relation to the ideas and words of others. By responding to each other's writing and by doing copy-editing, students practice good writing and learn how it is accomplished within the genres and conventions of particular discourse communities.



ENG 181 - CLASS AND LITERARY TEXTS (0182)

(Concurrent Enrollment Model)

Sem. – Credit WIHS ½ - SU 3

Prerequisite: Students must have completed WRT 105

This course exposes students to key texts in literature, film and other media as a way of fostering critical engagement and developing richer social responsibility through textual interpretation. Students will engage with the concepts of social class, social divisions of privilege, wealth, power and status – lenses through which they will approach a range of literary and other texts.

Invested in theoretical and historical frames of reading the course takes its starting point from concepts of social class and engages with texts ranging from the early modern period through the Industrial Revolution and into the present moment, when digital technology is dramatically shifting the way we work, live and communicate.

Students in this course will learn to read analytically and, through their writing, demonstrate a critical faculty for understanding how texts can be vital markers of the ways that social class, and the struggles that come with it, stratify, divide and define us today.

IB ENGLISH CORE

Students will focus exclusively on literary texts, adopting a variety of approaches to textual criticism. Students explore the nature of literature, the aesthetic function of literary language and textuality, and the relationship between literature and the world.

The aims of IB Literature are to enable students to:

- Engage with a range of texts, in a variety of media and forms, from different periods, styles, and cultures
- Develop skills in listening, speaking, reading, writing, viewing, presenting and performing
- Develop skills in interpretation, analysis and evaluation
- Develop sensitivity to the formal and aesthetic qualities of texts and an appreciation of how they contribute to diverse responses and open up multiple meanings
- Develop an understanding of relationships between texts and a variety of perspectives, cultural contexts, and local and global issues, and an appreciation of how they contribute to diverse responses and open up multiple meanings
- Develop an understanding of the relationships between studies in language and literature and other disciplines
- Communicate and collaborate in a confident and creative way
- Foster a lifelong interest in and enjoyment of language and literature



IB ENGLISH HL 1 – Junior Year (IB101)

Year – Credit 1

(Concurrent Enrollment Model)

***IB LANGUAGE A: LITERATURE HL 1 - Junior Year 1 (IB 101):** This course is a pre-university literature course in the student's native or best language. Language A1: Literature promotes:

- An appreciation of literature and knowledge of the student's own culture, along with that of other societies, and develops the student's power of expression, both in oral and written communication.
- The course emphasizes the skills involved in writing and speaking in a variety of styles and situations and offers students the opportunity to read works in various genres by at least 6 different authors.
- Works are chosen from a broad list of prescribed authors and works representing different literary periods, genres, and regions in the target language, as well as literature in translation.

Assessments administered during IB 11 include:

- ❖ Unseen Commentary - Oral & Written (WIHS, Ongoing)
- ❖ IB Learner Portfolio ~ (WIHS, Ongoing)
- ❖ Individual Oral ~ 10 minute presentation followed by 5 minute discussion with teacher (IB, May)
- ❖ Written Assignment ~ 1200-1500 Word Essay on one work studied during the course (IB, June)



IB ENGLISH HL 2 – Senior Year (IB102)

Year – Credit 1

This is the second year of a two-year curriculum which prepares you for the IB English exam in May. Students will read and study literature from a variety of genres, time periods, and authors. According to the aims in the IB course guide:

- Students completing this course will have a thorough knowledge of a range of texts and an understanding of other cultural perspectives.
- They will also have developed skills of analysis and the ability to support an argument in clearly expressed writing, sometimes at significant length.
- This course will enable them to succeed in a wide range of university courses, particularly in literature but also in subjects such as philosophy, law and language.
- Careful reading, analysis, and organization are essential for this class.

Assessments administered during IB12 include:

- ❖ College Essay & College Application (WIHS, Fall semester)
- ❖ Paper 1 and Paper 2 (IB, May)

Note: Teachers will also provide a review of the college essay to support students as they navigate the college application process.

ENGLISH DEPARTMENT ELECTIVES



CREATIVE WRITING (0184)

Sem. – Credit ½

This elective is an advanced writing course for students who wish to gain or extend their experience as a writer. Creative Writing provides an opportunity for students to create original, imaginative writing based on the study of models from observation, experience, and literature. Students will work on descriptive, narrative, and persuasive prose as well as dialogue and poetry. Student writing will be shared with the class and will be evaluated by both the instructor and peers. The course will be conducted in a workshop format; most class periods will be devoted to writing and ongoing conferences. Writers will be encouraged to submit work to contests and publications. Open to students in grades 10-12.



GRAPHIC NARRATIVE (0139)

Sem. – Credit ½

This course will introduce students to graphic storytelling using techniques that challenge and entertain in ways other literary forms do not. Students will explore the various aspects of what makes sequential storytelling so effective. The curriculum will emphasize comics and graphic novels as well as graphic memoirs. Students will apply the knowledge they gain toward writing their own sequential stories. Graphic Narrative is an elective course designed to help students develop skills they can take well beyond graduation, while simultaneously demonstrating how much fun reading can be. Open to students in grades 11-12.



IB FILM (SL) (IB103)

Grades 11-12, Year – 1 Credit (Students may receive either an English *or* an Art credit)

IB Film students have the courage to experiment, imagine, and explore creative vision. They work independently and collaboratively to research and analyze film and film theory as well as participate in all phases of production and film-making.

****This course satisfies the 12th grade English requirement for 12th grade students only.***

Students are expected to submit three major assessments for IB consideration:

- ❖ A 1750 word research based Textual Analysis exploring the stylistic choices and cultural context of a film.
- ❖ A 10 minute research based multimedia presentation Comparative Analysis of two films.
- ❖ A Film Production Portfolio including evidence of exploration and experimentation in three different production roles.

JOURNALISM (0183)

Sem. – Credit ½

This elective course will provide a general introduction to journalism, focusing on the history of journalism, trends in journalism, news writing, design and layout, and publishing. This course will develop the communication skills and specialized writing techniques needed by journalists. Students will learn and employ interviewing techniques as they gather, write, and report the news. In addition, students will write for a variety of purposes as they explore the different genres of a newspaper, such as sports, editorials, advice, local news, feature stories, advertising, and entertainment. Students may contribute to Paw Prints, West Islip High School's newspaper. Open to students in grades 9-12 who are interested in developing their writing skills.



MEDIA LITERACY (0190)

Sem. – Credit ½

This class is for students interested in journalism, social media, writing and digital literacy, who are intrigued by topics that currently consume our society including truth in journalism, the perils of social media, and how to evaluate the vast amount of information that bombards our consciousness each day. Students will examine the effects of the Internet on our environment and will evaluate the myriad “news” sources feeding our society. Based on a course offered by Stony Brook University, students will learn to “sort fact from fiction, news from promotion, and fact-based opinion from emotional assertion.” The goal of this course is to help students learn and implement the practices of a media literate individual in the 21st century who critically evaluates information and makes informed choices. Open to students in Grade 12.



MYTHOLOGY (0136)

Sem. – Credit ½

Mythology is designed to bring to students, through a thematic approach, a concept of the role played by Greek and Roman mythologies in shaping civilization from the era of ancient Greece to the present. This course will help students to understand the many influences of ancient mythology upon modern day life. Open to students in grades 10-12.



PUBLIC SPEAKING, DRAMA AND DEBATE (0166)

Sem. – Credit ½

Public Speaking is a course for students interested in developing skills in oral presentation. Students will learn how to research, outline, organize and deliver various types of formal speeches including informative, persuasive, demonstration and special occasion. Additional presentations will include impromptu speeches and debates. Students learn to be fair and critical listeners, give and respond to feedback, incorporate visual and multimedia aids into presentations, and manage communication anxiety. Students will have ongoing opportunities to participate in daily announcements, live streaming, and/or podcasts. The goal of this course is for students to walk away more confident, knowledgeable, and organized speakers. Open to students in grades 10-12. *Upon successful completion of this course, students will have the opportunity to earn three college credits for a reduced cost of \$171, through the Beacon Program at Suffolk County Community College.*

WRITING FOR COLLEGE AND CAREER (0191)

Sem. – Credit ½

Students will learn the art of writing about technical subjects using forms often required in the professional world such as reports, instruction manuals, summaries, emails, memos, software help files, how-to descriptions, user's guides, brochures, newsletters, fliers, etc. Students will also develop skills in writing business letters, cover letters, and resumes. Ongoing discussion of audience and purpose, graphics, layout, and design will guide this work. Students will have an opportunity to write using digital tools for an online audience. Before publishing their work, students will work through each aspect of the writing process: researching/prewriting, drafting, revising, and editing. Open to students in grade 12.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

ADAPTIVE PHYSICAL EDUCATION (1107)

A program offered for students with special needs, whether these needs are temporary or permanent. Students may move from a regular program to the special program, or vice versa. An individualized program of activity is designed for each participant with the assistance of the student's physician where needed.

FITTER, FASTER, STRONGER (FFS) (1125)

Sem. – Credit ¼

The FFS Program is a total conditioning program for all students regardless of age or gender. The FFS program is designed to increase all aspects of personal fitness and athletic performance. It will make you jump higher, run faster, throw farther, hit harder and be more explosive. The FFS program develops the total student by using core weight training exercises, speed and agility exercises, along with flexibility and plyometric exercises. Grades 11 and 12; May take both semesters; **Fulfills PE requirement.**

HEALTH EDUCATION 9/10 (1401) 11/12 (1402)

Sem. – Credit ½

The purpose of this course is to provide students with practical and working knowledge that will help them remain physically fit and mentally healthy throughout their lives. The course concentrates on the following areas: personality development, fitness, nutrition, communicative diseases including sexually transmitted diseases, mental health, drug abuse education including alcohol and tobacco and current issues in health and family life. A practical and written test qualifying the student for certification in Cardiopulmonary Resuscitation is given. **Health Education is required for graduation.**

INTRODUCTION TO SPORTS SCIENCE (1127)

11/12 Grade – Sem. – Credit ¼

Intro to Sports Science incorporates the traditional disciplines of anatomy, exercise physiology, biomechanics, nutrition and care and prevention of athletic injuries. Students will cover a range of core topics and carry out practical investigations in both laboratory and field settings which will provide a foundation for possible future employment pathways. This course will blend psychomotor, cognitive and affective domains. **Fulfills PE requirement.**

LIFEGUARD TRAINING 10-12 (1105)

Sem. – Credit ¼

Prerequisite: The student must be 15 years of age and pass a swim entry test.

Students can receive half year PE credit and possibly earn a certification from American Red Cross in Lifeguarding, CPR for the Professional Rescuer, AED, and First Aid. The students must pass a rigorous swim entry test before being admitted into the course, including a 500 yard continuous swim. To earn Red Cross certification the student must pass a lifeguard skills test and three written exams. **Fulfills PE requirement.**

Note: The American Red Cross charges a non-refundable fee of \$40.00 for the certification.

PHYSICAL EDUCATION 9/10 (1101/1102) & 11/12 (1111/1112)

Sem. – Credit ¼

All students are required to participate in physical education every semester. Classes are coeducational and organized to allow students to select from several activities including *lifetime fitness activities*, team sports, individual sports, Project Adventure or aquatic instruction. All 9th and 10th grade students **must** successfully complete one **10 week** aquatics unit each year. **Physical Education is required for graduation.**

TEEN HEALTH & WELLNESS 11/12 Elective (1408)

Sem. – Credit ½

The course is designed to challenge teen thinking regarding modern health behaviors and consequences. Students will utilize knowledge from their previous health studies along with current events to think critically about important factors that impact the health of individuals and society. This course is designed to guide students to discover critical options that will enable them to make responsible decisions concerning personal health issues. Topics discussed will cover: College/Work Environment, Nutrition, Substance Abuse, Mental/Emotional Health and well-being, Suicide Prevention, Eating Disorders, Sexuality, Gender Roles, and HIV/AIDS awareness as well as current issues and trends in personal and global health. **This course does NOT fulfill the NYS Health requirement.**

MATHEMATICS DEPARTMENT

[Click here to view the Mathematics flowchart](#)



ALGEBRA I (0315)

Year – Credit 1

This program of study includes the following topics: the real number system; quantities; seeing structure in expressions; arithmetic operations on polynomials and rational expressions; creating equations; reasoning with equations and inequalities; interpreting functions; building functions; linear, quadratic, and exponential models; and interpreting categorical and quantitative data.

Note: Passing the Algebra Regents examination is a graduation requirement.



ALGEBRA I with Lab (0315L)

Year – Credit 1

This is the same program of study presented in Algebra with the addition of an extra period every other day. It is designed to give students the extra time needed to be successful. Students will take the Algebra I Regents exam at the end of this course.

Note: Passing the Algebra Regents examination is a graduation requirement.

DISCOVERING GEOMETRY (0306)

Year – Credit 1

Prerequisite: Successful completion of Algebra I with lab.

This is a non-Regents course designed for students who completed Algebra I but do not intend to pursue an advanced regents diploma. The purpose of this course is to formalize and extend the geometric experiences from the middle grades. Major emphasis will be placed on congruence, similarity, right triangles, trigonometric ratios and right triangles, and use of coordinates to prove simple geometric theorems algebraically. Students will strive to become fluent in triangle congruence and similarity criteria; using coordinates to establish geometric results; and calculating length and angle relationships. Students will not be eligible to take the Geometry Regents at the end of this course.



GEOMETRY (0317)

Year – Credit 1

Prerequisite: Successful completion of Algebra I.

This program of study will include topics in congruence, similarity, right triangles and trigonometry, circles, expression of geometric properties with equations, measurement and dimension, constructions, and modeling with geometry. Students will take the Geometry Regents exam at the end of this course.

Note: Passing the Geometry Regents examination is required to receive the “Regents Diploma with Advanced Designation.”



GEOMETRY HONORS (0318)

Year – Credit 1

Prerequisite: Successful completion of Algebra I with teacher recommendation.

This program of study will include topics in congruence, similarity, right triangles and trigonometry, circles, expression of geometric properties with equations, measurement and dimension, constructions, and modeling with geometry. Students will be eligible to take the Geometry Regents exam at the end of this course.

Note: Passing the Geometry Regents examination is required to receive the “Regents Diploma with Advanced Designation.”



GEOMETRY with Lab (0380)

(alternate day lab)

Year – Credit 1

Prerequisite: Successful completion of Algebra I Lab, or Algebra I with teacher recommendation.

This is the same program of study presented in Geometry with the addition of one extra period every other day. Students will take the Geometry Regents exam at the end of this course.

Note: Passing the Geometry Regents examination is required to receive the “Regents Diploma with Advanced Designation.”

FOUNDATIONS OF ADVANCED MATH (0310)

Year – Credit 1

Prerequisite: Successful completion of Geometry Lab, or Geometry with teacher recommendation.

This non-Regents course allows students to expand their algebraic skills to include the solution and application of quadratic equations, graphing of functions, problem solving, and probability and statistics. Students will be shown the process to apply algebra to realistic situations and to represent different mathematical concepts. Topics also examined include factoring, equations and system of algebra II equations, logarithms, proportions, and variations. The course will prepare students for Algebra II.

HS ALGEBRA (0325)

Year – Credit 1

Prerequisite: Completion of Geometry with Lab or Discovering Geometry.

This course allows students to expand on the essential algebraic skills that are utilized in the real world. Major topics include modeling of linear and quadratic equations, graphing of functions, factoring, proportions, systems of equations, problem solving, and probability and statistics. Dynamic mathematics technology will be emphasized in the problem solving process. This course will help to prepare students for future success in Consumer Math, Financial Math, or Everyday Statistics.



ALGEBRA II (0302)

Year – Credit 1

Prerequisite: Successful completion of Geometry or successful completion of Foundations.

This program of study will include topics such as: polynomials; factoring; solving and applying equations (polynomial, rational, and radical); complex numbers, trigonometric functions, exponential and logarithmic functions, and inferences and conclusions from data. Students will take the Algebra II Regents exam at the end of this course.

Note: Passing the Algebra II Regents examination is required to receive the “Regents Diploma with Advanced Designation.”



ALGEBRA II HONORS (0307)

Year – Credit 1

Prerequisite: Successful completion of Geometry Honors or Geometry with teacher recommendation.

This program of study will include topics such as: polynomials; factoring; solving and applying equations (polynomial, rational, and radical); complex numbers, trigonometric functions, exponential and logarithmic functions, and inferences and conclusions from data. Students will be eligible to take the Algebra II Regents exam at the end of this course.

Note: Passing the Algebra II Regents examination is required to receive the “Regents Diploma with Advanced Designation.”



PRE-CALCULUS (0357)

Year – Credit 1

Prerequisite: Successful completion of Algebra II.

This course is designed to help students prepare to study topics in Calculus or Advanced Placement Calculus AB. Topics to be studied include: Complex numbers, matrices, vectors, rational and exponential functions, trigonometry, and probability and statistics. Students interested in taking the CLEP exam in Pre-Calculus upon the conclusion of the course may earn college credit for their work. Any student seeking to do so is encouraged to visit the College Board website for additional information.



PRE-CALCULUS HONORS (0346)

Year – Credit 1

Prerequisite: Successful completion of Algebra II Honors or successful completion of Algebra II with teacher recommendation.

This course is designed to help students prepare to study advanced topics in AP Calculus AB or BC. Topics to be studied include: Complex numbers, matrices, vectors, rational and exponential functions, trigonometry, and probability and statistics. Students interested in taking the CLEP exam in Pre-Calculus upon the conclusion of the course may earn college credit for their work. Any student seeking to do so is encouraged to visit the College Board website for additional information.



ADVANCED PLACEMENT CALCULUS AB (0358)

Year – Credit 1

Prerequisite: Successful completion of IB Math SL or Pre-Calculus Honors or Pre-Calculus with teacher recommendation.

In this course students are given the opportunity to study college Calculus. Differential and integral calculus and applications are explored in-depth. Major topics of study include techniques and applications of the derivative, techniques and application of the definite integral, and the Fundamental Theorem of Calculus. Students are expected to take the Advanced Placement exam in AP Calculus AB in May.



ADVANCED PLACEMENT CALCULUS BC (0381)

Year – Credit 1

Prerequisite: Successful completion of IB Math SL or Pre-Calculus Honors or Pre-Calculus with teacher recommendation.

This is a course in single-variable calculus that includes all the topics of Calculus AB plus additional topics in differential and integral calculus (including parametric, polar, and vector functions) and series. It is equivalent to at least a year of calculus at most colleges and universities. Algebraic, numerical, and graphical representations are emphasized throughout the course. Students are expected to take the Advanced Placement exam in AP Calculus AB in May.



ADVANCED PLACEMENT COMPUTER SCIENCE A (0360)

Year – Credit 1

Prerequisite: Successful completion of Algebra II and JAVA.

This course offers students the opportunity to design and implement computer-based solutions to problems, to select, use, and implement common algorithms and data structures to solve problems, to code fluently in an object-oriented paradigm using JAVA and its subsets. The course includes a structured lab component providing hands-on lab experiences. Students will be provided instruction in the ethical and social implications of computer use.



ADVANCED PLACEMENT OF COMPUTER SCIENCE PRINCIPLES (0359)

Year – Credit 1

Prerequisite: Successful completion of Algebra I.

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cyber security concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.



ADVANCED PLACEMENT STATISTICS (0398)

Year – Credit 1

Prerequisite: Successful completion of Algebra II.

The Advanced Placement Statistics course is equivalent to an introductory, non-calculus based, college course in statistics. It is particularly well-suited for students planning college majors in social sciences, health sciences, and business. Students are exposed to four broad conceptual themes: (1) exploring data; (2) planning a study; (3) anticipating patterns; (4) statistical inference. Students will use a graphing calculator and/or computer technologies as an aid to their statistical studies. Students are expected to take the Advanced Placement Statistics exam in May.



CALCULUS (0351)

Year – Credit 1

Prerequisite: Successful completion of Pre-Calculus.

This course will consist of a full academic year of work in calculus and related topics comparable to courses in colleges and universities. Students will become acquainted with the major concepts, definitions, and theorems relating to limits, continuity, the derivative, and the definite integral. Topics in both differential and integral calculus will be studied. Students interested in taking the CLEP exam in Pre-Calculus upon the conclusion of the course may earn college credit for their work. Any student seeking to do so is encouraged to visit the College Board website for additional information

CONSUMER MATH (0312)

Year – Credit 1

Prerequisite: 11th and 12th grade students only.

Topics and concepts included in this course will prepare students for the mathematics placement exam at our local community colleges. The course is designed to provide students with reinforcement of basic skills that are applied to real life situations in budget preparation, taxation, and banking. Students have the opportunity to use a scientific calculator. It should be noted that the study of these topics are not considered preparation for future college math courses.



EVERYDAY STATISTICS (0390)

Year – Credit 1

Prerequisite: Successful completion of Foundations of Advanced Math.

Statistics is an indispensable tool which is used to help make intelligent decisions. This course is intended to present a broad overview of the subject of statistics and its applications. Students will explore the statistical relationships in sports, the sciences, psychology, sociology, and business. A graphing calculator and computer technology will be used as a tool to deepen the student's understanding of statistical processes.

FINANCIAL MATH (0311)

Year – Credit 1

Prerequisite: 11th and 12th grade students only.

This is a specialized interdisciplinary course related to the Mathematics and Technology learning standards and the Career Development and Occupational Studies learning standards. The course will prepare students for the mathematics placement exam at our local community colleges and is designed to provide students with a basic understanding of: the mathematics involved in personnel, production, purchasing, sales, marketing, warehousing and distributing, and services.



IB MATHEMATICS ANALYSIS & APPROACHES (IB301)

(alternate day lab)

Year – Credit 1

Prerequisite: Successful Completion of Algebra II.

The IB Mathematics Analysis & Approaches course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts.

IB Mathematics Analysis & Approaches has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. Students should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. Students are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments. The internally assessed exploration allows students to develop independence in mathematical learning. Throughout the course students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. This course prepares students for the courses Advanced Placement Calculus BC, Advanced Placement Calculus AB or Advanced Placement Statistics.



IB MATHEMATICS APPLICATIONS & INTERPRETATIONS (IB303)

(alternate day lab)

Year – Credit 1

Prerequisite: Successful completion of Algebra II.

The IB Mathematics Applications & Interpretations course **recognizes the increasing role that mathematics and technology** play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modeling. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct and communicate this mathematically and interpret the conclusions or generalizations. Students should expect to develop strong technology skills, and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics. All external assessments involve the use of technology. Students are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments. The internally assessed exploration allows students to develop independence in mathematical learning. Throughout the course students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas.

INTRODUCTION TO COLLEGE MATH (0382)

Year – Credit 1

Prerequisite: This course is for seniors who are college-bound as non-mathematics majors, and who have successfully completed Algebra II or Foundations of Advanced Algebra.

The course will provide an in-depth study of algebra and functions, counting and probability, data analysis and statistics, financial mathematics, geometry, logic. Focus will be placed on problem solving with real world applications. Students interested in taking the CLEP exam in Introduction to College Math upon the conclusion of the course may earn college credit for their work. Any student seeking to do so is encouraged to visit the College Board website for additional information.



JAVA (0392)

Year – Credit 1

Prerequisite: Successful completion of Algebra I.

This is a full year course designed to introduce students to the concepts of computer programming, using the language of Java. This course introduces basic structured and object-oriented programming concepts and techniques and is intended for all who plan to use computer programming in their studies and careers. Topics included are: variables, arithmetic operators, control structures, arrays, functions, recursion, dynamic memory allocation, files, class usage, and class writing. Program design and testing are also included.

SAT MATH PREPARATION (0367) Pass/Fail

1 Semester – ½ Credit

Prerequisite: Successful completion of Algebra I and Geometry.

This is a half year course designed to prepare students for the Scholastic Achievement Test for entrance to college. Mathematical concepts and test-taking strategies will be taught to help students become familiar with the exam and methods for solving a variety of math and reasoning problems. In order to improve SAT Math scores, students will need to complete practice assignments utilizing strategies taught and analyze mistakes to improve performance. Students will be graded on a pass/fail basis.

STEM ACADEMY

[Link to STEM Academy Pathway Graphic](#)

Vision

Inspire future STEM leaders by preparing students to think critically and work collaboratively in Science, Technology, Engineering, and Mathematics.

Mission

STEM Academy classes will foster innovation through a cooperative culture and rigorous course work in STEM fields. Students will develop a depth of learning and a strong work ethic in highly challenging courses that will accelerate their learning in STEM. Through a student driven and interdisciplinary learning environment, STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science.

Descriptions of Required Courses

✓Required for all STEM pathways

*Enrollment in a World Language course is required

Grade 9

✓DESIGN AND DRAWING FOR PRODUCTION

Course description can be found in the Engineering Technology Section of the course catalog.

✓STEM SKILLS (0498)

Year – Credit 1

This one year course is a required class for ninth grade students who have been accepted into the STEM Academy. STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science. The course includes introductory research and problem solving skills necessary for advanced exploration in the STEM pathways. Students conclude the course with a culminating research project that integrates science, engineering, math and computer science.

Grade 10

✓AP COMPUTER SCIENCE PRINCIPLES

Course description can be found in the Math section of the course catalog.

Science Pathway

✓BIOTECHNOLOGY RESEARCH

Course description can be found in the Science section of the course catalog.

Technology/Engineering Pathway, Mathematics Pathway, Computer Science Pathway

✓COMPUTER AIDED DESIGN (CAD)

Course description can be found in the Engineering Technology section of the course catalog.

Grade 11

✓11TH GRADE STEM RESEARCH (0472)

Year - Credit 1

STEM Research 1 is a required course for juniors enrolled in the STEM Academy. The course will guide students to choose a real-world problem that they can use the skills gained in their STEM courses to solve. This course (year 1) will focus on teaching additional STEM skills needed for research in all STEM fields as well as literature review, research plan/engineering design, and data collection. Solving real-world problems using STEM skills takes thoughtful planning and time to execute a well designed experiment so that enough data can be collected to draw meaningful conclusions. Students will meet both with their subject pathway teachers as well as in a large group setting throughout the year. Students will ideally work in teams consisting of students focused in each area of STEM so they get a true sense of the real interactions between STEM professionals. Outside counsel in the forms of mentors for students will be pursued depending on the appropriateness for each project chosen by student teams.

Grade 12

✓12TH GRADE STEM RESEARCH (0474)

Year - Credit 1

12th Grade STEM Research is a required course for seniors enrolled in the STEM Academy. Students have the opportunity to continue their previous research project or begin a new focus of research on real-world problems. This course will focus on teaching additional STEM skills needed for research in all STEM fields as well as literature review, research plan/engineering design, and data collection. Solving real-world problems using STEM skills takes thoughtful planning and time to execute a well designed experiment so that enough data can be collected to draw meaningful conclusions. Students will meet both with their subject pathway teachers as well as in a large group setting throughout the year. Students will ideally work in teams consisting of students focused in each area of STEM so they get a true sense of the real interactions between STEM professionals. Outside counsel in the forms of mentors for students will be pursued depending on the appropriateness for each project chosen by student teams.

Science Pathway

Science Elective

Course descriptions can be found in the Science Section of the course catalog.

Technology/Engineering Pathway

Engineering Elective

Course descriptions can be found in the Engineering Technology Section of the course catalog.

Mathematics Pathway

AP Stat or Everyday Stat

Course descriptions can be found in the Mathematics Section of the course catalog.

Computer Science Pathway

AP Computer Science A or Java

Course descriptions can be found in the Mathematics Section of the course catalog.

MUSIC DEPARTMENT

All music courses fulfill the one year N.Y.S. graduation requirement.

MUSIC THEORY (0900)

Year – Credit 1

This course is an introduction to theoretical aspects and rudiments of music. Students will also explore the harmonic structure of music. (Grades 9-12)

ADVANCED PLACEMENT MUSIC THEORY (0905)

Year – Credit

Prerequisite: Music Theory

Music history, literature, sight singing, ear training, advanced harmony, composition, arranging and conducting are some of the topics covered in this course. (Grades 10-12)

MUSIC TECHNOLOGY & INNOVATION LAB (0902)

Year – Credit 1

This class is designed for the student who wishes to be more knowledgeable with the music they play and/or listen to. The class takes place in our state of the art Macintosh Music Lab; each student is assigned their own Midi keyboard and computer workstation. Programs used include Reaper, Audacity, Garage Band, FL Studio, Ableton and many more. Students will be exposed to aspects of music which include harmony, melody, chord progressions, scales and key signatures. Students will also have an opportunity to learn about today's latest music technology as well as be able to write and record their own music using a computer and keyboard. Some of the topics covered regarding technology will be digital music recording, pop song form, music sequencing, song production/CD mastering and CD artwork. Students can take this course more than once (Grades 9-12).

MUSIC PERFORMANCE

FRESHMAN CHOIR (0903)

Year – Credit 1

Prerequisite: Chorus 8 or recommendation of instructor.

The Freshman Choir composed of all 9th grade students and those new to Choir. Five full periods per week.

ADVANCED TREBLE CHOIR (0906)

Year – Credit 1

Prerequisite: Prior participation in the high school chorus program or recommendation of an instructor. For soprano and alto voices only. Grades 10-12. Five full periods per week.

CHORALE (0907) – Selective – Grades 10-12

Year – Credit 1

Prerequisite: Prior high school chorus experience and audition.

A highly select vocal group. Five full periods per week.

VOCAL MOTION (0911) – Highly selective (Grades 11-12)

Year – Credit 1

Prerequisite: Vocal and dance audition required.

A highly select vocal and dance group. Five periods per week.

ORCHESTRA (0915) - Grade 9

Year - Credit 1

Prerequisite: 8th Grade Orchestra or recommendation of the instructor. Five full periods per week.

The 9th Grade orchestra is composed of all 9th grade interested students who perform on violin, viola, cello, or bass. This group meets every day for 40 minutes, in addition to 1 weekly instrumental class that will be assigned by the instructor. This instrumental class is used to further develop students' technique, pedagogy, and mastery of their instrument.

ORCHESTRA (0909) - Grades 10-12

Year – Credit 1

Prerequisite: 9th Grade Orchestra or recommendation of the instructor. Five full periods per week.

The 10-12 grade orchestra is composed of a mix of interested students who perform on violin, viola, cello, or bass. This group meets every day for 40 minutes, in addition to 1 weekly instrumental class that will be assigned by the instructor. This instrumental class is used to further develop students' technique, pedagogy, and mastery of their instrument.

CHAMBER ENSEMBLE (0920) - Grades 10-12

Highly Selective

Year – Credit 1

Prerequisite: Prior participation in String Orchestra, audition, and recommendation of the instructor. Five periods per week. Courses meet five periods per week.

Chamber Ensemble is an auditioned group open to all 10-12 grade orchestra students who wish to apply. Chamber Ensemble is composed of a mix of interested students who perform on violin, viola, cello, or bass. This group meets every day for 40 minutes, in addition to 1 weekly instrumental class that will be assigned by the instructor. This instrumental class is used to further develop students' technique, pedagogy, and mastery of their instrument.

BAND (0914) - Grade 9

Year – Credit 1

Prerequisite: Prior experience in 8th grade band or recommendation of the instructor.

MARCHING & CONCERT BAND (0908) – Grades 10-12

Year – Credit 1

Prerequisite: Prior experience in the West Islip High School Band Program or recommendation of the instructor.

MARCHING BAND & WIND ENSEMBLE (0916)

(Showband) Grades 10-12 – Highly selective

Year - Credit 1

Prerequisite: Prior experience in high school Band, audition and recommendation of the instructor.

WIHS MUSIC CONSERVATORY PROGRAM

The West Islip High School Music Conservatory program is designed to recognize student commitment and achievement in musical performance and includes academic, leadership, and performance-based components connected to our music curriculum. This program will afford students the opportunity to gain the necessary skills in preparing for a career in music and/or entering a music college or conservatory.

To complete the four year program, 9th Grade students must register for:

MUSIC THEORY I & PERFORMANCE MUSIC GROUP (Band, Chorus or Orchestra)

Prerequisites for 9th Grade registration:

- Vocal or instrumental experience
- Strong interest in developing compositional skills
- Completed and/or scheduled to perform a NYSSMA solo at Level 3 or higher
- Permission of the instructor

PROGRAM OVERVIEW:

9th Grade – Music Theory I and enrollment in band, chorus or orchestra.

10th Grade – AP Music Theory and enrollment in band, chorus or orchestra.

11th Grade – IB Higher Level (HL) and enrollment in band, chorus or orchestra or IB Standard Level (SL) and enrollment in band, chorus or orchestra Performance Group Music and Music Theory I are prerequisites for the IB Music Program.

12th Grade – IB Music HL or Music Technology and enrollment in band, chorus or orchestra.

IB MUSIC SL (IB901) - Grade 11 or 12

Year – Credit 1

Prerequisite: Successful completion of Theory I and concurrent enrollment in a West Islip performance ensemble. AP Music Theory is strongly recommended.

The International Baccalaureate Music SL course is designed for students with a strong interest and background in music. This course will cover Western music history, music of the world's cultures, traditional and electronic composition techniques, performance practice, form analysis, and an extended study of musical elements. Students enrolled in this class should be able to perform solo repertoire at an advanced level. (NYSSMA level 5 +)

IB MUSIC HL (IB902/IB903) - Grades 11 and 12

2 Years – Credit 2

Prerequisite: Successful completion of Theory I and concurrent enrollment in West Islip performance ensemble. AP Music Theory is strongly recommended.

The International Baccalaureate Music HL course is designed for students with a strong interest and background in music. This course will cover Western music history, music of the world's cultures, traditional and electronic composition techniques, performance practice, form analysis, and an extended study of musical elements. Students enrolled in this class should be comfortable performing solo repertoire at a very advanced level. (NYSSMA level 6)



SCIENCE DEPARTMENT

[Click here to view Science flowchart](#)



BIOLOGY (LIVING ENVIRONMENT) (0412)

Year – Credit 1

Living Environment is the scientific exploration of the diverse world of living organisms. Major themes include structure and function of cells, interactions between organisms, homeostasis, reproduction and genetics, and evolution.

Laboratory work is included. All students will take the Regents Exam in June.



EARTH SCIENCE (0401)

Year – Credit 1

Prerequisite: Completion of Biology.

This course is designed to cover such topics as the earth's crust, geologic changes, fossils, the ocean, the atmosphere and weather, earth motions, and energy in earth processes. Laboratory work is included. All students will take the Regents Exam in June.



CHEMISTRY (0424)

Year – Credit 1

Prerequisite: Successful completion of Regents Earth Science and Algebra I.

This is a full year laboratory course that will cover the New York State Regents core curriculum. This course is designed to cover such topics as the nature of matter and its changes, energy, the periodic table and its applications, electrochemistry, kinetics and equilibrium. All students will take the Regents Exam in June.



PHYSICS (0444)

Year – Credit 1

Prerequisite: Successful completion of Chemistry and Algebra II.

This is an enriched laboratory course which is strongly quantitative and analytical. The course covers physical concepts and applications in areas of mechanics, energy, electricity, magnetism and light. Students will take the New York State Physics Regents exam.



ADVANCED PLACEMENT BIOLOGY (0434)

Year – Credit 1

Prerequisite: Successful completion of Biology and Chemistry.

The AP Biology course is the equivalent of the first two semesters of introductory college biology, and is intended to prepare students for subsequent college biology courses. Students are expected to take the Advanced Placement Examination in May.



ADVANCED PLACEMENT CHEMISTRY (0442)

Year – Credit 1

Prerequisite: Successful completion of Chemistry and Algebra II.

This is a college level course which provides a systematic introduction to the principles, laws and concepts of chemistry. Students are expected to take the Advanced Placement Examination in May.



ADVANCED PLACEMENT PHYSICS 1 (0436)

(Grade 11 or 12)

Year – Credit 1

Prerequisite: Successful completion of Chemistry and Algebra II.

This college level course provides a systematic introduction to the main principles of physics and the development of problem solving abilities. Provides a foundation for students interested in pursuing life sciences, pre-med and other fields not directly related to service. Students are expected to take the AP examination.



ADVANCED PLACEMENT PHYSICS 2 (0440)

(Grade 12)

Year – Credit 1

Prerequisite: Successful completion of Advanced Placement Physics 1.

This college level course cultivates the understanding of Physics through inquiry-based investigations in: fluids; thermodynamics; electrical force, field and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic and nuclear physics. Students are expected to take the AP exam in May.



IB BIOLOGY HL 1 - Grade 11 (IB405)

Year – Credit 1

Prerequisite: Successful completion of Chemistry is strongly suggested. Students taking IB Biology HL should **NOT** co-enroll in Human Anatomy and Physiology and Genetics.

The primary emphasis of this course will be on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding is a grasp of the personal experience in scientific inquiry as well as recognition of unifying themes that integrate the major topics of biology. Students should be able to use inquiry skills to apply their biological knowledge and critical thinking to environmental and social concerns that will benefit the world. Students will use the acquired tools to appreciate worldwide differences and work towards acceptance by those they can influence, educate and persuade.

Topics studied in year one include statistics, cells, biochemistry, genetics, biotechnology, evolution, and ecology with the accompanying laboratory activities. The course will follow the guidelines for IB Biology and prepare the student for the HL examination in May of 12th grade. Students may work on the required Group IV project during year one. The Group IV project is a collaborative and multidisciplinary activity, which encourages science students to appreciate the environmental, social, and ethical implications of science.



IB BIOLOGY HL 2 - Grade 12 (IB406)

Year – Credit 1

Prerequisite: Successful completion of IB Biology HL 1. Students taking IB Biology HL should **NOT** co-enroll in Human Anatomy and Physiology and Genetics.

This course is a continuation of IB Biology HL 1. The emphasis of this course will continue to be to develop an understanding of the concepts through scientific inquiry. Students will be presented with the unifying themes that integrate the major topics of biology. Students should be able to use inquiry skills to apply their biological knowledge and critical thinking to environmental and social concerns that will benefit the world. Students will use the acquired tools to appreciate worldwide differences and work towards acceptance by those they can influence, educate and persuade. Topics studied in year two will include climate change, plant biology and advanced human physiology, with the accompanying laboratory activities.

The IB Biology HL year two course is designed for students entering the 12th grade who have successfully completed IB Biology HL year one. The course will follow the guidelines for IB Biology and prepare the student for the HL examination in May of 12th grade. Students will work on the required Group IV project during year two and will complete the IA (Internal Assessment). The Group IV project is a collaborative and multidisciplinary activity, which encourages science students to appreciate the environmental, social, and ethical implications of science.



IB CHEMISTRY SL (IB411)

Year – Credit 1

Prerequisite: Successful completion of Chemistry R and Successful completion of, or current enrollment in Algebra II is recommended.

The primary emphasis of this course will be on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding is a grasp of the personal experience in scientific inquiry as well as recognition of unifying themes that integrate the major topics of chemistry. Students should be able to use inquiry skills to develop experimental and investigative scientific skills including the use of current technologies. Students will use the acquired tools to develop and apply 21st century communication skills in the study of science. Topics studied include stoichiometry, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, and measurement and data processing

The course will follow the guidelines for IB Chemistry and prepare the student for the SL examination in May. Students will work on the required Group IV project. The Group IV project is a collaborative and multidisciplinary activity, which encourages science students to appreciate the environmental, social, and ethical implications of science.



IB ENVIRONMENTAL SYSTEMS SL (IB413)

Year – Credit 1

This course is designed to provide students with a macrocosmic view of the environmental issues that pervade Planet Earth by integrating historical, economic, cultural, political, and scientific aspects and how they impact our global society. This is a laboratory oriented course with an emphasis on scientific principles, concepts, and methodologies required to identify, analyze, evaluate, and examine avenues of resolution to global issues. The course combines core curricula from both Group IV and Group III, offering more flexibility in the IB Diploma Program. It is recommended that students have preparation in understanding scientific methods and some awareness of local and global environmental issues.

The course will follow the guidelines for IB Environmental Systems and prepares the student for the SL examination in May. Students will work on the Group IV project. The Group IV project is a collaborative and multidisciplinary activity, which encourages science students to appreciate the environmental, social, and ethical implications of science.



IB PHYSICS SL (IB403)

Year – Credit 1

This course is designed to help students appreciate scientific study and creativity within a global context, to acquire a body of knowledge, methods, and techniques that characterize science and technology, and to apply and use a body of knowledge, methods and techniques that characterize science and technology. Students will develop an ability to analyze, evaluate and synthesize scientific information, a critical awareness for effective collaboration and communication, 21st century communication skills, and an understanding of the relationships between scientific disciplines, and their influence on other areas of knowledge. The course will focus on measurement and uncertainty, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear and particle physics, and energy production.

The course will prepare the student for the SL examination in May. Students will work on the Group IV project. The Group IV project is a collaborative and multidisciplinary activity, which encourages science students to appreciate the environmental, social, and ethical implications of science.



ASTRONOMY - EXPLORATION OF THE UNIVERSE (0430)

Fall Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to 10th graders, however, this course may not be used to fulfill the science Regents requirement. This course is intended to present a study of the universe in which students explore galaxies, the stars, and the possibility of life in other worlds. The use of the planetarium will be an integral part of instruction.



ASTRONOMY - UNDERSTANDING THE SOLAR SYSTEM (0433)

Spring Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to 10th graders, however, this course may not be used to fulfill the science Regents requirement. This course is intended to present a study of our solar system and the laws which govern the properties of the planets, moons, comets, meteors, asteroids and our sun. The use of the planetarium will be an integral part of instruction.



FORENSICS I (0454)

Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to 10th graders, however, this course may not be used to fulfill the science Regents requirement.

This course will devote one semester to studying the role that forensic science plays in anthropology, history and crime detection. Considerable attention will be given to the role that forensic science plays in society.



FORENSICS II (0455)

Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to grades 11 and 12. Successful completion of Forensics I. Open to 10th graders however this course may not be used to fulfill the science Regents requirement.

This is a hands-on course in which students will apply their knowledge and skills taught in Forensics I (formerly Forensics.) Topics will be covered in more detail with more of an emphasis on correct scientific procedure and evaluation used in crime scenes. Forensics I and Forensics II may not be taken concurrently. The course will culminate with a crime scene.



GENETICS (0459)

Sem. – Credit ½

Prerequisite: Successful completion of Biology. Open to grades 11 and 12.

Genetics is a half year advanced level elective course that focuses on Inheritance (Mendel), Molecular Biology (DNA), and DNA Biotechnology. Students will participate in several lab activities to gain experience with real world scenarios while utilizing modern biotechnology techniques such as gel electrophoresis. Topic examples include crime scene analysis and genetic disorder inheritance.



HUMAN ANATOMY AND PHYSIOLOGY (0462)

Sem. – Credit ½

Prerequisite: Successful completion of Biology.

Successful completion of Chemistry recommended. Open to grades 11 and 12. This half-year elective is an in-depth study of the structure and function of the human body. Students will explore the systems of the human body in far greater detail than they did in Biology. This course is highly recommended for anyone thinking of entering health care or medicine. Students must be willing to participate in dissections.



MARINE SCIENCE (0453)

Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to grades 11 and 12. Open to 10th graders, however, this course may not be used to fulfill the science Regents requirement.

This is a one semester course devoted to studying the organisms that live in the marine habitats of Long Island and ecological relationships that exist between them and us.



NATURAL DISASTERS (0458)

Sem. – Credit ½

Prerequisite: Successful completion of two years of science. Open to grades 11 and 12. Open to 10th graders, however, this course may not be used to fulfill the science Regents requirement.

This is a one semester course that will focus on the causes of natural disasters and their impact on the populations of living organisms on the planet. Topics covered could include the study of hurricanes, tidal waves, volcanoes, earthquakes, meteorites, tornados, global warming, ozone depletion, landslides, avalanches and mudslides. Students will be required to do independent research, projects and group presentations.

SKILLS IN SCIENCE RESEARCH (0490)

Year – Credit 1

This one year honors level course introduces students to the scientific method and lab techniques. Students will conduct hands-on investigations in the life sciences. Students will also have the opportunity to conduct a research project in their area of interest.

BIOTECHNOLOGY RESEARCH (0487)

Year – Credit 1

This one year honors level course may be taken following the Skills in Science Research course or with a recommendation from your science teacher. Biotechnology Research introduces students to lab techniques specifically in the field of biotechnology. Students will conduct hands-on investigations in which they extract, digest and amplify segments of DNA for analysis. Students will also conduct an original research project of their own design. At the conclusion of this course, students will be prepared to conduct an extended research project in an Advanced Research course.

ADVANCED RESEARCH 1 (0492)

Year – Credit 1

Prerequisite: Two years of honors science and, Successful completion of Skills in Science Research, Biotechnology Research, or recommendation from current science and English teachers.

Students learn research methodology in the natural and social sciences by using on-line databases and bibliographic search techniques, consulting professionals in the field of study, developing hypotheses and conducting an experiment that tests them. Findings are presented through PowerPoint presentations, a final research poster and by making a presentation at the West Islip Science Research Symposium and a local science fair. It is expected that the students will be familiar with many of these activities from prerequisite courses, although students may enter the course with recommendations from their Science and English teachers. Emphasis is placed upon developing and conducting the research experiment.

ADVANCED RESEARCH 2 (0493)

Year – Credit 1

Prerequisite: Successful completion of Advanced Research 1 Research Institution Experience.

Students will continue work undertaken in the Advanced Research 1 course or Research Institution Experience with an emphasis placed upon additional data collection and the communication of results including participation in local and national science competitions.

RESEARCH INSTITUTION EXPERIENCE (0485)

Year – Credit 1

Prerequisite: Student has found a qualifying mentor at a research institution, and two years of honors science, and Successful completion of Skills in Science Research, Biotechnology Research, or recommendation from your current Science teacher.

Students enrolled in Advanced Research 1 or Advanced Research 2 may qualify Research Institution Experience if the student finds a qualifying mentor from a research institution. Students must apply for acceptance to the Research Institution Experience course after finding a qualifying mentor and discussing the research to be conducted with the research teacher.

STEM ACADEMY

[Link to STEM Academy Pathway Graphic](#)

Vision

Inspire future STEM leaders by preparing students to think critically and work collaboratively in Science, Technology, Engineering, and Mathematics.

Mission

STEM Academy classes will foster innovation through a cooperative culture and rigorous course work in STEM fields. Students will develop a depth of learning and a strong work ethic in highly challenging courses that will accelerate their learning in STEM. Through a student driven and interdisciplinary learning environment, STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science.

Descriptions of Required Courses

✓Required for all STEM pathways

*Enrollment in a World Language course is required

Grade 9

✓DESIGN AND DRAWING FOR PRODUCTION

Course description can be found in the Engineering Technology Section of the course catalog.

✓STEM SKILLS (0498)

Year – Credit 1

This one year course is a required class for ninth grade students who have been accepted into the STEM Academy. STEM Academy students will develop the skills they need to explore world problems. Students will be provided with opportunities to collaborate with peers, teachers, and experts in the fields of science, technology, engineering, math, and computer science. The course includes introductory research and problem solving skills necessary for advanced exploration in the STEM pathways. Students conclude the course with a culminating research project that integrates science, engineering, math and computer science.

Grade 10

✓AP COMPUTER SCIENCE PRINCIPLES

Course description can be found in the Math section of the course catalog.

Science Pathway

✓BIOTECHNOLOGY RESEARCH

Course description can be found in the Science section of the course catalog.

Technology/Engineering Pathway, Mathematics Pathway, Computer Science Pathway

✓COMPUTER AIDED DESIGN (CAD)

Course description can be found in the Engineering Technology section of the course catalog.

Grade 11

✓11TH GRADE STEM RESEARCH (0472)

Year - Credit 1

STEM Research 1 is a required course for juniors enrolled in the STEM Academy. The course will guide students to choose a real-world problem that they can use the skills gained in their STEM courses to solve. This course (year 1) will focus on teaching additional STEM skills needed for research in all STEM fields as well as literature review, research plan/engineering design, and data collection. Solving real-world problems using STEM skills takes thoughtful planning and time to execute a well designed experiment so that enough data can be collected to draw meaningful conclusions. Students will meet both with their subject pathway teachers as well as in a large group setting throughout the year. Students will ideally work in teams consisting of students focused in each area of STEM so they get a true sense of the real interactions between STEM professionals. Outside counsel in the forms of mentors for students will be pursued depending on the appropriateness for each project chosen by student teams.

Science Pathway

Science Elective

Course descriptions can be found in the Science Section of the course catalog.

Technology/Engineering Pathway

Engineering Elective

Course descriptions can be found in the Engineering Technology Section of the course catalog.

Mathematics Pathway

AP Stat or Everyday Stat

Course descriptions can be found in the Mathematics Section of the course catalog.

Computer Science Pathway

AP Computer Science A or Java

Course descriptions can be found in the Mathematics Section of the course catalog.

**Students must earn three science credits at the high school level in order to meet
New York State graduation requirements**

SOCIAL STUDIES DEPARTMENT

[Click here to view the Social Studies flowchart](#)



GLOBAL STUDIES 9R (0207) H (0206)

Year – Credit 1

This course is open to students who would be scheduled for English 9 and Global Studies concurrently. Taught in consecutive periods by one teacher from each department, a mini-team environment will be created along with expanded opportunities for joint projects and overlapping connections. Literature will be matched with the social studies curriculum for both origin and chronology. The course offers a cross-curriculum study of literature, geography, culture and historical influences on the development of selected global regions. Interdisciplinary and multicultural reading, writing and speaking projects will be emphasized.



GLOBAL STUDIES 10R (0204) H (0212)

Year – Credit 1

This course will follow the interdisciplinary format as in grade 9 including consecutive period scheduling, literature matched to the social studies curriculum and team teaching. Major units of research and analysis will include: the cultural heritage of modern Europe, industrialization, the rise of democratic societies, the institutions and history of the former Soviet Union and Latin America, colonialism, nationalism, and conflicting ideologies of the twentieth century. Global connections will be identified and evaluated. At the conclusion of the course students will take a New York State Regents examination.



ADVANCED PLACEMENT EUROPEAN HISTORY (0262)

Year – Credit 1

This is a college level introduction course on the general narrative of European History from 1450 to the 1990's. The study includes an examination of political, diplomatic, economic, social, intellectual, and cultural themes. Students will compare and contrast the major ideas of documents that contributed to the growth of western civilization. They will also use and analyze statistics, visual and graphic resources, and historical interpretations. There will be a heavy emphasis on the development of theme essays. Students will take the Advanced Placement European History Examination in May. At the conclusion of the course students will take a New York State Regents examination.



UNITED STATES HISTORY R (0224) H (0222)

Year – Credit 1

This course follows the mandated State Syllabi in Social Studies. The history of American growth from the colonial period to the present is developed. The enduring issues of constitutional history are stressed with a post 1865 emphasis on social, political and economic themes. Writing and research skills are integrated continuously. At the conclusion of the course students will take a New York State Regents examination.



ADVANCED PLACEMENT GOVERNMENT AND POLITICS (0252)

Year – Credit 1

The course is designed to give students a critical perspective on politics and government in the United States. Students study general concepts used to interpret American politics and analyze specific case studies. The course requires familiarity with the various institutions, groups, beliefs and ideas that constitute American politics. Students are expected to take the Advanced Placement Examination in Government and Politics in May.



ADVANCED PLACEMENT MACRO/MICRO ECONOMICS (0247)

Year – Credit 1

This course will focus on giving students a thorough understanding of the principles of macro and micro economics. It will place primary emphasis on the nature and functions of markets, and the role of government in promoting greater efficiency and equity in the economy. Supply and demand models, consumer choice, production and costs, and market structures will be analyzed. Measurement of economic performance, national income and price determination, as well as international economics will also be included. **This course fulfills economics and government requirements for graduation.**



AMERICAN GOVERNMENT R (0256)

Sem. – Credit ½

The primary goal of this course is to facilitate and encourage the development of civic-minded individuals capable of effectively fulfilling the "office of citizen" that is a fundamental precept of democracy and a right and obligation guaranteed by the 14th Amendment to the Constitution. The end product should be individuals who have the characteristics that define a citizen – committed, informed, skillful and active. To that end, we are offering a one semester course in American Government and Politics which is designed to give students a critical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality.

Note: All seniors are required to successfully complete American Government AND Economics to meet New York State graduation requirements.



CRIMINAL JUSTICE (0269)

Sem. – Credit ½

This course will examine the nature of law and the law-making process. It will also examine the causes of crime and the different classifications of crime that exist within the American criminal justice system. In addition it will investigate the criminal justice process in the United States. Open to grades 9 through 12.



ECONOMICS R (0244) H (0275)

Sem. – Credit ½

Economics is a required senior course designed to develop an understanding of the American economic system, including its characteristics, institutions, and problems. The course will cover both macroeconomics and microeconomics. Critical thinking skills (summarizing, organizing, analyzing and evaluating ideas) are incorporated throughout the course to help students make informed economic decisions. In keeping with the concept of economic world interdependence a significant portion of the course focuses on international economics, i.e. international trade, economic growth in developing nations, and comparative economic systems.



GENOCIDE IN HISTORY (0282)

Sem. – Credit ½

This course explores and analyzes the causes, results, and moral decision-making centered on the tragedy of the Holocaust during the rise of Nazism in Germany and World War II. Furthermore, the course will examine parallel case studies of genocide and severe human rights abuses during the 20th century. Using historical analysis such relevant issues as discrimination, prejudice, peer pressure and the responsibilities of an individual in modern society will be studied. Open to grades 9 through 12.



PSYCHOLOGY (0264)

Sem. – Credit ½

This course seeks to analyze and understand why people behave the way they do, both consciously and unconsciously. Through scientific studies, case histories, experiments and related materials and activities, the student will gain an insight into human behavior. The course will also stress informal discussions designed to provide a greater understanding of one's own behavior. Open to grades 10, 11 and 12.



PUBLIC ISSUES 12H (0251)

Sem. – Credit ½

This curriculum was created in support of the goals of the National Issues Forums, and uses its materials as the basis for the Public Issues course. The students will learn to actively participate in the deliberative process. Eventually, they will also learn the skills and techniques so they may moderate the deliberations. Beyond the examination using the NIF issue books, the students will also learn cost/benefit analysis and be taught that public policy does not exist in a vacuum. The effectiveness of the various approaches will be considered, but more importantly, they will be taught about the mechanics of the creation of public policy. A unit on the government's role in creating public policy will be studied so that a true ability to example realistic policies will exist. In addition, it is envisioned that various guest speakers will be brought into the classroom. This includes legislators, people from community organizations, special interest groups, school officials, etc. Hopefully, if the need arises, the students will be able to create a format for and even lead community or school based forums. The idea is to make this a course that increases civic awareness and fosters participation in the democratic process.

** This course satisfies the 12th grade American Government requirement.*



SOCIOLOGY (0268)

Sem. – Credit ½

Sociology is designed to introduce the student to terminology and techniques used by sociologists. The main focus is American society and how the individual develops through the socialization process and becomes a productive member of that society. Open to grades 9 through 12.



THE ROAD TO VIETNAM AND BEYOND (0280)

Sem. – Credit ½

This course looks at United States foreign and defense policy from 1945 to the present with an emphasis on the road to Vietnam and its aftermath. Issues examined will include the Cold War, the Korean War, the dissolution of the Soviet Union, and the current involvement in Afghanistan and Iraq. In addition, the role of the Presidency will be discussed. Students will have the opportunity to participate in several creative hands-on activities as part of home and classwork. Open to grades 9 through 12.

IB HISTORY ELECTIVES



IB HISTORY OF THE AMERICAS HL 1 - (IB201)

Year – Credit 1

The History of the Americas is a 2 year course.

An international minded education offers the best solution to provide young people with the skills, knowledge and values to confront the immense challenges that face humanity in the 21st century. This course is designed to present an intensive study of key historical developments in the 20th century and select topics from the Americas. The 11th grade curriculum has been carefully crafted to strike a balance between the IB goals of developing an international perspective particularly as relates to Canada, the United States and various Latin American nations, with the requirements of the New York State Regents assessment the students will sit for in June of the 11th grade year. An important aim of this course will be placed on developing critical thinking skills where students will interpret the past through the investigation of a variety of sources from multiple perspectives. An emphasis will be made to have students evaluate such issues as validity, reliability, credibility, certainty and individual as well as cultural points of view. In addition, issues that highlight the relationship between Theory of Knowledge (TOK) and history will be incorporated and explored throughout the course. Students will demonstrate their grasp of the aims and objectives of this course by way of three externally assessed papers in May of the second year. In addition, students will conduct an historical investigation which will be internally assessed and externally moderated. **Must complete 2 years and students will receive Government and Economics credit.**



IB HISTORY OF THE AMERICAS HL 2 (IB202)

Year – Credit 1

An internationally minded education offers the best solution to provide young people with the skills, knowledge and values to confront the immense challenges that face humanity in the 21st century. This is the second year of a two year course designed to present an intensive study of key historical developments in the 20th century from an international perspective. Select topics will include: Causes, Practices and Effects of War, The Cold War and an IB prescribed subject – Communism in Crisis 1976-1989. An emphasis will be made to have students evaluate such issues as validity, reliability, credibility, certainty, and individual, as well as, cultural points of view. In addition, issues that highlight the relationship between Theory of Knowledge (TOK) and history will be incorporated and explored throughout the course. Students will demonstrate their grasp of the aims and objectives of this course by way of three externally assessed papers in May of their senior year. In addition, students will conduct a historical investigation which will be internally assessed and externally moderated.



IB PSYCHOLOGY SL (IB203/IB204)

2 years – Credit 2

Psychology is the systematic study of human behavior and mental processes from an empirical perspective. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. Psychology has its roots in both the natural and social sciences, leading to a variety of research designs and applications, and providing a unique approach to understanding modern society. IB Psychology examines the interaction of biological, cognitive and socio-cultural influences on human behavior, thereby adopting an integrative approach. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB psychology. In the core of the IB Psychology course, the biological level of analysis demonstrates what all humans share, whereas the cognitive and sociocultural levels of analysis reveal the immense diversity of influences that produce human behavior and

mental processes. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture. In this two-year program, students are required to complete two external essay assessments and an internal assessment report of a simple experiment which they conduct.*

****This course satisfies the 12th grade American Government requirement. Must receive passing grade both years. Students are required to take the IB exam.***



IB PSYCHOLOGY HL (IB205) (IB206)

2 years – Credit 2

The IB Diploma Programme higher level psychology course aims to develop an awareness of how research findings can be applied to better understand human behavior and how ethical practices are upheld in psychological inquiry. Students learn to understand the biological, cognitive and sociocultural influences on human behavior and explore alternative explanations of behavior. They also understand and use diverse methods of psychological inquiry.

****This course satisfies the 12th grade American Government requirement. Must receive passing grade both years. Students are required to take the IB exam.***



SYRACUSE UNIVERSITY PROJECT ADVANCE (SUPA)

This program offers qualified high school students the opportunity to enroll in challenging Syracuse University freshman courses during their senior year of high school. Control of the academic aspects of PROJECT ADVANCE courses, including course syllabi, textbooks, assignments, grading practices, and like matter, resides with the university faculty. *A student tuition cost of \$345 for this three-credit course is required during 2023-2024, but is subject to change.*



AMERICAN HISTORY 101/102 (0225)

Year – Credit 1

The first part of this course is an “introductory” course in American history that covers the period from 1607 to 1865. Students will explore the period from 1607 to the middle of the eighteenth century and will deal with the question of how Europeans from a medieval culture became Americans. We will also explore the political, social and economic impact the Revolution had upon the American society. And finally, we will focus on the modernization of American society in the nineteenth century and examine the relationship between modernization and the sectional crisis. All three themes will focus on issues of political democracy, social justice and equality.

The second part of this course is intended to be an introduction to U.S. history from the end of the Civil War until the present. It will focus on many of the important developments and major trends that have shaped modern American life. By the end of the year, students will learn how to construct persuasive arguments, to use evidence effectively, and to hone a variety of analytic skills that will be of value to them both during the undergraduate experience and in the future.



ECONOMICS 203 (0242)

ECONOMIC IDEAS AND ISSUES

Sem. – Credit ½

Economics Ideas and Issues is an introduction to mainstream economic thought designed for students with a liberal arts interest. The goals of this course are to introduce students to the ideas that form the foundation of modern western (Neoclassical) economic thought, to examine the basic framework (the model) that economists have built on this foundation, and to show how this model is applied to current issues facing individuals and society. The course begins with a presentation of the scientific method which is then used to analyze the question: How do individuals and societies make choices when they are faced with scarcity? Beginning with the individual in the simplest of situations, a one-person society, the course moves step by step to develop a model of a complex society based on division of labor and exchange through markets. The process takes students from the microeconomics to the macroeconomics level, emphasizing the connection between these two perspectives. Students examine the benefits, as well as the problems, inherent in a market-oriented economy. The course prepares students to analyze and understand the ongoing economic policy debate between interventionists and non-interventionists.



WORLD LANGUAGE DEPARTMENT

[Click here to view the Spanish flowchart](#)

[Click here to view the Italian flowchart](#)

[Click here to view the ASL flowchart](#)



SPANISH 1B (0552)

Year – Credit 1

This beginning course covers the Checkpoint A curriculum and is aimed at the development of fundamental communicative skills. Listening and speaking skills are emphasized. Students are taught pronunciation, basic vocabulary in everyday situations, and basic reading and writing structures in contextual settings. Cultural concepts are incorporated into the material. This course culminates in the FLACS Checkpoint A exam. (This course satisfies the language requirement for a Regents diploma.)



SPANISH 2 (0564) ITALIAN 2 (0545)

Year – Credit 1

Prerequisite: Spanish 1/Italian 1

The major objective of this course continues to be building skills within the three modes of communication; interpersonal, presentational and interpretive. More time is devoted to reading and writing in the target language in contextual settings. This class emphasizes the interpersonal and presentational use of the target language in communication and instruction. Cultural concepts are integrated throughout the curriculum.



SPANISH 2H (0550) ITALIAN 2H (0549)

Year – Credit 1

Prerequisite: Spanish 1/Italian 1

The objective of this course is to further develop the skills associated with the three modes of communication; interpersonal, presentational and interpretive. The class is also almost entirely conducted in the target language with an emphasis on speaking. Comprehension of contextual reading and written expression with cultural enrichment are also more fully addressed in this course.



SPANISH 3 (0580) ITALIAN 3 (0546)

Year – Credit 1

Prerequisite: Spanish 2/Italian 2

The objective of this course is to further develop the skills associated with the three modes of communication; interpersonal, presentational and interpretive. A complete review of the structure and vocabulary of the previous years is incorporated into the communication skills practiced. It is almost entirely conducted in the target language with an emphasis on speaking. Upon completion of this course and passing the FLACS Checkpoint B exam, students will have met the language requirement for the Regents Diploma with Advanced Designation.



SPANISH 3H (0556) ITALIAN 3H (0551)

Year – Credit 1

Prerequisite: Spanish 2H/Italian 2H.

A major emphasis in this course continues to be the development of the skills necessary for all three modes of communication; interpersonal, presentational and interpretive. These skills are integrated and evaluated using performance assessments. The course is taught in the target language. Upon completion of this course and passing the FLACS Checkpoint B exam, students will have met the language requirement for the Regents Diploma with Advanced Designation.



SPANISH 4 (0588) ITALIAN 4 (0548)

Year – Credit 1

Prerequisite: Spanish 3/3H Italian 3/3H.

These post-advanced diploma required courses are aimed at enhancing proficiency in all three modes of communication; interpersonal, presentational and interpretive. The class is conducted in the target language with a great emphasis on oral proficiency. Performance tasks such as Socratic Seminar and debate are an integral form of evaluation, as well as instruction.



SPANISH 5 (0589) ITALIAN 5 (0541)

Year – Credit 1

Prerequisite: Spanish 4/Italian 4

The second year of post-advanced diploma required study, this course offers a student-centered approach to further develop proficiency in all three modes of communication; interpersonal, presentational and interpretive. Only the target language is spoken here. Field trips provide cultural enrichment. At the culmination of this course students will be provided the opportunity to earn the NYS Seal of Biliteracy.



SPANISH 111/112 (0582) 11th grade college level

Year – Credit 1

Prerequisite: Spanish 3H/Spanish 4

This post-advanced diploma required course is aimed at enhancing a higher level of proficiency in all three modes of communication; interpersonal, presentational and interpretive. This class is conducted entirely in the target language. A variety of authentic materials including audio and visual sources are utilized to stimulate discussion. Students in this level must be willing to challenge themselves, as they will be expected to perform academically at a college level. A large part of the curriculum instruction and evaluation will be conducted using performance tasks such as Socratic Seminar, debate and round-table discussion. This course is the prerequisite to AP Spanish.

Note: Students enrolled in Spanish 111/112 will have the opportunity to earn a maximum of six college credits (3 per semester) through Adelphi University. Tuition is approximately \$400 per semester during 2023-2024.



ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE (0584)

Year – Credit 1

Prerequisite: Spanish 111/121

Students may prepare for the Advanced Placement Examination in this course. Oral communication aimed at developing a high degree of proficiency is stressed. Students will show a higher level of proficiency in all three modes of communication; interpersonal, presentational and interpretive. Lectures and discussions are entirely in the target language. A large part of the curriculum instruction and evaluation will be conducted using performance tasks such as Socratic Seminar, debate and round-table discussion. Students are expected to take the AP examination in May. At the culmination of this course students will be provided the opportunity to earn the NYS Seal of Biliteracy.



AMERICAN SIGN LANGUAGE 2 (0536)

Year – Credit 1

Prerequisite: ASL 1

The major objective of this course continues to be increased receptive and expressive skills. Students will be able to engage in extended discourse on a broad range of topics, including those of general interest to members of the Deaf community.



AMERICAN SIGN LANGUAGE 3 (0538)

Year – Credit 1

Prerequisite: ASL 2

In this course there is a strong emphasis on strengthening advanced receptive and expressive skills. This class will be conducted entirely in the target language; therefore comprehension and fluency are essential. Students will be exposed to a variety of different cultural materials and participation is imperative. Upon completion of this course and passing the Checkpoint B exam, students will have met the language requirement for the advanced Regents diploma.



AMERICAN SIGN LANGUAGE 4 (0528)

Year – Credit 1

Prerequisite: ASL 3

This post-Regents advanced course is designed for students who have a genuine interest in ASL and/or are interested in pursuing a career in the field. The class is conducted entirely in the target language with the objective to increase fluency. We will examine the preservation of sign language as well as discuss the significance of cross cultural issues between the hearing and deaf community. In addition, students will explore career opportunities that use ASL and have the opportunity to meet guest speakers that work in the field.



AMERICAN SIGN LANGUAGE 111/112 (0532)

Year – Credit 1

Prerequisite: 4R/H class with teacher recommendation.

This post-Regents advanced course is designed to increase vocabulary, expand and develop grammar structures and examine the use of classifiers. The class is conducted entirely in the target language. We will examine the preservation of sign language through poetry, hand shape, stories, ABC stories and drama; as well as discuss the significance of cross-cultural issues between the hearing and deaf community. Students in this level must be willing to work hard, as they will be expected to perform academically at a college level. At the culmination of this class students will be provided the opportunity to earn the NYS Seal of Biliteracy.

Note: Students enrolled in ASL 111/112 will have the opportunity to earn a maximum of six college credits (3 per semester) through Adelphi University. Tuition is approximately \$400 per semester during 2023-2024.

Note: Not all colleges will accept ASL as meeting the world language requirement.

Note: The IB and AP programs do not recognize American Sign Language as a world language.

IB WORLD LANGUAGE COURSES

The aims of the IB language standard level courses are to:

- Develop students' intercultural understanding
- Enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- Encourage, through the study of texts and social interaction, and awareness and appreciation of the different perspectives of people from other cultures
- Develop students' awareness of the role of language in relation to other areas of knowledge
- Develop students' awareness of the relationship between the languages and cultures with which they are familiar
- Provide students with a basis for further study, work and leisure through the use of an additional language
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language

The aims of the IB language higher level courses are to:

- Develop students' intercultural understanding
- Enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
- Develop students' awareness of the role of language in relation to other areas of knowledge
- Develop students' awareness of the relationship between the languages and cultures with which they are familiar
- Provide students with a basis for further study, work and leisure through the use of an additional language
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language
- Introduce and explore at least two works of authentic literature in the target language



IB SPANISH SL 1 (IB501)

Year – Credit 1

Prerequisite: Spanish 3H/3R with teacher recommendation.

The IB DP language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.



IB SPANISH SL 2 (IB502)

Year – Credit 1

Prerequisite: IB Spanish 1

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.

At the conclusion of the IB sequence students are expected to sit for the IB examination at the standard level for Spanish IB SL 2. At the culmination of IB SL 2 students will be provided the opportunity to earn the NYS Seal of Biliteracy.



IB SPANISH HL 1 (IB505)

Year – Credit 1

Prerequisite: Spanish 3/3H with teacher recommendation.

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.



IB SPANISH HL 2 (IB506)

Year – Credit 1

Prerequisite: Spanish HL 1

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.

At the conclusion of the IB sequence students are expected to sit for the IB examination at the higher level for Spanish IB HL 2. At the culmination of the IB HL 2 students will be provided the opportunity to earn the NYS Seal of Biliteracy.



IB ITALIAN SL 1 (IB503)

Year – Credit 1

Prerequisite: Italian 3/3H with teacher recommendation.

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.



IB ITALIAN SL 2 (IB504)

Year – Credit 1

Prerequisite: IB Italian 1

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.

At the conclusion of the Italian IB sequence students are expected to sit for the IB examination at the standard level for Italian IB SL 2. At the culmination of IB SL 2 students will be provided the opportunity to earn the NYS Seal of Biliteracy.



IB ITALIAN HL 1 (IB507)

Year – Credit 1

Prerequisite: Italian 3 with teacher recommendation or 3H.

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.



IB ITALIAN HL 2 (IB508)

Year – Credit 1

Prerequisite: Italian HL 1

This IB Language B course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language.

At the conclusion of the Italian IB sequence students are expected to sit for the IB examination at the higher level for Italian IB HL 2. At the culmination of IB SL 2 students will be provided the opportunity to earn the NYS Seal of Biliteracy.



[New York State Seal of Biliteracy Information](#)

BOCES CAREER & TECHNICAL PROGRAMS: GRADES 11-12 ONLY

West Islip High School partners with Eastern Suffolk BOCES (ESBOCES) to expand career and technical opportunities for students beyond the traditional classroom environment. ESBOCES provides educational leadership, direct instruction, management and support through effective instructional programs. The goals of BOCES Career & Technical Education are to assist students in developing marketable skills, and educate students in programs which comply with current New York State standards. Students will have the opportunity to study in a work-based experience through the work-skills employability profile. Students in grades 11 and 12 are eligible to participate and must discuss this option with their counselor if interested.

The following courses are pending District and final budget approval.

ANIMAL SCIENCE

2 years- Credit 4

Animal Science is designed to prepare students who are pursuing animal related careers and can be used as a college preparatory course for those interested in furthering their education in applied sciences. This course provides students with the opportunity to work with a wide variety of animals. Classroom environment simulates procedures performed in veterinary hospitals, grooming shops and kennel facilities. Students are also provided with hands-on experience with farm animals at Cornell Cooperative Extension and at local horse farms.

AUTO BODY REPAIR AND REFINISHING

1 or 2 year – Credit 4

This program will give students the opportunity to learn how to dismantle and reassemble damaged automobile components, straighten metal parts and car frames, straighten dents, use filler compounds, grind, and prepare a car for the refinishing shop. Students will also learn how to select and mix paint according to the latest EPA guidelines as well as the proper techniques in spray painting. Students are eligible to receive I-Car Certification upon completion of this program.

AUTOMOTIVE TECHNOLOGY

2 year – Credit 4

This two-year program meets requirements for Automotive Service Excellence (A.S.E.) certification and is certified by NATEF. The program provides students with basic skills to repair and service automobiles. Troubleshooting, diagnosing, repair and service of chassis, front-end alignment and steering, electrical/electronics, drive line, exhaust emissions and engine components will be learned in theory and practice. Students will be prepared for The National Institute for Auto Service Excellence examination and have the option to be approved by the New York State Department of Motor Vehicles in N.Y. State Inspection. High achieving juniors will have the opportunity to enter the AYES Program (www.ayes.org), which is a two-year apprentice program, administered through BOCES with local dealerships, similar to cooperative learning. Students are eligible to receive Automotive Service Excellence (ASE) upon completion of this program. *All students must complete introductory automotive service courses at WIHS prior to enrolling in this program.*

AVIATION/PROFESSIONAL PILOT TRAINING

2 years – Credit 4

Students in this program will study aerodynamics, navigation, meteorology, aviation physiology, airplane performance and air traffic control procedures. They will operate actual aircraft as well as flight simulators. All students will be prepared to take the Federal Aviation Administration (FAA) Private Pilot Knowledge Exam (FAA testing procedures apply) and the FAA 3rd Class Medical Exam by the end of the first year. Students who have passed the FAA Private Pilot Knowledge Exam and the FAA 3rd Class Medical Exam along with earning at least an 80 in the first year will be eligible to enroll in the second year of the program. Students will have the opportunity to earn a Private Pilot's Certificate and work with business and local industry in an aviation-related capacity.

BARBERING

2 years – Credit 4

This course is a combination of classroom instruction and laboratory opportunities that will develop academic and professional knowledge as well as skills required for job acquisition, retention and advancement. This program emphasizes specialized training in safety, sanitation, shaving, reception, precision shear and clipper cutting, sales, and can create opportunities for small business ownership. The curriculum is designed to give an overview of the barbering industry, licensing and the opportunities for professional growth. Students who successfully complete this 500 hour course will be eligible to sit for the New York State Licensing Board Exam. Students must be at least 17 years of age to take the New York State Barber Practical Examination.

CARPENTRY/RESIDENTIAL CONSTRUCTION AND HOME IMPROVEMENT

2 year - Credit 4

The carpentry program is a combination of hands-on skill development and technical training in order to prepare students for entry-level employment or higher in residential construction, home improvements and related fields. Students will actively build and/or renovate a three-bedroom, Energy Star rated ranch on-site using Brookhaven Town and Energy Star building codes. Both renovation and alteration of existing residential structures are taught, and students evaluate their own work and keep an active portfolio as well as a notebook. Students have the option of taking the National Center for Construction Education Research (NCCER) National Registry. The registry provides valuable industry credentials for students as they seek employment and build their careers. Students will take the OSHA-10 course in their first year of study with the goal of obtaining the OSHA-10 card. *All students must take Intro to Trade at WIHS prior to enrolling in this program.*

CLINICAL MEDICAL ASSISTING

1 year – Credit 4

This course is designed to provide basic training in the areas of phlebotomy, EKG, medical terminology, first aid/CPR, and medical assisting. It enables students to become nationally certified by the American Association of Allied Health Professionals (AAHP). Emphasis is placed on preparing students for work in the healthcare industry. It provides fundamental theories and principles needed by all health care providers in the legal aspects of the industry, as well as professional behavior skills. Safety is emphasized throughout the course. Students are eligible for certification in Phlebotomy, EKG, CPR/BLS, and/or Clinical Medical Assisting through Certified Health Professionals (CHP).

COSMETOLOGY

2 year – Credit 4

Instruction is provided along with hands-on experience in hair shaping, styling and chemical services, including hair coloring, permanent waving and chemical relaxing. Also, encompassed within the curriculum are scalp treatments, facials, makeup, nail care and artificial nails. The course fulfills the 1,000-hour requirement necessary to qualify for the New York State Licensing Examination while reinforcing the New York State Regents Standards. A Cosmetology license qualifies you to work with hair, skin or nails or to select any one of the three as a specialized career path. This license will unlock countless doors within the beauty industry. Please note: according to NYS Licensing Standards students must complete 1,000 hours of classroom instruction. Upon completion of the second year, students are eligible to take the New York State Cosmetology Licensing Exam.

CULINARY ARTS/RESTAURANT OPERATIONS MANAGEMENT

2 year - Credit 4

Our program begins with baking and pastry arts and moves into complete food preparation and management techniques. Students gain an understanding of baking and cake decorating, nutrition, menu planning, catering, dining, food service, food production, as well as safety and sanitation codes. Second year students are prepared to take the National Restaurant ServSafe test. The program has the accreditation of the American Culinary Federation (ACF), which provides students with the opportunity to earn a Certified Fundamentals Cook (CFC). The program is also associated with the New York State Restaurant Association (NYSRA) Educational Foundation ProStart Program, which provides students with work experience necessary to succeed in the workplace. *All students must take Intro to Culinary Arts at WIHS prior to enrolling in this program.*

ELECTRICAL TRADE AND ALTERNATIVE ENERGY

2 year - Credit 4

This program is a combination of hands-on skill development and technical training in order to prepare students for entry-level employment or higher in the electrical trade. Students gain practice in traditional wiring methods based on the 2011 National Electric Code. Students learn to install, troubleshoot and repair electrical wiring systems, motors, generators, and control equipment that are used in homes, offices, stores and factories. The latest renewable energy concepts including solar, wind and geothermal technologies will be introduced. Energy conservation methods and the technological changes driving future energy careers are an integral part of this program. Students have the option of taking the National Center for Construction Education Research (NCCER) exam to be placed on NCCER's National Registry. The Registry provides valuable industry credentials as students build their careers. *All students must take Intro to Trade at WIHS prior to enrolling in this program.*

HEATING, VENTILATION AND AIR CONDITIONING

1 or 2 year – Credit 4

Our program includes the installation, service and repair of air conditioning, cooling, heat pump systems, and electrical theory and service. An integral part of this program involves green technologies including geothermal and solar hot water heating, indoor air quality and HEPA filtration as well as air sealing techniques. Students are prepared and take the EPA Certification Test for the handling of refrigerants. Students have the option of taking the National Center for Construction Education Research (NCCER)

exam to be placed on NCCER's National Registry. The Registry provides valuable industry credentials as students build their careers. *All students must take Intro to Trade at WIHS prior to enrolling in this program.*

MARINE/MOTORSPORTS TECHNOLOGY

2 years – Credit 4

Instruction will introduce and reinforce core knowledge in engine systems, drive systems, electrical and electronics systems, fuel systems, fabrication and engine machining. Students will learn how things are built, how they work and how to approach a repair. Students will have the opportunity to utilize our engine dynamometers to reinforce theory and prove performance modifications. Graduates will leave with the knowledge required to enter a broad array of the motorsports trades, including automotive, marine, motorcycle and heavy equipment. Students can take advantage of the work study program and gain hands-on industry experience with senior technicians while in high school.

NURSE ASSISTING

1 year – Credit 4

This course is designed to prepare the student to be employed as a Nurse Assistant. Basic skills include procedures used in the care of patients such as bathing, positioning, moving, transferring and monitoring vital signs. Practical applications of theory and utilized in clinical affiliations with various health care institutions. This course is an entry-level program in the field of Nursing. Students are prepared for New York State Nurse Aide Certification.

PLUMBING AND HEATING

1 or 2 year - Credit 4

This program is designed for students interested in installing, servicing and repairing domestic sanitation systems, water heaters and home heating units. Students will also receive training on the latest trade-related green technology, as well as efficient appliances, retrofitting to increase water efficiency, and resource conservation. Along with the Plumbing and Heating curriculum, students will have an opportunity to take the National Center for Construction Education Research (NCCER) Academic Core Exam, be placed on NCCER's National Registry and qualify for both Plumbing Level 1 and Core Certifications. *All students must take Intro to Trade at WIHS prior to enrolling in this program.*

PRACTICAL NURSING

17 month – Credit 4

This is a 17 month program that begins in the student's senior year. In the first year of the program, the student will learn the basic nursing skills necessary to care for patients based on the principles of the biological, physical and social sciences and include a clinical experience in affiliate hospitals. The second phase of the program (Sept.-March), following high school graduation, is a full-time clinical experience. Students participate in clinical learning activities from 7:45 am – 2:30 pm Monday through Friday at affiliate hospitals and health-related facilities. A graduate is eligible to take the New York State Licensure exam for licensure as a Licensed Practical Nurse (L.P.N.) after successful completion of 1260 hours of instruction and all program requirements.

WELDING/METAL FABRICATION

1 or 2 year – Credit 4

Electric ARC, TIG, MIG and Plasma ARC welding techniques provide for entry-level skills. These are developed in areas from heavy ferrous materials to highly specialized light metals common to Long Island industry. Welding according to specifications and blueprints is emphasized. Students will have an opportunity to take the National Center for Construction Education Research (NCCER) Academic Core Exam and be placed on NCCER's National Registry. *All students must take Intro to Trade at WIHS prior to enrolling in this program.*

WEST ISLIP HIGH SCHOOL **REQUIREMENTS FOR NEW ENTRANTS TO BOCES 2023-2024**

1. Students must have no more than 15 absences per period in the year in which they apply to BOCES.
2. Students must attend the BOCES Visitors' Day on February 1, 2023. Interested students must speak to their counselor prior to submitting the registration form. Students will be given the opportunity to visit two programs that the West Islip School District supports for the 2023 - 2024 school year. BOCES Applications will be distributed on Visitors' Day. Students who are unavailable to attend BOCES Visitors' Day must see their counselor as soon as possible, but prior to February 1, 2023.

3. Students and parents must sign the Attendance Contract by clicking this link <https://forms.gle/SVk1TyL3eFHSgQ9m7>.
4. Students must be on track to graduate with their cohort and be making satisfactory progress towards degree while attending BOCES. All graduation requirements must be met at West Islip High School.
5. Students must have taken all high school electives in their vocational field of interest.
6. The completed BOCES application and all of the required components are **due to your counselor by March 1, 2023. Applications will be reviewed and submitted to BOCES on a rolling basis as they are received.**

WEST ISLIP HIGH SCHOOL REQUIREMENTS FOR CONTINUING BOCES STUDENTS 2023-2024

1. Students must have no more than 15 absences per period at West Islip High School. (Lateness is factored into the total). Continuing BOCES students must have no more than 10 absences from BOCES per year.
2. Students must notify their counselor of their intention to continue with BOCES for a second year by January 31, 2023.
3. Students and parents must sign the Attendance Contract by clicking this link <https://forms.gle/zeV6dtwjVurijrnn6>.
4. Students must be on track to graduate with their cohort and be making satisfactory progress towards degree while attending BOCES. All graduation requirements must be met at West Islip High School.

WEST ISLIP HIGH SCHOOL BOCES ATTENDANCE PROTOCOL

**Students/parents must sign the attendance contract by clicking this link <https://forms.gle/zeV6dtwjVurijrnn6>*

Eastern Suffolk BOCES provides educational leadership, direct instruction, management and support through effective instructional programs. The goals of BOCES Career & Technical Education are to assist students in developing marketable skills, and educate students in programs which comply with current New York State standards. Students will have the opportunity to study in a work-based experience through the work-skills employability profile.

Student Expectations:

- Attend BOCES on time each day that school is in session .
- Recognize that exceeding fifteen (15) absences per period at West Islip High School or ten (10) absences from BOCES will result in loss of privilege to continue the following school year.
- Recognize the drop date for all BOCES programs will be **October 16, 2023**.

Parent/Guardian Expectations:

- Assume responsibility for assuring their child attends BOCES on a regular basis as required by the West Islip School District's compulsory school attendance policy.
- Contact West Islip High School the morning of an absence, to explain the reason for the absence.

West Islip High School Expectations:

- Monitor daily attendance and provide outreach to students and parents if there are any concerns regarding absences or lateness to BOCES.
- Provide assistance to resolve circumstances making it difficult for students to be at BOCES on time each day.