

# Course Catalog

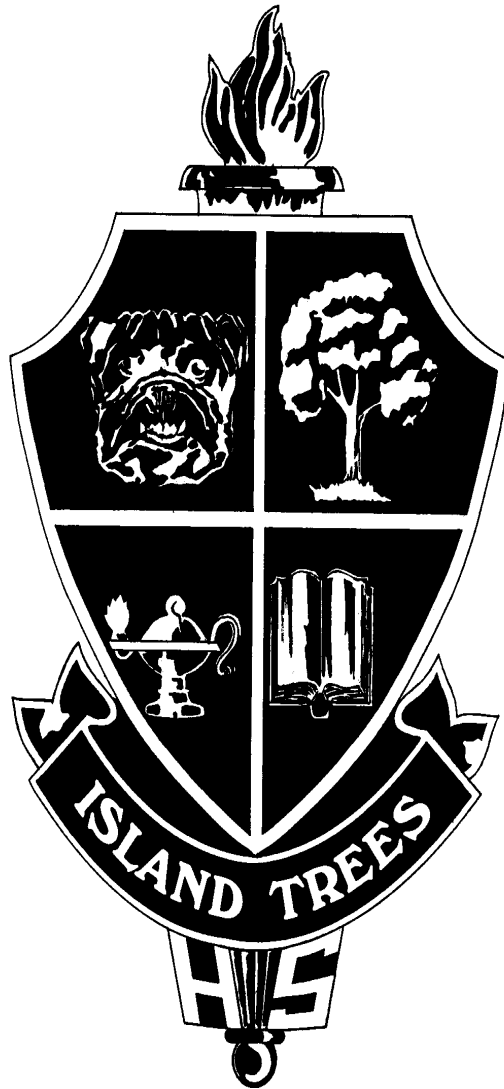
## ISLAND TREES HIGH SCHOOL

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### HIGH SCHOOL

520-2136

Nicholas Grande, Principal  
Jessica Sventoraitis, Assistant Principal

### HIGH SCHOOL

#### GUIDANCE DEPARTMENT

520-2139

Sara DiBella, Guidance Chairperson  
Christina Moore, Counselor  
Graham Radcliffe, Counselor  
Deborah Sullivan, Counselor  
Melissa Modica, Psychologist  
Nicole Tursenovic, Psychologist  
Dina Mulstay, Psychologist

### HIGH SCHOOL

#### INSTRUCTIONAL LEADERSHIP

English—Lori Christensen  
Social Studies—Douglas Rigo  
Mathematics—Maureen Bies  
Science—Jodie Spinale  
World Languages  
and ENL—Hannah Klein  
Music and Art—Susan Oliveto  
Special Education—Damian Garcia  
Libraries—Lisa Marshall

### MEMORIAL MIDDLE SCHOOL

520-2157

Daniel Keegan, Principal  
Amanda Steele, Assistant Principal

### MEMORIAL MIDDLE SCHOOL

#### STUDENT SUPPORT CENTER

520-2169

Allison Hoffman, Counselor  
Jill Tepper, Counselor  
Maryann Leone-Maidat, Psychologist  
Michael Perlotto, Psychologist

**SCHOOL YEAR**  
**2018-2019**

One goal of the Island Trees School District is to help each student plan and complete a course of study which will lead to high school graduation and a productive life. This course catalog is a guide to help students and parents make intelligent decisions in selecting programs which will be interesting and meaningful. It is important to pay careful attention to the courses selected to ensure that they will lead to graduation at the time desired, and that the program of study, if completed successfully, will optimize admission to the college or career of choice.

One of the primary roles of the counseling staff is to work closely as a liaison between the school and home. School counselors will meet with their students to plan a tentative academic program for next year. In many instances, teachers will make recommendations regarding course selection. Parents and students are encouraged to schedule conferences with their school counselor to discuss various sequences, elective courses, career-oriented programs and, most importantly, graduation requirements. The requirements for graduation are the minimum requirements. We encourage all Island Trees students to elect courses beyond basic requirements. We believe that all students can benefit from a challenging and enriching academic program.

A copy of the program developed will be sent home for parental approval. While it is asked that parents return written approval -- or requested changes -- to the guidance office, we will assume that parents approve if the form is not returned. At any time that parents or students have questions about course selection and the program of study, the school counselor should be immediately contacted. The direct phone to the Guidance Department is 520-2139 at the high school and 520-2169 at the middle school.

As soon as possible, students will receive a listing of courses to which they have been assigned for the following school year. If there are errors in this, or if a student has made a significant change in post secondary plans, please call the counselor to schedule an appointment.

### **ORGANIZATION OF THIS CATALOG**

The basic description of each course offered in the high school is included in this booklet. The description begins with the course title which is capitalized. The remainder of the heading gives details of the course length (full or half year), and graduation credits earned upon successful completion (1 or 1/2 credit). Any previous course which must be completed prior to this course (a prerequisite) is listed at the end. In some cases, a minimum passing grade in the prerequisite course is listed. This is only intended as a general representation of the quality of preparation expected at the time of course selection early in the calendar year. Students who receive a final grade somewhat below the minimum will not be precluded from enrolling in the course if other indicators suggest a reasonable possibility of success. A special note on final examinations, including Regents Exams: These exams are usually designed to measure the extent to which a student has mastered the course material covered during a year. To the extent that a student's score indicates a serious deficiency in this regard, a student may be denied permission to take the next sequential course. Please note on prerequisites that not all courses which meet the prerequisite requirement are listed. Only the minimum level of previous study is specified. In a few cases co-requisites are listed. These are courses which must be taken concurrently. Please note that high school (grades 9-12) units of credit cannot be awarded for course work which is essentially remedial in nature or below the ninth grade level of difficulty. Conversely, accelerated courses in grade eight receive credit toward high school graduation and the grades received are counted toward the high school academic average and class rank.

**NEW YORK STATE GRADUATION REQUIREMENTS BY DISCIPLINE**

English	4 credits
Social Studies	4 credits
Mathematics	3 credits*
Science	3 credits*
Health	.5 credit
Art/Music	1 credit
Physical Education	2 credits
Second Language	1 credit
<u>Electives</u>	<u>3.5 credits</u>
<b>TOTAL REQUIRED</b>	<b>22 credits</b>

*\*NOTE: EFFECTIVE SEPTEMBER 2014, ISLAND TREES SCHOOL DISTRICT POLICY REQUIRES ALL STUDENTS TO BE ENROLLED IN A SCIENCE AND A MATH COURSE EACH YEAR THEY ARE ENROLLED AT THE HIGH SCHOOL. STUDENTS ENROLLED IN A VOCATIONAL PROGRAM AT BOCES BARRY TECH OR LEVITTOWN CLAPS TECHNICAL CENTERS MAY BE EXEMPT ON AN INDIVIDUAL SCHEDULING BASIS, AS DETERMINED BY THE BUILDING PRINCIPAL.*

WITH FEW EXCEPTIONS, OUR GOAL IS TO HAVE ALL STUDENTS EARN AT LEAST A REGENTS DIPLOMA. STUDENTS WILL BE ENCOURAGED TO PURSUE A REGENTS DIPLOMA WITH ADVANCED DESIGNATION.

**ADD/DROP POLICY**

**ANY SCHEDULE CHANGES MADE AFTER THE FIRST WEEK OF SCHOOL MUST BE APPROVED BY THE BUILDING PRINCIPAL.**

**GRADES 9-11:** ANY COURSES ADDED OR DROPPED, INCLUDING LEVEL CHANGES, WILL ONLY BE PERMITTED UNTIL **THE CLOSE OF THE FIRST MARKING PERIOD (QUARTER 1)** AND MUST BE APPROVED BY THE BUILDING PRINCIPAL. COURSES THAT ARE DROPPED AFTER THIS DEADLINE WILL BE INDICATED ON A STUDENT’S PERMANENT TRANSCRIPT WITH A WP (WITHDRAWN PASSING) OR WF (WITHDRAWN FAILING) BASED ON THE STUDENT’S GPA IN THE COURSE AT THAT TIME.

**GRADE 12:** ANY COURSES ADDED OR DROPPED, INCLUDING LEVEL CHANGES, WILL ONLY BE PERMITTED **BEFORE OCTOBER 6<sup>th</sup>** WHEN TRANSCRIPTS ARE MADE AVAILABLE TO COLLEGES AND UNIVERSITIES. THESE CHANGES MUST BE APPROVED BY THE BUILDING PRINCIPAL. COURSES THAT ARE DROPPED AFTER THIS DEADLINE WILL BE INDICATED ON A STUDENT’S PERMANENT TRANSCRIPT WITH A WP (WITHDRAWN PASSING) OR WF (WITHDRAWN FAILING) BASED ON THE STUDENT’S GPA IN THE COURSE AT THAT TIME.

**EXAMINATION REQUIREMENTS FOR GRADUATION**

(FOR THOSE STARTING GRADE 9 IN SEPTEMBER 2008 AND LATER)

**LOCAL DIPLOMA** -- This diploma type is only an option for classified Special Education students. Students in

this group must attain a score of 55 or higher on Regents exams in English Language Arts, Global History, U.S. History & Government, one Math Regents exam and one Science Regents exam. **The passing standard is 55.**

**REGENTS DIPLOMA** -- Students in this group must pass Regents exams in English Language Arts, Global History, U.S. History & Government, one Math Regents exam and one Science Regents exam. **The passing standard is 65.**

**REGENTS DIPLOMA WITH ADVANCED DESIGNATION** -- In addition to the exam requirements for the Regents diploma, students must pass two additional course credits in French or Spanish, the Foreign Language Checkpoint B Exam (formerly the NYS Regents), two additional Regents exams in math, and a second Regents exam in science (one of which must be Living Environment). **The passing standard is 65.** In lieu of the Foreign Language requirement, students may substitute an approved 5-unit course of study in occupations, music, or art.

### **GROUPING FOR INSTRUCTION**

Although instruction is generally offered on three ability levels starting in grade seven, we believe that practically all of our students can benefit from "Regents-level" work. In many courses, therefore, students will prepare for the Regents but at a slower pace or in less depth than in "R" and "Adv" level instruction. We encourage our students to believe that "I can" is more important than "I.Q."

Students are assigned to an ability group for a subject based upon their achievement in that area as assessed by the previous teacher marks and achievement test scores. Each student's academic potential as revealed on ability tests is also reviewed. A student can be on different ability levels for different subjects.

**Advanced level instruction** -- Students who are eligible for enrollment in advanced level classes are given the opportunity to elect classes on that level in as many subjects as they are eligible. They may choose, if they wish, to receive instruction on a Regents level. Students selecting advanced classes should do so with the full understanding that a great deal will be expected of them. This is a commitment to excellence which must be maintained. Students who demonstrate a lack of interest (through incomplete homework assignments, poor test scores, and general lack of thorough preparation) are reassigned to a more appropriate level for them

**Regents level instruction** -- These classes are composed of all students who are of "average" ability or higher. Average does not mean easy! Students assigned to these sections should find the course work challenging but well within their capabilities. While assignment to this level of instruction is not a matter of choice, students who perform poorly will have their eligibility for this level of instruction reexamined. Lack of performance will not by itself be sufficient cause to transfer a student to lower level of instruction. A student who has the ability but is not applying himself will remain at the Regents level even if failing.

### **G.P.A. AND CLASS RANK**

Because the school recognizes that students who enroll in advanced courses will generally have to expend a great deal more effort to achieve the same report card mark as their peers in Regents sections, and since enrollment in AP and college courses is not mandated, the final mark which a student receives in such courses is weighted by a factor of 1.15. This means a final mark of 85, for example, is multiplied by 1.15 which yields a final mark for purposes of the G.P.A. (grade point average) of 97.75. A similar process is used to differentiate achievement of students enrolled in advanced and Regents level courses. In this case the final mark of an advanced course is weighted by a factor of 1.10, which results in a mark of 85 being converted to a G.P.A. of 93.5. Regents level courses are weighted by 1.05 which means an 85 would result in an 89.25. The quality of the academic work of an AP, college, or advanced student is, thereby, more fairly assessed in relation to students taking less demanding courses. Since the rank in class is based upon the average of all academic work attempted, including accelerated classes in Grade 8, the individual's rank in the graduating class will also more accurately reflect the scope and difficulty of the class work attempted.

### **GRADE PLACEMENT**

At the end of each summer, students are assigned to a grade level and homeroom based upon the number of units they have earned. Placement in grade seven requires completion of the elementary course of study. Students are promoted to grade eight or nine if almost all the work of the previous year was successful. Promotion to grade 10 requires that 5½ credits have been earned, and grade 11 requires 10 credits. Students are placed in a senior homeroom only if they have earned 15 ½ credits or the potential to graduate in June of that school year.

## ART

Education in the visual arts at the secondary level is intended to enrich the lives of all students, stimulate and encourage creative growth, increase the understanding of the importance of art both in our contemporary society and in societies which have contributed to our cultural heritage, and bring students to enjoy and appreciate works of art in various media. In addition, through student participation in various courses, the art department hopes to develop skills and techniques as well as an excitement and satisfaction in the creation of personal projects. Students may satisfy the one unit art/music diploma requirement by electing courses offered to students in grades nine through twelve. As indicated, extensive elective work is possible and students may satisfy one Regents sequence requirement by study in the Art Department. In order to provide a rich and varied curriculum, a number of courses are offered in alternate years as noted in the course descriptions. Students who wish to plan the best possible program should carefully look ahead to the variations possible in grades ten through twelve.

### **STUDIO IN ART**

**1 year - 1 unit, Grades 9-12**

Interested in exploring various mediums such as pencil, printmaking, clay, acrylic, and watercolor paint at an introductory level? Studio in art, a prerequisite for other art courses, allows the beginning artist to explore the foundations of artistic expression using a variety of media and techniques. The goal of this course is to give students the opportunity to experience the satisfaction of creative expression and to help them appreciate their own artistic achievement as well as recognize the importance of art in our society.

### ***OFFERED IN THE 2018-2019 SCHOOL YEAR***

#### **ALTERNATIVE ART TECHNIQUES**

**1/2 year - 1/2 unit (offered alternating days), Grades 9-12**

Alternative Art Techniques is a half year course that addresses The New York State Standards for The Arts and Common Core. This course will give students the opportunity to explore a variety of alternative mediums and techniques such as scratchboard, collage, image transfer, paper relief, paper mache and altered books in conjunction with more traditional mediums associated with drawing and painting. It will encourage individual expression and higher order thinking so that students may successfully develop their own artistic style.

### ***OFFERED IN THE 2019-2020 SCHOOL YEAR***

#### **FOUNDATIONS IN ART**

**1/2 year - 1/2 unit (offered alternating days), Grades 9-12**

Foundations in Art is a half year course, offered every other day for a full year, that addresses the New York State Standards for The Arts and Common Core. It provides a diverse curriculum in which students will be introduced to a variety of mediums and techniques which are the foundations for developing their own artistic style. They will be given the opportunity to work in mediums such as pencil, colored pencil, ink, watercolor and acrylic paint, and a variety of sculpture and collage materials. Foundations in Art is a class for beginning artists and will prepare students for any of the other art classes they may wish to take.

### **CERAMICS (NEW)**

**1/2 year – 1/2 unit, Grades 9-12**

Have you ever watched someone “throw” a clay pot on a wheel and wished you could do the same? In ceramics you will explore the artistic possibilities with clay as an art medium. Students will create freestanding hand-made pieces using different techniques including coil building, slab building, hand building, and throwing on a wheel. Firing and glazing methods for clay will also be taught.

**SCULPTURE (NEW)****1/2 year – 1/2 unit, Grades 9-12**

Do you like to build things and work with your hands? Not all artwork is flat! Sculpture may just be the artistic outlet you are looking for! Creating art in 3-D form can be exciting, challenging, and rewarding. This class will explore different materials including wood, found objects, paper mache, clay, and wire.

**GRAPHIC ARTS/PRINTMAKING****1/2 year - 1/2 unit, Grade 10-12**

This course is designed to introduce artistic printmaking using various processes. An array of media, tools, and techniques will be explored in this hands-on course. The elements of art and principles of design will be used to analyze, design, create, and evaluate prints as students learn techniques such as low relief, intaglio, stencil, mono-prints, dry point, and collography. Students will also engage in the photographic printmaking process using a traditional darkroom.

**DRAWING & PAINTING I****1 year - 1 unit, Grades 10-12**

Drawing is the first and most important skill an artist must learn. Drawing and Painting I is an introductory course that teaches the student the primary concepts of observation and perception. With the use of drawing and painting, the students will learn the basic elements of art such as perspective, proportion, composition, line, color and shading. The students will also receive a prelude to the techniques of recording images and impressions through sketching, drawing, and painting. Students will explore various media and techniques by way of realistic and abstract exercises studying landscapes, still life, portraiture and self-expression. Materials will include pencil, charcoal, pastel, collage, watercolor, tempera paint, and acrylic paint.

**Prerequisite: Studio in Art****OR Foundations in Art AND Alternative Art Techniques****DRAWING & PAINTING II****1 year - 1 unit, Grades 11-12**

Drawing is the first and most important skill an artist must learn. The mastery of drawing is essential for success in virtually every artistic discipline. Drawing and Painting II is an advanced drawing and painting course designed to prepare students for college level course work regardless of the major. Drawing and Painting II is a class that has an emphasis on the development and sound draftsmanship and various strategies for personal growth and exploration. The course is woven around themes that have played central roles in the traditions of Western Art such as drawing and painting the figure, still life, interiors, landscapes, cityscapes, light, nature, the portrait, and composition. Students will explore various media and techniques by way of realistic and abstract exercises. The majority of the course work will explore the introduction of oil painting. Other materials will include pencil, charcoal, pastel, collage, watercolor, tempera paint, and acrylic paint.

**Prerequisite: Studio in Art AND Drawing & Painting I****OR Foundations in Art AND Alternative Art Techniques AND Drawing & Painting I****DIGITAL STUDIO IN ART (NEW)****1 year - 1 unit, Grade 9-12**

Behind your favorite band, sports team, beverage, and app, there is a digital designer at work. In the Digital Studio Art class, you will develop a solid foundation of technical skills, along with a familiarity of professional tools and resources. You will gain an understanding of the digital creation process and be able to apply it to a broad spectrum of computer-based media that is aligned with the New York State Standards for the Media Arts. You will learn strategies for drawing digitally, as well as software such as Photoshop and Illustrator that allow you to digitally arrange compositions and designs. In this class, you will learn how photographers, copywriters, illustrators, printers, and graphic designers take their ideas to make them digitally visible.

***OFFERED IN THE 2019-2020 SCHOOL YEAR***

**GRAPHIC DESIGN 1**

**1/2 year - 1/2 unit, Grades 10-12**

Have you ever had an idea but didn't know where to head? The moment you grab a pencil and begin sketching, you are starting on the graphic design highway. Graphic design is a diverse, dynamic, and flexible field. You can specialize in branding, packaging, or interactive design. You can join a tech company or start your own design firm. In the Graphic Design class, you will learn how to design your own career path by combining both traditional and digital media. You will develop a solid foundation in illustration, advertising, and creative problem solving along with the core principles of color, composition, visual concepts, and style in order to bring your creations to life.

**Prerequisite: Digital Studio in Art**

**AP STUDIO ART**

**1 year - 1 unit, Grades 11-12**

The AP program in Studio Art enables highly motivated students an opportunity to prepare and perform at the college level and receive college credit while still in high school. The A.P. Portfolio should be viewed as the culminating experience in a student's secondary visual arts training. Each portfolio requires submissions in three distinct sections. The sections are designed to assess different aspects of student performance. The sections require the student to demonstrate quality, breadth, and in-depth engagement in the process of making art. Students are required to take the AP Exam in May.

**Prerequisite: Studio in Art AND Drawing & Painting I and II**

**OR Foundations in Art AND Alternative Art Techniques AND Drawing & Painting I and II**

**INTRO TO PHOTOGRAPHY**

**1/2 year - 1/2 unit, Grades 9-12**

This is a foundation course in photography that will cover all of the basic fundamentals and techniques of black and white photography. Proper use of the darkroom, film development, print enlargement and photography presentation will be covered. This course is a pre-requisite for all other photography classes.

***OFFERED IN THE 2019-2020 SCHOOL YEAR***

**STUDIO IN PHOTOGRAPHY**

**1/2 year - 1/2 unit, Grades 9-12**

This course will continue to improve basic black and white film fundamentals and allow students to also work digitally with Photoshop. Advanced techniques and alternative darkroom printing will take place. Some techniques will be hand coloring, toning and computer applications in Photoshop. **Students will need a digital camera or cell photo camera.**

**Prerequisite: Intro to Photography**

***OFFERED IN THE 2018-2019 SCHOOL YEAR***

**ALTERNATIVE TECHNIQUES IN PHOTOGRAPHY**

**1/2 year - 1/2 unit, Grade 9-12**

This class will provide students with the opportunity to expand their technical and creative abilities through various techniques. Students will complete a series of challenging assignments with step-by-step guidance. Alternative techniques, including computer, hand-made paper, and use of various art mediums will be used. **Students will need a digital camera or cell phone camera.**

**Prerequisite: Introduction to Photography**



## **BUSINESS & COMPUTER**

In today's society, the challenge of being college and career ready is on the mind of many of the students here at our high school. Island Trees High School offers a variety of business courses to students who wish to improve their business skills and computer skills. Students who wish to be at the forefront of expectations from college admissions officers as well as business representatives can take advantage of the many courses offered here in our Business Department.

If you wish to set yourself apart when applying to college or a job, you should also consider enrolling in our CTE-Business for College and Careers endorsement offered here at Island Trees High School. The Business Department has created a career pathway – Business for College and Careers – approved by the New York State Department of Education. Upon completion of the program a Career and Technical Education Endorsement (CTE seal) will be placed on your diploma. Students may also substitute a 5-unit course of study in CTE in lieu of the Foreign Language requirement.

Our goal in the Business Department here at Island Trees High school is to have our business students develop skills and traits which will lead to admission into post-secondary institutions and/or introduction into the labor force. All students are urged to consult with their counselor to help them investigate the numerous careers paths, CTE endorsement, occupational education offerings and general guidance in helping their dreams becomes reality.

Please see our chart below regarding our CTE-Business for College and Careers endorsement program requirements and suggested class sequence.

### **ACCOUNTING**

**1/2 year – 1/2 unit, Grades 10-12**

Every business in America speaks the same language...the language of money. An accountant is a necessity in any business. Many students will enter the business world which requires an understanding of how money travels in and out of a business. This course is designed to provide students with basic insight of the behind-the-scenes operations of a business and an understanding of basic accounting principles. Students will also apply business concepts and work with integrated spreadsheets using Microsoft Excel. Real-world simulations and accounting scenarios will be explored. This course is important for students with an entrepreneurial spirit or those that seek to be a professional in the corporate world.

### ***OFFERED IN THE 2019-2020 SCHOOL YEAR***

#### **BUSINESS & PERSONAL LAW**

**1 year - 1 unit, Grades 9-12**

Want to be a police officer or lawyer? ...Or maybe you just want to buy a new car or purchase your own home one day. A general understanding of the laws that govern our society is crucial in navigating life as a young adult. Business and Personal Law will give you the background necessary to make better career decisions when planning a career path. This course can also help you understand the procedures and legal matters that you will encounter with your personal and/or professional life. The course touches upon topics such as ethics, the source of law, civil and criminal procedures. Rights of minors, contracts, cyber-law, consumer laws, rental relationships, credit, debt, bankruptcy and intellectual property are also covered. Landmark cases that influence laws today are explored as well. This is truly a MUST take for all who are looking to have an understanding of society outside the confines of our hallways. Students also have the choice to take this course for three credits through SUNY Farmingdale at a discounted tuition rate.

**CAREER ADVANTAGE****1 year - 1 unit, Grades 11-12**

Did you know that it takes the average college student six years to complete a four year degree? This is due in part to the fact that college students change their majors two and three times before graduating because they don't have a clear understanding of what they want to do with their lives before they leave high school. Why not take the first step toward a clear career path by choosing Career Advantage as an elective? You will have the opportunity to "try out" a few careers through shadowing, field trips and research before going to college or straight into the world of work after graduation. Career Advantage consists of two very important components: the class and the outside opportunities. While enrolled in Career Advantage, you will have the opportunity to earn three SUNY Farmingdale College Credits at a discounted tuition rate. While learning to write a resume, cover letter, work on college and career research on the internet, you can participate in conferences and workshops and be part of field trips to a variety of workplaces. Many different guest speakers are invited to the class to speak with students about careers, goal setting, employment and college tips. You will also have the opportunity to participate in shadowing experiences in which you will follow the routine of a professional in your career area of interest. Through internships, shadowing and "on the books" paid work experiences you will earn credit toward graduation. If you choose, you can earn one credit for every 300 hours of "on the books" work experience, internships and shadowing experience (15 hours per week per semester) for up to a maximum of 600 hours or two credits for the school year. This gives you the opportunity to earn two additional high school credits making Career Advantage potentially a three credit course. Students do not have to work in order to take Career Advantage. Students can also take Career Advantage for high school credit only. This course is required for CTE Endorsement Credential.

**COMMUNICATIONS****1 year – 1 unit, Grades 9-12**

This is a full year course co-taught by the English and Business Departments that will introduce students to a communications course that is now a popular major in many colleges. Along with the many facets of journalism, media, public speaking, and project-based learning, students will understand the business/marketing aspects involved in producing school publications such as the school newspaper, yearbook, and annual creative writing magazine. The course will help students develop the skills needed to write both creative and technical content associated with publishing a yearbook or newspaper. Students will be exposed to technology and computer applications needed to help produce these publications. As per Common Core, an emphasis will be placed on writing skills as well as communication skills. Marketing concepts along with experience in using current technologies will help students become both college and career-ready. The skills learned and the hands-on applications of these skills are essential for students to be successful in both college and/or the workplace.

**COMPUTER PROGRAMMING****1/2 year - 1/2 unit, Grades 9-12**

With the demand of 21<sup>st</sup> Century skills becoming more paramount in the work place, computer programming is recognized as a valid way to teach students how to improve problem solving skills and help them understand the technology shaping their world. In this course, students are introduced to computer programming, logic and techniques using current, relative computer programming languages. Emphasis is placed on identifying problems, cultivating problem solving skills and team work by means of computer programming. Students taking this course will have the foundation needed to learn many of the languages used in today's demanding work place such as Java, C++, PHP and Python. Using mathematic computation and technological knowledge, students will explore ways to design and create applications through activities and projects.

**COMPUTERS FOR BUSINESS APPLICATIONS****1/2 year - 1/2 unit, Grades 9-12**

Knowledge is Power! The Age of Information is well upon us. Do you have the skills to navigate, utilize and create information that can make you a valuable employee? This course is designed to integrate computer technology, critical thinking and problem solving skills along with collaboration and creativity to help each student become more marketable in the work force and more efficient in their post-secondary pursuits. Along with basic training in proper keyboarding, the course provides instruction in software concepts using a Windows-based professional suite. Projects in this course include utilizing word processing, spreadsheet, database, graphics and presentation applications. Basic understanding of computer hardware, software operating systems and networks are explored. Students are also given the opportunity to seek businesses/industry certifications such as Microsoft Office Specialist (MOS) certification. This course is required for CTE Endorsement Credential.

**DIGITAL MEDIA PRODUCTIONS****1/2 year – 1/2 unit, Grades 9-12**

In this course students will be introduced to the tools, techniques and concepts behind the production of digital media through the practice of good design. They will have a hands-on learning environment and be exposed to the application of digital media technologies including operating systems, hardware, software and multimedia design. Students will use industry standard software including the Adobe Creative Suite. Some of the areas covered include: definition of digital media, overview of digital media techniques, and digital media production, design principles and opportunities for careers using digital media. Students enrolled in this course need to be reliable, self-motivated, organized and creative individuals who can work well in a team setting and are able to meet deadlines.

***OFFERED IN THE 2018-2019 SCHOOL YEAR*****SPORTS AND ENTERTAINMENT MARKETING****1/2 year – 1/2 unit, Grades 9-12**

The Super Bowl, The MTV Movie Awards, and the latest summer blockbuster all have something in common. The sports and entertainment industries are big business in today's society. Being almost recession proof, both industries share the task of having tremendous marketing efforts associated with each. The business of sports and entertainment is ever expanding with the introduction of new technologies and new platforms for marketing. This course is designed to help students interested in sports and entertainment to learn how business decisions are made in these industries. Along with the 4P's (product, price, promotion, place) of marketing the course will explore branding, licensing, and the economics of sports and entertainment. Business analytical skills as well as communication skills are enforced. If you are seeking a fun and diverse look into the world of marketing hoping one day to work in the big city this course is for you.

**WEB DEVELOPMENT FOR BUSINESS****1/2 year - 1/2 unit, Grades 9-12**

Nike, Make-A-Wish, Proctor & Gamble, and News 12 all have something in common. They all have a website. Having a presence on the World Wide Web is vital for any successful business or organization. In this one semester course, students will learn to plan, develop, create and run a small business website. Students in this course will learn to utilize applications from the Adobe Creative Suite to create web graphics and website content. Basic animation, e-commerce and web hosting will be explored as well. The culmination in a multi-page business website will demonstrate the students' ability to apply the various applications such as Adobe Dreamweaver, Illustrator and Photoshop. Creative students with business ideas are encouraged to bring concepts to life with animation and sound to create a positive web experience for the consumer.

**VIRTUAL ENTERPRISE FOR BUSINESS EDUCATION (NEW)****1 year – 1 credit, Grades 9-12**

Welcome to VE! Virtual Enterprise is a simulated business environment that converts the traditional classroom into a buzzing office. Students create and manage a virtual business from the ground up selling their products/services to other virtual firms around the world. Students are interviewed and placed in various departments of their virtual business based on their strengths, passions and potential career paths. Common VE jobs include Management, Accounting/Finance, Marketing, Human Resources and Web Design. Students will also learn about principles of Economics and its relationship to and impact on business operations in the private enterprise system.

Students will develop business skills and use current business productivity software along with the World Wide Web to meet goals and objectives of their business plan. Independent learning as well as collaborative projects make this the ideal course to prepare students for the world of work. Students will also create and run a trade show booth at the Virtual Enterprise International Trade Show in New York City. To learn more about the program visit [www.veinternational.org](http://www.veinternational.org).

## ENGLISH & READING

Rooted in the rigorous Common Core Learning Standards, the courses in our English curriculum focus on the study of many literary genres, including non-fiction, novels, short stories, plays, and poetry. Through a balanced literacy program that reflects the need to develop college and career readiness, students are afforded the opportunity to become stronger communicators. Our careful focus on vocabulary enrichment and grammar instruction strengthens written expression; in addition, our instruction centers on evidence-based writing, with an increased emphasis on author's craft and purpose. A strong emphasis is also placed on improving and promoting critical reading, fluent speaking, and active listening. In addition to becoming analytical readers and writers, students are afforded the opportunity to develop their creative writing and critical thinking skills in each of the courses they take. The Common Core English Regents, given in eleventh grade, requires that students demonstrate proficiency in listening and reading comprehension, with a strong emphasis on close reading for literary analysis. Our department carefully scaffolds the skills necessary to meet with success on this exam, while also providing various opportunities for enrichment. Our AP and college courses offer students the opportunity to meet the challenges of college-level courses in the supportive environment of a high school setting. Finally, our elective courses offered to students throughout their high school experience encourage them to discover and develop their individual interests and talents. Our greatest goal is to provide students with the resources to enter into the world beyond high school with the tools necessary to succeed in college, work, and beyond.

### **READING/AIS**

**Grades 9-12**

Reading and writing instruction is offered not only to students who need support in these areas, but also to strong readers who are committed to improving their reading and learning strategies. Reading instruction at the High School is integrated into the classroom rather than by a separate course. The reading specialist provides reading and writing remediation on an individual or small group basis every day, during all lunch periods and after school on Mondays and Wednesdays. Instruction is designed to provide literacy support in content area subjects, improve test taking strategies, and prepare students for success on required New York State exams.

### **ENGLISH 9 AP PREP**

**1 year - 1 unit, Grade 9**

This course emphasizes literary analysis, the development of argumentative writing, oral communication skills, critical reading, and speech. Independent reading and increased writing expectations are required. Language skills are developed through the teaching and review of vocabulary, spelling, usage, and grammar. A research paper is required.

**Prerequisite: Teacher recommendation and departmental approval**

### **ENGLISH 9 R**

**1 year - 1 unit, Grade 9**

This course emphasizes literary analysis, the development of argumentative writing, oral communication skills, critical reading, and speech. Writing instruction focuses on improved sentence structure and language use. Language skills are developed through the teaching and review of vocabulary, spelling, usage, and grammar. A research paper is required.

### **ENL/ELA 9-10**

**1 year - 1 unit, Grades 9-10**

Designed for additional language support for the English Language Learner, this course will focus on strengthening the four modalities: Reading, Writing, Speaking and Listening. Students will focus a great deal on learning vocabulary in context through short stories and non-fiction articles, while adhering to the Common Core State Standards. Instruction will also include the research process and synthesis essays.

**AP SEMINAR****1 year - 1 unit, Grade 10**

This foundational course provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop deep understanding of complex issues as they make connections between these issues and their own lives. This course is aligned with the Common Core State Standards, and upon successful completion of the course, students will be awarded AP credit and are qualified to take the AP Research course in 11<sup>th</sup> or 12<sup>th</sup> grade. Students who earn scores of three or higher in AP Seminar, AP Research and four additional AP courses will be awarded an AP Capstone Diploma from College Board. Students will be required to take the AP exam in May.

**Prerequisite: Teacher recommendation and departmental approval****AP RESEARCH****1 year – 1 unit, Grade 11**

This elective is the second course in the AP Capstone experience (AP Seminar is the first). This course allows students to deeply explore an academic topic, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. This course is aligned with the Common Core State Standards, and upon successful completion of the course, students will be awarded AP CREDIT. Students who earn scores of three or higher in: AP Seminar, AP Research, and four other AP courses will be awarded an AP Capstone Diploma from College Board. Enrollment guideline: Administration recommendation

**Prerequisite: AP Seminar****ENGLISH 10 AP PREP****1 year - 1 unit, Grade 10**

Designed for the AP student, this course emphasizes an analytical approach to various literary genres. In addition to honing their critical analysis skills, students will become immersed in vocabulary enrichment designed to enhance their writing and reading proficiency. Students will receive the background necessary for success in future AP courses. A research paper is required.

**Prerequisite: Teacher recommendation and departmental approval****ENGLISH 10 R****1 year - 1 unit, Grade 10**

Designed for the college-bound student, this course emphasizes various literary genres, including poetry, non-fiction, novels, dramas, and short stories. With a focus on close-reading, students will become more critical readers. The course also centers on developing writing skills, building vocabulary, utilizing proper grammar, and promoting oral communication. A research paper is required.

**AP ENGLISH LANGUAGE & COMPOSITION****1 year - 1 unit, Grade 11**

This course, taught on a college level, engages students in becoming skilled readers of non-fiction and fiction, and in becoming skilled writers who compose for a variety of purposes. Students in this course research, synthesize, and evaluate sources to produce papers of richness and complexity. Students will be required to take the AP Exam in May.

**Prerequisite: Teacher recommendation and departmental approval**

**ENGLISH 11 R****1 year - 1 unit, Grade 11**

Designed for the college-bound student, this course emphasizes advanced literary analysis and clear argumentation. A continued emphasis on vocabulary, usage, grammar, and writing promotes the confidence and skill necessary for success on the Comprehensive Examination in English (Regents) and other challenging assessments. A research paper is required.

**ENL/ELA 11-12****1 year - 1 unit, Grades 11-12**

This course is designed to assist the English Language Learner in preparation for the Common Core English Language Arts Regents and the development of skills necessary for success in college. With additional vocabulary and grammar support, students will develop their skills in reading, writing, listening and speaking. Students will study a variety of texts and a research project is required.

**AP ENGLISH LITERATURE & COMPOSITION****1 year - 1 unit, Grade 12**

This full-year course, an intense study of the works of renowned writers, is taught on a college level. Students are required to take the AP Literature and Composition Examination in May, as well as a Final Examination in June. Students in this course will write and revise essays and read multiple works of fiction beginning with the Summer Reading Assignment. After that, we use Shakespeare as the starting point and we will read selected works from each century thereafter – from the 1600's through the 21<sup>st</sup> Century – while building intense analytical reading and writing skills essential for success in college and beyond.

**Prerequisite: Teacher recommendation and departmental approval**

**COLLEGE ENGLISH 1 & 2****1 year - 1 unit, Grade 12**

College English is a full year, dual credit course offered through St. John's College Advantage Program. The College English course seeks to provide qualified students with the opportunity to achieve college level credit (6 transferable college credits) at the Island Trees campus while completing the senior English requirement, to accelerate their academic pursuits and to provide enriched instruction in secondary school. Students meeting all admissions criteria established by the faculty of St. John's are considered fully-matriculated students who have full use of all facilities and resources at St. John's. Emphasis is placed on using MLA format, research skills and revision.

**Prerequisite: Teacher or chairperson recommendation**

**COMMUNICATIONS****1 year – 1 unit, Grades 9-12**

This is a full year course co-taught by the English and Business Departments that will introduce students to a communications course that is now a popular major in many colleges. Along with the many facets of journalism, media, public speaking, and project-based learning, students will understand the business/marketing aspects involved in producing school publications such as the school newspaper, yearbook, and annual creative writing magazine. The course will help students develop the skills needed to write both creative and technical content associated with publishing a yearbook or newspaper. Students will be exposed to technology and computer applications needed to help produce these publications. As per Common Core, an emphasis will be placed on writing skills as well as communication skills. Marketing concepts along with experience in using current technologies will help students become both college and career-ready. The skills learned and the hands-on applications of these skills are essential for students to be successful in both college and/or the workplace.

**DEBATE****1/2 year - 1/2 unit, Grades 9-12**

This course is a combination of skills needed for research, public speaking, and debate. Students will practice all skills involved in research, based on the new Common Core research module. The research will then be presented via debate format, where students will practice learned public speaking skills along with the ability to think on their feet and defend ideas logically, supported by their research.

**SAT/COLLEGE PROCESS (NEW)****1 year - 1 unit, Grade 11**

In this course, students spend the first three quarters receiving instruction and preparation to ensure success on both the SAT and ACT exams. Careful attention will be paid to all components of the exam: reading comprehension, vocabulary, grammar, essay writing, algebra, and geometry. Students will be prepared to take the March SAT and April ACT. Then in April, the Guidance Counselors will partner with the English Department in the classroom to facilitate the Guidance Department's college application process. Designed to guide students who are planning to apply to four-year colleges/universities through the difficult application process, this course will provide a hands-on, practical approach to making successful choices. It is expected that students communicate their progress to their parents as there are many aspects of the application process which require parental input. The scope of the work includes researching college/university choices based on career interest, developing the personal essay and various short responses, creating a resume needed for the college application, getting the required recommendation letters, understanding the supplementary essay requirements, writing scholarship essays, and practicing the college interview.

**THE COLLEGE PROCESS****1/2 year - 1/2 unit, Grade 12**

The first marking period, the Guidance Counselors will partner with the English Department in a classroom setting to further enhance the Guidance Department's college application process. Designed to guide students who are planning to apply to four-year colleges/universities through the difficult application process, this course will provide a hands-on, practical approach to making successful choices. It is expected that students communicate their progress to their parents as there are many aspects of the application process which require parental input. The scope of the work includes researching college/university choices based on career interest, developing the personal essay and various short responses, creating a resume needed for the college application, requesting the required recommendation letters, understanding the supplementary essay requirements, writing scholarship essays, and practicing the college interview. The second marking period mimics the college experience by allowing students to select various English electives suited to their interests.

**FILM-- EXPLORING THEMES IN LITERATURE THROUGH FILM****1/2 year - 1/2 unit, Grades 11-12**

This course exposes students to the criteria needed to effectively analyze and respond to films and their thematic connections with short stories, novels and plays. Understanding film terminology: narrative, documentary, experimental, film-maker's intent, rating system, style, subject, stream-of-consciousness, hybrid films and examining literary genre conventions (theme/setting/presentation/character types/story formula) will culminate in the study of themes derived from the examination of literature from a traditional to popular genre study (gangster, film noir, sci-fi, horror, comedy, drama, western, etc.).



This year, students will be able to choose two half year courses from a choice of four to satisfy their 12th grade English requirement. Each course is one semester (1/2 credit), so students must choose two literature courses: one for the fall semester and one for the spring semester. Both courses must be successfully passed to satisfy the English graduation requirement. When students register, they will prioritize their choices from 1<sup>st</sup> choice to 4<sup>th</sup> choice. Guidance will try to honor students' priorities whenever possible.

Seniors who are enrolled in English 12AP Literature and Composition or College English can take a senior English half-year course for elective credit.

- Science Fiction and Horror – Students in this course examine how authors create alternate worlds to discuss social and political realities. In the first quarter, dystopic universes and life on other planets will be explored. The second quarter examines the genre of horror and the author's intent. Throughout the semester, students engage with several literary works and film, interacting through written analysis and in-class discussion. Emphasis is placed on literary analysis and expository writing.
- Drama- Students in this course study drama from classic to contemporary. The plays chosen relate to themes such as Mankind's Inhumanity, the Fight for Survival, and the American Dream.
- Current Topics - Through fiction and nonfiction, students examine the *current* issues in society that drive today's media. Throughout the semester, students engage with literary works, essays, editorials, media and film. Emphasis is placed on research, literary analysis, in-class debates and expository writing.
- New York City Literature – Students will examine what it means to be a New Yorker and how identity is shaped by this locale. Through literature, nonfiction, poetry, music, film and field trips, students will explore urban life and the themes of class, race, family, culture and self-awareness. Emphasis is placed on literary analysis, research, creative and expository writing.

## **ENGLISH AS A NEW LANGUAGE**

Formerly known as English as a Second Language (ESL), ENL (English as a New Language) is a state-mandated program for ELLs (English Language Learners) who have been determined to have a primary language that is other than English and who require support in order to become proficient in English. The ENL program emphasizes English language acquisition. In an ENL program, language arts and content-area instruction are taught in English using specific ENL instructional strategies. Some content area classes, including ELA, may be taught as an Integrated ENL class. The Stand-alone English as a New Language courses are offered to students who are at an Entering or Emerging English language proficiency, as determined on the NYSITELL or NYSESLAT exam.

### **STAND ALONE ENGLISH AS A NEW LANGUAGE**

**1 year - 1 unit, Grades 9-12**

Students will work towards English language proficiency in the areas of listening, speaking, reading and writing. This course is an additional school service provided to help students who are learning English as a new language succeed in school. Teachers work with students to help them develop their language skills, cultural awareness, and learning strategies to be successful in all school disciplines. As the English proficiency improves, they will not receive as much ENL support.

### **ENL/ELA 9-10**

**1 year - 1 unit, Grades 9-10**

Designed for additional language support for the English Language Learner, this course will focus on strengthening the four modalities: Reading, Writing, Speaking and Listening. Students will focus a great deal on learning vocabulary in context through short stories and non-fiction articles, while adhering to the Common Core State Standards. Instruction will also include the research process and synthesis essays.

### **ENL/ELA 11-12**

**1 year - 1 unit, Grades 11-12**

This course is designed to assist the English Language Learner in preparation for the Common Core English Language Arts Regents and the development of skills necessary for success in college. With additional vocabulary and grammar support, students will develop their skills in reading, writing, listening and speaking. Students will study a variety of texts and a research project is required.

## **FAMILY & CONSUMER SCIENCE**

### **FAMILY AND CONSUMER SCIENCES**

Family and Consumer Sciences help students obtain the knowledge and skills for a healthy and productive future. The curriculum utilizes a critical science approach within the context of the real world which presents opportunities for learning that students find exciting. The department's mission is to prepare individuals to be competent, confident, and caring in managing their personal, family, and work lives.

#### **BAKE SHOP**

**1/2 year - 1/2 unit, Grades 9-12**

This course will introduce students to basic principles of baking, recipe formulations, functions of ingredients, and baking procedures. Students will prepare a variety of breads, cookies, pies, puddings, custards, frozen desserts, and candy. They will practice cake decorating techniques and working with puff pastry. Technology-related mathematics, reading, writing, vocabulary, and science are integrated throughout the curriculum. Students will receive instruction in safety requirements and demonstrate sound safety practices, sanitation, and personal hygiene.

#### **ADVANCED BAKE SHOP**

**1/2 year – 1/2 unit, Grades 9-12**

##### **Prerequisite- Bake Shop**

This advanced culinary course teaches skills in food production, preparation, customer service, and teamwork. Instruction includes planning, selecting, storing, purchasing, preparing, testing, and serving of quality baked goods for district events. Additional studies will include nutritive values, safety and sanitation, use and care of equipment, the management of food establishments, cost and profitability analysis, handling customer orders, and food service standards, regulations and laws. This hands-on class will allow students to continue to extensively expand on their previous Bake Shop knowledge. In this class students will be taught advanced baking, decorating, and plating techniques. Students will apply their newly acquired skills in real life applications.

#### **CHILD DEVELOPMENT**

**1/2 year - 1/2 unit, Grades 10-12**

This course will enable students to understand the physical, emotional, social, and intellectual development of infants and children. Students will acquire the necessary knowledge and skills to care for children in a positive and nurturing environment. They will create safe and appropriate activities and crafts to stimulate children's learning through play and socialization. Students will be provided an opportunity to observe children and care for a mechanical baby. Other complex issues explored include child abuse/neglect, divorce, teen parenting, children's health issues, and the changing family. 11<sup>th</sup> and 12<sup>th</sup> graders may choose to take this course for college credit through Adelphi University. Three college credits will be awarded to students who pay the discounted tuition to Adelphi and successfully complete additional college coursework.

#### **FOOD & FITNESS**

**1/2 year - 1/2 unit, Grades 9-12**

The main goal for this course is to provide students with a better understanding of healthy eating, cooking and fitness to help them live healthier lives. Students will gain an in-depth understanding about carbohydrates, protein, fats, vitamins, minerals, and water in relation to what the body needs to maintain proper health and fitness. Students will learn about society's views and perspectives on dieting and fitness, and the dangers of obesity and "fad" dieting. During food labs, students will practice various healthy cooking techniques and will learn how to substitute

ingredients in recipes to make them healthier. Students will receive instruction in safety requirements and demonstrate sound safety practices, sanitation, and personal hygiene.

OFFERED IN THE 2018-2019 SCHOOL YEAR

**GOURMET FOODS**

**1/2 year - 1/2 unit, Grades 9-12**

Gourmet Foods provides students with an in-depth study of food preparation techniques and food science principles related to all aspects of cooking and serving a meal. This course emphasizes food appearance, presentation, consumerism, and meeting individual and family needs. Students will apply these skills during food labs in the preparation of appetizers, salads, soups, side dishes, entrées, and desserts. Students will receive instruction in safety requirements and demonstrate sound safety practices, sanitation, and personal hygiene.

OFFERED IN THE 2019-2020 SCHOOL YEAR

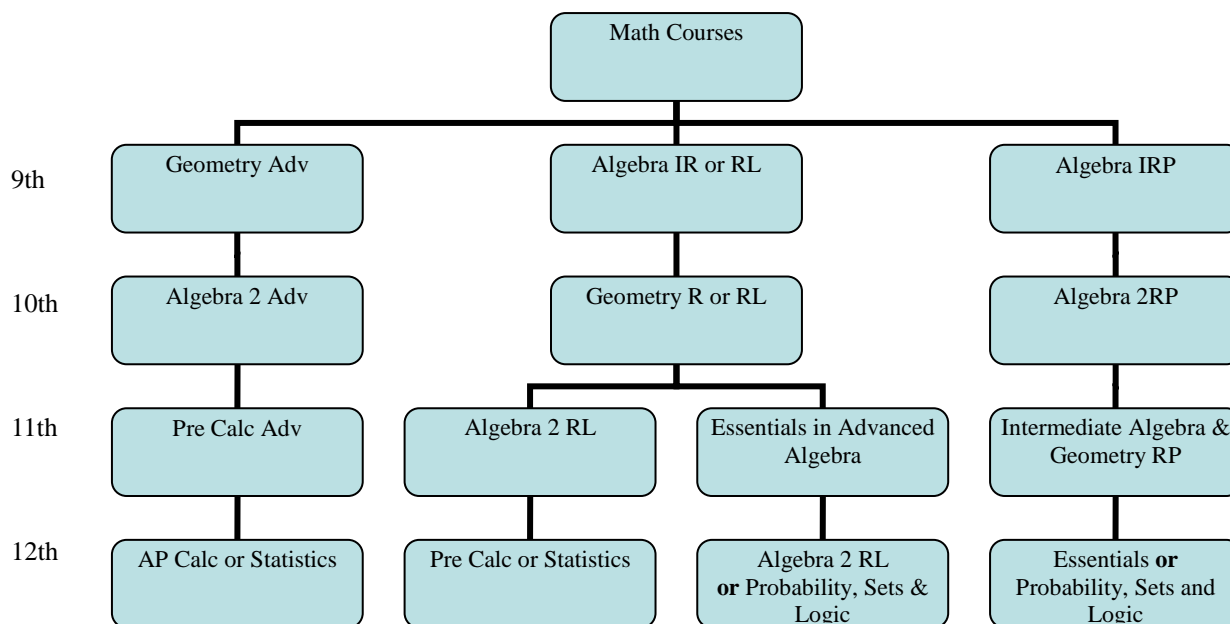
**INTERNATIONAL CULTURE & FOODS**

**1/2 year - 1/2 unit, Grades 9-12**

International Culture and Foods is designed to teach students about the cuisine in various countries around the world. Students will explore the meals, traditions, cooking and preparation techniques, and recipes in various cultures. A “trip around the world” approach is an exciting way to introduce each country’s culture and cuisine while students cook and sample recipes with a variety of ingredients, herbs, and spices. American regional cuisine will also be explored. Students will receive instruction in safety requirements and demonstrate sound safety practices, sanitation, and personal hygiene.

## MATHEMATICS

The mathematics program emphasizes computational skills, problem-solving techniques, and mathematical structure. Students learn skills and concepts, practice analytical thinking, and study the use of the computer, statistics, measurement, consumer expenditures and budgeting. In addition, algebraic and geometric structures, logic, and analysis provide a sequential elective program for the college bound. Students electing Algebra 2 Adv, Geometry Adv, Pre-Calculus Adv and AP Calculus must have teacher recommendation and departmental approval.



### ALGEBRA I ADV., R or RL

**1 year- 1 unit, Grades 8 (Adv) or 9 (R or RL)**

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. The Standards of Mathematical Practice will be applied throughout the course. Students will take the NYS Algebra I Regents Exam in June. A passing grade of 65 on this exam is required for a NYS diploma.

### ALGEBRA 1 RP

**1 year - 1 unit, Grade 9**

The focus of this course is the algebra content strand of the New York State Core Curriculum. This course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in different settings. Topics will include: the real number system, operations with polynomials, solving linear equations, solving quadratic equations, operations with algebraic fractions, operations with radicals and graphing linear functions. Particular attention will be given to solving verbal problems. A final exam will be given at the end of this course.

### ALGEBRA 2 RP

**1 year - 1 unit, Grade 10**

This course will cover topics that include graphing non-linear functions, statistics, probability, regression equations, radicals, set theory, right triangles and basic trigonometry, as well as plane and solid geometry. There is an emphasis on analysis and problem solving. Students will take the Algebra Regents examination at the end of this course.

which is a requirement for graduation.

**Prerequisite: Algebra 1RP**

**GEOMETRY ADV., R or RL**

**1 year- 1 unit, Grades 9 (Adv.) or 10 (R or RL)**

This course will focus on concepts in congruence, similarity, right triangles and trigonometry, circles, expression of geometric properties with equations, measurement and dimension, constructions, and modeling with geometry. The Standards of Mathematical Practice will be applied throughout the course. Students will take the NYS Geometry Regents Exam in June.

Prerequisite: Successful completion of Algebra I. *Students who receive an average less than 78 in Algebra I will be recommended to the Geometry RL class.*

Geometry Advanced requires teacher recommendation and departmental approval.

**ALGEBRA II ADV. or RL**

**1 year- 1 unit, Grades 10 (Adv) or 11 (RL)**

In this course, students will study topics such as: polynomials; factoring; solving and applying equations (polynomial, rational, and radical); complex numbers, trigonometric functions, exponential and logarithmic functions, and analyzing data. The Standards of Mathematical Practice are applied throughout the course. Students will take the NYS Algebra II Regents Examination in June.

Prerequisite: Successful completion of Geometry.

Algebra II Advanced requires teacher recommendation and departmental approval.

**ESSENTIALS OF ADVANCED ALGEBRA**

**1 year – 1 unit Grade 11**

In this course students will expand their knowledge of Advanced Algebra, Topics of study will include families of functions; quadratic, radical, exponential, absolute logarithmic and trigonometric, complex numbers, and data analysis. A final exam will be given at the completion of this course.

**Pre-Requisite: Successful completion of Geometry.** *Students who earn a grade less than 75 in Algebra I and Geometry may be recommended for this course.*

**ALGEBRA II EXTENDED**

**½ Year – ½ Unit Grade 12**

This course is intended to help students develop and strengthen the mathematics skills and foundations necessary to complete topics related to Algebra II and to explore related topics in Pre-Calculus and College Algebra. The course will include topics such as families of functions; quadratic, radical, exponential, absolute logarithmic and trigonometric, complex numbers, and data analysis. Students will apply strategies of modeling and problem solving. Upon successful completion of this course students will retake the Algebra II Regents exam, affording them the opportunity to earn a “Regents Diploma with Advanced Designation.”

Prerequisite: A passing grade in Algebra II and a failing grade on the Algebra II Regents Exam

**INTERMEDIATE ALGEBRA AND GEOMETRY RP**

**1 year - 1 unit, Grade 11**

In this course, students will explore a variety of advanced algebra topics which will include, but are not limited to, problem solving, quadratic equations, absolute value equations, radical equations, complex numbers and rational expressions. They will also study relationships of lines and angles as well as properties of quadrilaterals and triangles.

**Prerequisite: Successful completion of Algebra I**

**PRE-CALCULUS ADV. or R****1 year - 1 unit, Grades 11 (Adv) or 12 (R)**

This course is designed for college-bound students who successfully complete Algebra II/Trigonometry ADV or R. Topics in this course include advanced algebra, conic section and polynomial graphing, polar coordinates, limits and introductory calculus. Calculus will be covered in more depth at the advanced level. During the fall semester, students will be able to earn four transferable college credits through The University in the High School Program and SUNY Farmingdale.

**Prerequisite: Successful completion of Algebra II**

Pre-calculus Advanced requires teacher recommendation and departmental approval.

**AP CALCULUS****1 year - 1 unit, Grade 12**

This advanced placement (AP) course is directed at college-bound students who will major in math, science, or a technical field. A development of the calculus, accompanied by analytical geometry, will be thoroughly explained. This is a highly conceptual course and students should expect to be challenged. Students are required to take the AP exam in May.

**Prerequisite: Pre-Calculus Advanced or departmental approval****COLLEGE STATISTICS****1 year - 1 unit, Grade 12**

College Statistics is a full year course that is offered through The University in the High School Program and SUNY Farmingdale. In this course, students will study basic probability and statistical inference. Topics include processes for data collection, graphic displays of data, measures of central tendency and dispersion, and binomial, normal, and chi-square distributions. More advanced topics will include confidence intervals, hypothesis testing, and correlation and regression. Students can earn three transferable college credits while at Island Trees High School.

**NOTE: Advanced 11<sup>th</sup> graders are able to take this course with department approval.**

**Prerequisite: Pre-Calculus, SUNY Farmingdale approval and acceptance, and 85% average in prior math courses**

**PROBABILITY, SETS AND LOGIC****1/2 year - 1/2 unit, Grade 12**

This course will introduce students to sets and combinations, probability of mutually exclusive events, random variables, probability distributions and discrete variables, as well as laws of logic and arguments.

**Prerequisite:** Successful completion of three math credits or departmental approval.

**FINANCIAL MANAGEMENT****1/2 year - 1/2 unit, Grade 12**

This is a basic level course designed for seniors which provides a practical approach to understanding important consumer and commercial concepts. Major topics of discussion will include money management, budgeting, payroll systems, payroll deductions, keeping records, taxes, banking, establishing and maintaining credit, investment strategies, insurance needs, housing decisions and transportation expenses. Students will be required to bring a calculator to class.

**SAT/COLLEGE PROCESS (NEW)****1 year - 1 unit, Grade 11**

In this course, students spend the first three quarters receiving instruction and preparation to ensure success on both the SAT and ACT exams. Careful attention will be paid to all components of the exam: reading comprehension, vocabulary, grammar, essay writing, algebra, and geometry. Students will be prepared to take the March SAT and April ACT. Then in April, the Guidance Counselors will partner with the English Department in the classroom to facilitate the Guidance Department's college application process. Designed to guide students who are planning to

apply to four-year colleges/universities through the difficult application process, this course will provide a hands-on, practical approach to making successful choices. It is expected that students communicate their progress to their parents as there are many aspects of the application process which require parental input. The scope of the work includes researching college/university choices based on career interest, developing the personal essay and various short responses, creating a resume needed for the college application, getting the required recommendation letters, understanding the supplementary essay requirements, writing scholarship essays, and practicing the college interview.



## MUSIC

Music education in the middle and high school is designed to foster an understanding and appreciation of music through the study of music history and tradition, the elements of music structure, style and form, the role and impact of music in our culture, and, most importantly, a basis for making a value judgment about the quality of music. These aims are met through participation in a performing organization (band, chorus, or orchestra) or through more traditional structured courses. Those students not electing a performing group in middle school are assigned to general music classes in order to fulfill this requirement. Students in grades nine through twelve electing to continue participation in a performing group will receive one unit of credit for each year of satisfactory membership on a daily basis. This will meet the requirement for one unit of work in music and/or art prior to graduation. Other students may elect courses in either department in order to satisfy this graduation requirement for local and Regents diploma.

### ***OFFERED IN THE 2018-2019 SCHOOL YEAR***

#### **GUITAR AND ROOTS OF ROCK**

**1/2 year - 1/2 unit, Grades 9-12**

This course is open to students of all ability levels from complete beginners to 'semi-polished pros.' Keyboards and guitars will be provided for in-school use. Students will study the history of rock through analysis and exploration on instruments. Students will explore Guitar Tablature, standard notation and common rock/pop chord progressions.

### ***OFFERED IN THE 2019-2020 SCHOOL YEAR***

#### **MUSIC TECHNOLOGY**

**1/2 year - 1/2 unit, Grades 9-12**

No musical experience needed, students will create their own music using multiple forms of composition methods, including the "dub-step" craze that is used in popular music today. Students will be able to create music on the new Korg Kronos Synthesizer Workstations, as well as experience internet based learning along with use of the Promethean Board.

### ***OFFERED IN THE 2019-2020 SCHOOL YEAR***

#### **AP MUSIC THEORY**

**1 year - 1 unit, Grades 11-12**

This is a college level course that culminates in taking the nationwide AP exam in the spring. The course will present advanced harmonic and compositional concepts with additional emphasis on keyboard performance and sight singing. This course is a must for anyone interested in pursuing a career in music. It is also wonderful for anyone interested in advancing their musical knowledge. Students are required to take the AP Exam in May.

**Prerequisite: Music Theory or departmental approval.**

### ***OFFERED IN THE 2018-2019 SCHOOL YEAR***

#### **MUSIC THEORY**

**1 year - 1 unit, Grades 9-12**

This course will deal with the fundamentals of music including notation, rhythms, chord structure, and scales. Synthesizer recording projects are used to reinforce these concepts. A great course for beginners and experienced musicians alike. Guitar concepts will be introduced.

#### **CONCERT BAND**

**4 years - 1 unit each, Grades 9-10**

This course meets to prepare for concert and marching band performances. Students are also scheduled for small group lessons. Regular practice at home is expected. Private instruction is encouraged. Attendance at all rehearsals and performances is mandatory except when excused by instructor.

**Prerequisite: Permission of the band director. NOTE: In the fall both the Concert and Symphonic bands will perform as one marching band. Weekend performances are required.**

**SYMPHONIC BAND****4 years - 1 unit each, Grades 11-12**

In addition to concert band description, this course is designed to fill the gap between high school and collegiate standard wind repertory. The class will be comprised mostly of upperclassmen, with rare exception for extraordinarily gifted underclassmen or the need for balanced instrumentation.

**Prerequisite: By audition only.**

**NOTE: In the fall both the Concert and Symphonic bands will perform as one marching band. Weekend performances are required.**

**CHORUS****4 years - 1 unit each, Grades 9-12**

This course is an advanced form of earlier choral activities. Sight singing and knowledge of musical notation is desirable but not required. Attendance at public performances is required and several after school/evening rehearsals may be necessary. Students are scheduled for small group lessons.

**Prerequisite: Permission of the choral director/audition.**

**ORCHESTRA****4 years - 1 unit each, Grades 9-12**

This course meets to prepare string players for various concerts throughout the year. Students are scheduled for small group lessons. Regular practice at home is expected. Private instruction is encouraged. Attendance at all rehearsals and performances is mandatory.

**Prerequisite: Teacher recommendation.**

## OCCUPATIONAL EDUCATION

Occupational coursework offered within the school district are those in business, home economics, and technology. The district offers other opportunities through cooperative programs through the Board of Cooperative Educational Services of Nassau County (BOCES – Barry Tech). A student who elects to pursue a career training program offered at BOCES must be a student in good standing, who adheres to the high school attendance policy, and who has met certain core requirements for high school graduation. Students who are contemplating election of vocational training are advised to contact the high school Guidance Department early in their sophomore (10th grade) year so that offerings and requirements can be carefully, thoroughly, and individually reviewed. A meeting with the Guidance Counselor and a visit to observe the program in operation must be made by the student and interested parents. In order to permit the school district to prepare a budget that realistically reflects charges of tuition (no cost to student or parent), applications must be completed in a timely manner. Students who submit applications late will be placed on a waiting list. **Programs approved by the Island Trees School District are listed below.**

### **Barry Tech – Approved Programs**

- Dental Assisting
- Medical Assisting
- Auto Collision Technician
- Auto Skills
- Automotive Technology
- Powersports and Small Engine Repair
- Carpentry
- Construction Electricity
- Construction Trades
- Construction Trades Skills
- Network Cabling Technician/Home Technology Integration (HTI)
- Plumbing
- Welding
- Barbering Technician
- Cosmetology and Cosmetology Skills
- Culinary Arts and Culinary Arts Skills

## **PHYSICAL EDUCATION, HEALTH, AND DRIVER EDUCATION**

The goal of the physical education program is to provide students with a program of training, sports, and exercise which develops physical fitness and coordination, encourages team work and individual proficiency, and prepares students for active participation in athletics and healthful recreation throughout their lives. In addition to this activity program, classroom instruction in health reinforces the importance of healthful living through units on substance abuse (drug, tobacco, and alcohol), mental health, first aid and safety, and family living. In addition, topics such as goal setting, decision making and dealing with stress are presented. These programs meet the requirements of the Commissioner of Education.

### **PHYSICAL EDUCATION 9-10 (NEW)**

**2 years - 1/2 unit each, Grades 9-10**

This is an introductory course that will focus on fitness and skill development. Fitness components and activities will be integrated into classes throughout the year. Additionally, students will spend a minimum of one quarter in the weight room developing and implementing a personalized fitness plan. Skill development for individual and team sports will be a second focus. Through skill based activities and modified games, students will work to improve in the fundamentals of sports such as basketball, tennis, flag football, soccer, badminton, volleyball, and softball.

### **PHYSICAL EDUCATION 11-12 (NEW)**

**2 years - 1/2 unit each, Grades 11-12**

This course will continue to focus on fitness and skill development as well as strategy and teamwork during game play. The emphasis of this course will be to explore and learn lifetime sports. Students will continue to work and develop a personalized fitness plan. During tournament and game play, students will work together to develop strategies for team success. In addition, new activities will be introduced for students to explore. When available, students will have an option to choose the activity they wish to participate in.

### **HEALTH**

**1/2 year - 1/2 unit, Grades 9-12**

The objective of this course is for each student to develop a better understanding of his or her physical, social, emotional, and mental health. Through readings, class participation, and group work, positive and confident attitude are developed along with an understanding that a healthy environment is crucial for all people. Decision making, stress, nutrition, fitness, alcohol, drugs, tobacco, family life, and AIDS are the core topics. Required for graduation.

### **DRIVER EDUCATION**

*not for credit*

Driver education is offered during the summer session to high school students who are district residents and who will be sixteen as of July 1. This course is also offered in the fall and spring with classes in the mornings, afternoons, and Saturdays. At the time of selection, each student must present an affidavit which specifies the following regarding the previous twelve months of school:

1. His or her attendance in each class has been 85% or higher;
2. He or she has not been suspended out-of-school more than once; and
3. He or she has not been suspended (in and/or out-of-school) for more than three days (combined total)

## SCIENCE

Through a sequential program in earth science, living environment, physics, and chemistry, students learn to observe, inquire, research, measure, and experiment in order to master the fundamental principles and processes of science, to understand the role of science in everyday life, and to appreciate their own relationship to their natural environment.

<b>Grade</b>	<b>Regents</b>
<b>8th</b>	Science 8 R
<b>9th</b>	Living Environment R
<b>10th</b>	Earth Science R
<b>11th</b>	Chemistry R or 2 half year science courses
<b>12th</b>	Physics R or 2 half year science courses

## Science Courses with the option of AP Exam(s)

	Regents Sequence with 1 Science AP*	Advanced Sequence with 2-3 Science AP's	Highly Advanced Sequence with 3-4** Science AP's	Science Electives to be taken with Regents/Advanced or AP courses.
8th		Earth Science Advanced	Living Environment Advanced or Earth Science Advanced	Anatomy & Physiology
9th	Living Environment Regents	Living Environment Advanced	Earth Science Advanced or Living Environment Advanced	Forensic Crime Scene Investigation 1 and Forensic Crime Scene Investigation 2
10th	Earth Science Regents	Chemistry Advanced + AP Biology	Chemistry Advanced + AP Biology	Introduction to Science Research Level 1
11th	Chemistry Regents + AP Biology AP	Advanced Physics	AP Chemistry + Advanced Physics	Science Research Level 2
12th	Physics Regents	AP Chemistry or AP Physics 1 and/or AP Physics C	AP Physics 1 and/or AP Physics C	***NEW*** Conceptual Physics: Physics in Words and Pictures
	*Recommended sequence for students who love science and struggle in math.		**Taking both AP Physics 1 and AP Physics C will allow for maximum AP's to be taken.	Robotics
			Special Note: AP Physics C is for Engineering Majors.	Astronomy

**LIVING ENVIRONMENT ADV or R****1 year - 1 unit, Grade 9 (Laboratory Requirement)**

Students will study the life processes, the scientific method, and the chemistry of human life (nutrition, circulation, respiration, excretion, nerve and hormone regulation, and locomotion). Other major units covered in great detail will be reproduction and development, heredity and new research in genetics, evolution and modern evolutionary theory, and ecology. Advanced classes will receive a greater laboratory experience of related subject matter to prepare them for the SAT II Biology exam in June. This course is a prerequisite for AP Biology. This course concludes with the June Regents exam.

**EARTH SCIENCE ADV or R****1 year - 1 unit, Grades 8 (Adv) or 10 (R) (Laboratory Requirement)**

The Regents Earth Science program is a course of study designed to encourage students to investigate their world through first hand experiences. Through this program, students should gain new understandings of the world around them and appreciate the dynamic equilibrium of our planet. In part, course content will include earth history, earth shape and size, rock and mineral formation, erosion and deposition, atmospheric changes and the earth in space. This study will be oriented to developing science skills and knowledge through laboratory experiences and a problem solving approach. This course concludes with the June Regents exam.

**CHEMISTRY ADV or R****1 year - 1 unit, Grades 10 (Adv) - 11 (R) (Laboratory Requirement)**

Students will learn to set up and solve problems using analytical thinking skills developed by this course. Content includes the properties of matter, energy, atomic theory, chemical bonding, interpreting the periodic table, mathematics of chemistry (formulas and equations), types of solutions, kinetics and equilibrium, acids and bases, oxidation-reduction reactions, electrochemistry, organic chemistry, and nuclear chemistry. Advanced classes will go into more detail. These classes will receive a laboratory experience of greater depth and be prepared for the SAT II Chemistry exam in June. This course concludes with the June Regents exam.

**Prerequisite: 75 or higher average in Algebra I course or chairperson's approval**

**PHYSICS ADV or R****1 year - 1 unit, Grades 11 (Adv) - 12 (R) (Laboratory Requirement)**

Students will engage in numerous classroom-laboratory experiences. Observation and logical thinking will be emphasized. Major units of work will include measuring length, time, mass, weight, vectors, force, motion, gravitation, and planetary motion; heat and structure of matter; wave motion (sound and light); electricity and the nature of matter; electromagnetism; quantum theory; and nuclear physics. Advanced classes will go into more detail and topics including planetary motion, heat, and structure of matter, electromagnetism, quantum theory and nuclear physics. Advanced classes will receive a laboratory experience of greater depth. This course concludes with the June Regents exam.

**Prerequisite: Chemistry R and Algebra II**

**AP BIOLOGY****1 year - 1 unit, Grade 10-12 (Laboratory Requirement)**

A one year, in-depth biology course geared to college level and including the study of cell structure, fundamentals of genetics, evolution theory, and ecological systems. Investigative skills and analytical thinking will be stressed. Course will include training in laboratory techniques and the writing of college-level laboratory reports. Students are required to take the AP Exam in May. Class meets two periods every day.

**Prerequisite: Biology ADV**

**AP CHEMISTRY****1 year - 1 unit, Grades 11-12 (Laboratory Requirement)**

This course is designed to be analogous to a first year college general chemistry course. Through laboratory settings

and lecture, the importance of the theoretical aspects of chemistry will lead to an increased understanding of nuclear chemistry, quantum theory kinetics, electrochemistry, stoichiometry, and organic chemistry. The course is designed to provide some of the greatest intellectual challenges to a high school student. Students are required to take the AP Exam in May. Class meets two periods every day.

**Prerequisites: Chemistry ADV and teacher recommendation**

### **AP PHYSICS 1**

**1 year - 1 unit, Grade 12 (Laboratory Requirement)**

AP Physics 1 is an algebra-based introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory simple circuits. Laboratory experiences are included in this course and colleges may require students to present their laboratory materials from AP science courses before granting college credit.

**Prerequisite: Successful completion of Physics ADV and Pre-Calculus**

### **AP PHYSICS C: MECHANICS**

**1 year - 1 unit, Grade 12 (Laboratory Requirement)**

AP Physics C is equivalent to a one-semester, calculus-based, college-level physics course. This course is especially appropriate for students planning to specialize or major in physical science or engineering. This course explores topics such as kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. Laboratory experiences are included in this course and colleges may require students to present their laboratory materials from AP science courses before granting college credit.

**Prerequisite: Successful completion of Physics ADV and Pre-Calculus, and teacher recommendation**

### **FORENSICS 1**

**1/2 year – 1/2 unit, Grades 11-12**

This half year elective science course focuses on hands-on laboratory techniques employed by scientists to solve crimes. Emphasis is placed on the scientific method utilizing principles of identification and comparison. Along with the study of the history of forensic science and how scientific strategies are employed in solving crimes, students will participate in various activities such as crime scene investigation, forensic anthropometry, fingerprinting, and arson.

### **FORENSICS 2**

**1/2 year – 1/2 unit, Grades 11-12**

This is a half year elective science course which dives deeper into forensic techniques focusing on advanced identification and comparison principles. Students will participate in various activities such as ballistics, forensic document analysis, anthropology, entomology, odontology, serology, DNA analysis, toxicology, and serial killers. The laboratory component of this course will give students hands-on experience using scientific technologies to analyze data and solve problems.

**Prerequisite: Forensics 1**

### **ROBOTICS 1**

**1/2 year – 1/2 unit, Grades 9-12**

This course brings together the study of electronics, microprocessors (computer-on-a-chip), computer programming, robot sensors and actuators, and robotic electromechanical systems. Throughout the course, students will be posed with different tasks in which they will design and create projects to solve these tasks. They will learn how to combine and apply the study of electronics, programming and actual mechanics into one working machine. Students will have the opportunity to apply what they are learning in a variety of robot-building projects and have



the opportunity to earn six college credits while applying their real world problem solving skills. The centerpiece of the course will be the construction of the Island Trees entry to the “FIRST” robot building and operation competition. Robotics 1 focuses on the mechanical aspects of the robot.

## **ROBOTICS 2**

**1/2 year – 1/2 unit, Grades 9-12**

This course brings together the study of electronics, microprocessors (computer-on-a-chip), computer programming, robot sensors and actuators, and robotic electromechanical systems. Throughout the course, students will be posed with different tasks in which they will design and create projects to solve these tasks. They will learn how to combine and apply the study of electronics, programming and actual mechanics into one working machine. Students will have the opportunity to apply what they are learning in a variety of robot-building projects and have the opportunity to earn six college credits while applying their real world problem solving skills. The centerpiece of the course will be the construction of the Island Trees entry to the “FIRST” robot building and operation competition. Robotics 2 focuses on the electrical and programming aspects of the robot.

## **ASTRONOMY**

**1/2 year - .5 unit, Grades 9-12**

Astronomy is a course that helps students develop a clear understanding of the universe and the Earth’s place within it. Students conduct field and laboratory investigations and use scientific methods to develop logical arguments about theories based solely on objective evidence. Students study the history of astronomy characteristics and life cycles of stars, formation of the solar system, comparison of planets, orientation and placement of the Earth in the Milky Way galaxy, formation of galaxies, and theories about the formation of the universe.

## **CONCEPTUAL PHYSICS: PHYSICS IN WORDS AND PICTURES**

**1/2 year - .5 unit, Grades 9-12**

Have you ever wondered why a raw eggs spins differently than a hard boiled ones, or how a magician can pull a tablecloth out from underneath a place setting? Why does a straw look bent when it is in a glass of water? How does a parachute work? This course uses the conceptual approach to understanding the laws of physics. Topics investigated will include mechanics, forces, light, waves, sound, electricity and magnetism. Practical applications of physics laws will be introduced and students will be able to relate them to real world situations. Many laboratory experiments and demonstrations will be performed to illustrate principles of physics.

## **HUMAN ANATOMY AND PHYSIOLOGY**

**1/2 year - .5 unit, Grades 11 & 12**

Did you ever wonder why the pleasure of scratching an itch often intermingles with some pain, why you can’t extend the ring finger independent of the middle and little fingers, from a clenched fist? What does your tongue have in common with an octopus’ tentacle and an elephant’s trunk? Take this course! You will learn the structure and function of our bodies. How our bodies maintain the delicate balance characteristic of life is examined. Areas of study include digestion, circulation, respiration, excretion, synthesis, regulation, locomotion and reproduction. Diseases and disorders of each system will be investigated.

## **INTRODUCTION TO RESEARCH**

**1 year - .5 unit given every other day, Grades 9-12**

Grades 9,10,11,12. This course is designed to spark the curiosity of students and help to develop effective research skills and abilities. Introduction to Research integrates concepts of mathematics, language arts, science, and

technology to encourage students to test their explanations of natural phenomena through the use of procedures and techniques of scientists (the scientific method). Students can prepare a project(s) that may be entered in a variety of local competitions. Students will be exposed to the research techniques required of the more advanced science research courses. Science Research students may elect to participate in local/national competition including but not limited to the Regeneron (formerly Intel) Science Talent Search, Siemen's Competition in Math, Science and Technology and the Long Island Science and Engineering Fair.

***OFFERED IN THE 2019-2020 SCHOOL YEAR***

**LONG ISLAND ECOLOGY**

**1/2 year - 1/2 unit, Grade 12**

This course will specialize in the study of Long Island. The environmental history of Long Island will be discussed. The formation of Long Island, from its lush North Shore to its sandy South Shore beaches. Students will also learn to understand and apply the best methods and practices used on Long Island for conserving water, energy waste management, recycling, water treatment and other ecological practices. Field trips may be taken to beaches, recycling plant, LI Pine barrens. This course is also designed at improving Long Island environmental conditions.

***OFFERED IN THE 2019-2020 SCHOOL YEAR***

**MARINE BIOLOGY**

**1/2 year - 1/2 unit, Grade 12**

This course will explore marine organisms and their environment. Identification of different phyla and ecological niche will be discussed. The importance of estuaries as storm protection and fish nurseries will be investigated. Planned field trips include: Atlantis Aquarium, charter fishing out of Freeport or Captree and Cedar Beach Ecological Station.

## SOCIAL STUDIES

The courses offered in social studies impart knowledge and appreciation of American and other cultures, of economic, social and political institutions, of the causes and effects of historical events. Emphasis is placed upon analysis, reasoning, and inquiry to develop students who are able to apply knowledge to solve problems, to form judgment, and to make informed decisions as effective participants in our American democracy. Below are typical Social Studies course selections for each grade. Students may move between levels based on their performance, skills, and prerequisites. Please contact the HS Social Studies Chairperson if you have any questions.

	<b><u>Regents</u></b>	<b><u>AP</u></b>
<b>Grade 9</b>	Human Geography 9R	AP World History 9
<b>Grade 10</b>	Global History 10R	AP World History 10
<b>Grade 11</b>	US History 11R	AP US History, AP Psychology and AP Government or AP Microeconomics*
<b>Grade 12</b>	Economics and Government	AP Psychology, AP Government/Politics and/or AP Microeconomics*

**\*Please keep in mind that all students are required to take Economics and Government in order to graduate.**

**AP Economics and AP Government fulfill these requirements but are not mandatory.\***

### **HUMAN GEOGRAPHY (9R) (NEW) 1 year - 1 unit, Grade 9 & 10-12**

This course in human geography presents content thematically and is organized around the following subfields: economics geography, cultural geography, political geography, and urban geography. Case studies from all world regions will be used, with an emphasis on understanding the world in which we live today. This course will satisfy the 9<sup>th</sup> grade social studies requirement. It can also be taken as an elective in grades 10-12. Students have the option of taking the AP Human Geography exam in May.

### **GLOBAL HISTORY 10 R 1 year - 1 unit, Grade 10**

As a continuation of Global Studies, this course examines the Middle East, Western Europe, the Soviet Union and Eastern Europe, and culminates in a discussion of the world today. Each area is discussed in terms of its geography, dynamics of change, economic development, and global context. Course content is adapted to the level of the group.

### **GLOBAL STUDIES 10 CONTENT 1/2 year - not for credit, Grades 10-12**

No credit course for students who need reinforcement of social studies skills and knowledge in order to be successful on the NYS Global History & Geography Regents.

### **US HISTORY 11 R 1 year - 1 unit, Grade 11**

This course is a chronological history of the United States from its Constitutional foundations to the present. Students will learn to describe and analyze major historical factors in the development of the United States. Students will examine the principles and ideals of our democratic system based upon the premises of human dignity, liberty, justice, and equality. Content is adapted to the ability level of the group.

**US HISTORY 11 CONTENT****1/2 year - not for credit, Grades 11-12**

No credit course for students who need reinforcement of social studies skills and knowledge in order to be successful on the NYS US History & Government Regents.

**ECONOMICS****1/2 year - 1/2 unit, Grade 12**

Economics deals with the earning, distribution, and use of all kinds of wealth. Topics which will be covered include the market system, the role of government, economic growth and stability, U.S. economy, the business cycle, taxation, and comparative economic systems. Students will also take part in financial literacy certification.

**GOVERNMENT****1/2 year - 1/2 unit, Grade 12**

Aspects of government to be explored include the political system, the legal system, the legislative system, and the executive administration system, including bureaucracy, at the local, state, and national levels. Emphasis will be placed on the obligation of citizens to participate and ways of making participation effective.

**CRIMINAL JUSTICE****1/2 year - 1/2 unit, Grades 10-12**

This course is designed to familiarize students with the many aspects of crime. Topics that will be discussed include, but are not limited to, history of crime and the basic functions of each component of the criminal justice system, crime data, the collection of crime data and the special categories of crime, definitions of crime and types of defenses to a criminal charge.

**COLLEGE CRIMINAL JUSTICE****1/2 year - 1/2 unit, Grades 11-12**

This course will briefly examine the stages of the criminal justice process from investigation and arrest through conviction and corrections. College Criminal Justice will be divided into three parts: Policing – the legal aspects and the issues and challenges of policing. Adjudication – the operation of the court system, the courtroom participants and their roles, the stages of the court process and the progression of cases through the court system. Corrections – probation, parole community corrections, prisons and jails. Upon completion of the course, students can receive college credits from SUNY Farmingdale at a reduced tuition rate.

**Prerequisite:****Criminal****Justice****INTRODUCTION TO COLLEGE SOCIOLOGY****1/2 year - 1/2 unit, Grades 10-12**

Introductory course designed to help the student develop insights into human social interaction in terms of behavior as a group, across groups, and the impact the group has on individuals. We study sociological concepts and theories and apply them to key aspects of our lives and society (such as culture, family, education, work, media stratification, and social change). **Students will take College Board CLEP Test at the end of the semester.**

**PSYCHOLOGY****1/2 year - 1/2 unit, Grades 10-12**

This course is concerned with the study of human behavior. Its primary goal is an understanding of how human personality develops. Course content is also intended to enhance self-awareness and understanding of self and others in order to recognize and resolve problems which may be faced in life.

**CIVIL RIGHTS AND DIVERSITY IN AMERICA (NEW)****1/2 year – 1/2 unit, Grades 9-12**

Robert Kennedy once remarked that, “ultimately, America's answer to the intolerant man is diversity.” This course will focus on the concept of equality and inclusion in American society. We will explore the challenges faced by women, African Americans, Asian Americans, Hispanic Americans, Muslim Americans and members of the LGBTQ

community in their quest for full inclusion into the American democracy. Student in this course will learn college level research, note-taking and writing skills. We will also explore films, oral histories, engage in debates, current event discussions, and analyze of Supreme Court cases.

## ADVANCED PLACEMENT COURSES IN SOCIAL STUDIES

### AP WORLD HISTORY 9

**1 year - 1 unit, Grade 9**

This is the first year of a two-year AP course which fulfills the requirement for the New York State Global History and Geography course. The curriculum begins with the Pre-History Period and ends with the Renaissance. This is a pre-college level course in which college level texts and supplemental reading are used. Students will be introduced to historical research and independent study. They are encouraged to read critically and analytically from various interpretations of World History. Essay work in the course will stress clarity of thought and expression and the ability to corroborate opinion with historical fact.

### AP WORLD HISTORY 10

**1 year - 1 unit, Grade 10**

The second year of the two year AP World History course offers motivated tenth grade students the opportunity to immerse themselves in the processes that, over time, have resulted in the blending of the world into a tightly integrated whole. World History AP presents an approach that allows students to "do history" by guiding them through the steps a historian would take in analyzing historical events and evidence worldwide over a millennium. The course offers balanced global coverage with Asia, Africa, the Americas, and Europe each represented. **Students are required to take the AP Exam in May.**

**Prerequisite: AP World History 9**

### AP US HISTORY

**1 year - 1 unit, Grade 11**

This college-level course is a detailed chronological examination of American History taught through an analysis of primary sources and the works of historians and novelists. With emphasis upon self-sufficiency and independent study, this course will prepare the student for the Advanced Placement Examination in United States History, which is given in May, as well as additional course offerings at the post-secondary level. In addition, students will also be prepared for the New York State Regents Examination in United States History and Government which is given in June. This course will also require of all students the completion of textbook study and a stand-alone reading assignment offered during the summer prior to the outset of the course. Prospective students should be advised in advance of the increased reading and writing responsibilities involved with the Advanced Placement program. **Students are required to take the AP Exam in May.**

### AP PSYCHOLOGY

**1 year - 1 unit, Grades 11 - 12**

This course is similar to those offered in most colleges. It is designed for the more advanced student who is interested in obtaining a background in psychology and receiving college credit. The AP curriculum includes the following topics: the methodology of psychological research, the biology of behavior, sensation and perception, learning and memory, motivation and emotions, the formation of personality, the assessment and treatments for abnormal behavior, developmental psychology, cognition and language, and social psychology. **Students are required to take the AP Exam in May.**

### AP MICROECONOMICS

**1 year - 1 unit, Grades 11 - 12**

The Advanced Placement microeconomics course will prepare students for the AP Microeconomics exam administered by the College Board in May. This course will focus on the basic themes essential to all economics

courses including scarcity, opportunity costs, demand, supply, and elasticity. These themes will be followed by an analysis of those themes that are specific to Microeconomics, including consumers and firms, the role of the government, public finance, taxation, and the labor market. AP Microeconomics is a college level course open to eleventh and twelfth grade students who have demonstrated exceptional scholarship in Social Studies and Math. **Students are required to take the AP Exam in May.** *This course fulfills the NYS graduation requirement in Economics.*

**AP UNITED STATES POLITICS AND GOVERNMENT**

**1 year - 1 unit, Grades 11-12**

This class is an intensive study of the formal and informal structures of the U.S. Government and the processes of the American Political system, with an emphasis on policy-making. The class will study how our government works, why it is set up the way it is set up, and how policy is made and changed. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. This is a one-year course. **Students are required to take the AP Exam in May.** *This course fulfills the NYS graduation requirement in Participation in Government.*

## TECHNOLOGY

In this department, students will plan and make projects using a variety of materials in order to understand the way things work, to appreciate basic processes of industry and technology, to gain exposure to various occupations, and to acquire practical skills for use at home and on the job. These are exploratory experiences which differentiate them from courses where the goal is to develop specialized skills for immediate employment or specialized training following high school graduation. Courses offered at Island Trees in this department are not sufficient for a sequence. Students and parents who are interested in occupational training are advised to consult with their counselor about the opportunities available at BOCES or Levittown. All courses offered by this department are electives equally available to all students. Basic materials are supplied to all courses. Additional materials, especially for projects which the student will retain for personal use, require a nominal fee which varies from course to course. Field trips to related industry are included, where appropriate, in several courses.

### **AP COMPUTER SCIENCE PRINCIPLES (NEW)**

**1 year – 1 unit, Grades 10-12**

This course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

**Prerequisite: Counselor recommendation**

### **ARCHITECTURAL DRAWING**

**1/2 year - 1/2 unit, Grades 10-12**

This course content includes design and construction details on foundations, framing, windows, doors, roofing, and site planning. There will be experience in rendering and model building. Extensive use of Auto CAD in the planning stages of residential construction will be used.

### **COMPUTER AIDED DESIGN**

**1/2 year - 1/2 unit, Grades 10-12**

A course which assists students acquire a broad perspective of the place of CAD in the larger computer-aided process of design, manufacturing, inventorying, marketing, and "data basing." Students will acquire the basic skills of using computers in drawing/drafting and designing. Students will also acquire technical skills, comprehend industrial standards and codes, and understand methods of generating a hard copy. Students will study the ways in which CAD and other computer technologies are changing the role of drafting and the influence of this on the design and manufacturing process.

### **COMPUTER AIDED DESIGN 3D**

**1/2 year - 1/2 unit, Grades 10-12**

CAD 3D is a way of displaying real-world object in a more natural way by adding depth to the height and width. This system uses the X, Y and Z axes. This course will have an emphasis towards hands-on learning. Approximately 75% of the coursework will be completed through laboratory activities with the remaining 25% through classroom instruction. Students will complete a broad variety of laboratory activities to develop basic skills and a solid understanding of how CAD 3D works. You will be learning the following 3D concepts: isometric drawings, wire-frame, surfaces/regions and solid objects.

**Prerequisite: Computer Aided Design**

## **CONSTRUCTION SYSTEMS**

**1/2 year - 1/2 unit, Grades 9-12**

This course will study the contributions and impacts of the construction technologies on society and free enterprise through a study of its resources, processes and systems. This course has an emphasis on hands-on learning. Students will complete a broad variety of laboratory activities to develop basic skills and a solid understanding of how a construction project progresses from the initial concept and plans, through site work, structural development, mechanical system installation, finishing, and then finally culminating in the project being turned over to the end user. These laboratory activities will be supported by lessons on terminology, practices, and processes commonly used in contemporary construction projects.

## **DESIGN & DRAWING FOR PRODUCTION**

**1 year - 1 unit, Grades 9-12**

This course is a year long introduction to a universal language through which students can express ideas with creativity, clarity, and preciseness. This course challenges students to find graphic solutions. Students apply problem solving techniques in their search for solutions to technological problems. Students will design, draw, and produce models and products from a variety of materials. Students will analyze, creatively design, prepare drawings, and critically evaluate these objects. Drawings will be done by hand as well as on computer using Auto CAD program. **This course fulfills the graduation requirement in art.**

### ***OFFERED IN THE 2018-2019 SCHOOL YEAR***

## **PRODUCTION SYSTEMS**

**1/2 year - 1/2 unit, Grades 10-12**

Students will understand the impact of manufacturing and construction on society, the economy, and the environment. Students will identify the universal systems model assess the importance to everyday life delineate necessary resources, analyze and demonstrate various processes, evaluate the products and impacts, utilize mathematical and scientific principles in the solving of problems within the laboratory setting, and demonstrate problem solving and analytical thinking skills in solutions to simple engineering problems within the context of hands-on laboratory activities.

### ***OFFERED IN THE 2019-2020 SCHOOL YEAR***

## **MANUFACTURING SYSTEMS**

**1/2 year - 1/2 unit, Grades 10-12**

This course is designed for students to analyze and demonstrate various processes of manufacturing technology. Students will utilize mathematical and scientific principles in the solving of practical manufacturing problems within the laboratory setting. Students will demonstrate problem solving and analytical thinking skills in solutions to simple engineering problems within the context of laboratory activities and develop hand and machine tool skills.

## **PRINCIPLES OF ENGINEERING**

**1 year - 1 unit, Grades 10-12**

An integrative hands-on laboratory-based course which introduces students to concepts of engineering (ethics, design, modeling, optimization systems, technology/society interactions). These concepts are applied to solving problems contained in "real world" case studies. The case studies relate to auto safety, computer automation and control, energy, and ergonomics structural design. Students are introduced to careers in chemical, civil, electrical, and mechanical engineering. Students will be using hand tools and machines to solve problems.

## **ROBOTICS 1**

**1/2 year – 1/2 unit, Grades 9-12**

This course brings together the study of electronics, microprocessors (computer-on-a-chip), computer programming, robot sensors and actuators, and robotic electromechanical systems. Throughout the course, students will be posed with different tasks in which they will design and create projects to solve these tasks. They will learn how to combine and apply the study of electronics, programming and actual mechanics into one working machine. Students will have the opportunity to apply what they are learning in a variety of robot-building projects and have



the opportunity to earn six college credits while applying their real world problem solving skills. The centerpiece of the course will be the construction of the Island Trees entry to the “FIRST” robot building and operation competition. Robotics 1 focuses on the mechanical aspects of the robot.

## **ROBOTICS 2**

**1/2 year – 1/2 unit, Grades 9-12**

This course brings together the study of electronics, microprocessors (computer-on-a-chip), computer programming, robot sensors and actuators, and robotic electromechanical systems. Throughout the course, students will be posed with different tasks in which they will design and create projects to solve these tasks. They will learn how to combine and apply the study of electronics, programming and actual mechanics into one working machine. Students will have the opportunity to apply what they are learning in a variety of robot-building projects and have the opportunity to earn six college credits while applying their real world problem solving skills. The centerpiece of the course will be the construction of the Island Trees entry to the “FIRST” robot building and operation competition. Robotics 2 focuses on the electrical and programming aspects of the robot.

## WORLD LANGUAGES

Island Trees offers study in two modern languages other than English. French and Spanish are offered to students beginning in grade 7 and continuing through grade 12. NYS requires that all students have at least one high school credit in a Language Other Than English for graduation from high school. At the end of 8<sup>th</sup> grade, students must take, and pass, the FLACS Checkpoint A Exam (formerly the NYS Proficiency Exam) to earn this credit. Students seeking a Regents Diploma with Advanced Designation must continue language study through the end of 10<sup>th</sup> grade when they will take the Checkpoint B Exam (formerly the NYS Regents Exam). College-bound students are urged to continue two additional units of study including level 4 advanced, level 5 advanced or college level.

### Language Options

The typical pattern of study is to select one of the two languages offered and to continue study each year. Classes meet daily and focus on listening, speaking, reading and writing skills as well as cultural awareness.

Students who study French and would like to add Spanish to their schedules may choose to take Foundations of Spanish at any point during grades 9-12 (Approval of Department and Guidance Chairperson).

<u>Course Title</u>	<u>Grade Level</u>
<i>Middle School</i>	
Introduction to Spanish/French	7th
Spanish 1R/French 1R	8th
<i>High School</i>	
Foundations of Spanish	9 <sup>th</sup> - 12 <sup>th</sup>
Spanish 2R/French 2R	9th
Spanish 3R/French 3R	10th
Spanish 4 ADV/French 4 ADV	11th
College Spanish	12th
College French	12th

### **SPANISH 1R/FRENCH 1R**

**1 year - 1 unit, Grade 8**

This course serves as the second year of middle school second language study. Basic vocabulary and grammatical structures are enhanced and students become more proficient in the target language. Cultural awareness is also reinforced and students become more proficient in the target language. Cultural awareness is also reinforced and students become more proficient in communications skills. Topics include meal taking, house and home, health and travel. This course culminates with the Checkpoint A Exam. Successful completion of this exam awards students one high school credit for language study.

### **FOUNDATIONS OF SPANISH**

**1 year - 1 unit, Grades 9-12**

This course is designed for high school students who have not yet earned the one credit in LOTE necessary for graduation. This course emphasizes beginning level vocabulary, grammar and cultural topics at the Checkpoint A level and may lead to a continuation of Spanish study in Spanish 2R.

### **SPANISH 2R/FRENCH 2R**

**1 year - 1 unit**

This course expands upon the basic language structures taught in Spanish 1R/French 1R. Objectives include

increasing topical vocabulary, grammar, cultural awareness and listening, speaking, reading and writing skills.

**Prerequisite: Spanish 1R/French 1R and teacher recommendation.**

**SPANISH 3R/FRENCH 3R**

**1 year - 1 unit**

Students move toward mastery of the target language in preparation for the Checkpoint B Exam (formerly the NYS Regents). This course focuses on improving language and communication skills. Grammatical accuracy and cultural awareness are stressed.

**Prerequisite: Spanish 2R/French 2R and teacher recommendation**

**SPANISH 4 ADV/FRENCH 4 ADV**

**1 year - 1 unit**

This advanced course is offered to students with above average language ability and is designed to perfect vocabulary skills and grammatical structures. Students will be introduced to culture through literature. Students will complete a series of readings which will provide the basis for discussions, written projects and oral presentations.

**Prerequisite: Spanish 3R/French 3R and teacher recommendation**

**COLLEGE FRENCH/COLLEGE SPANISH**

**1 year - 1 unit**

This course enhances and perfects language skills while incorporating film, art and literature as well as advanced grammatical structures. This course is taught almost exclusively in the target language. Students are given the option of receiving college credit for their course work. Credit is awarded by paying a discounted tuition to Adelphi University and successfully completing the course. Six college credits per year are offered and are transferable to many colleges and universities.

**Prerequisite: Spanish 4 ADV/French 4 ADV and teacher recommendation**