



Stamford Public Schools



**Stamford High**



**Westhill High**

**2022 - 2023**

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## NOTE FROM THE SUPERINTENDENT



Dear Students and Families,

Welcome to the 2022-2023 Program of Studies.

As Superintendent of Stamford Public Schools, every year I look forward to the release of the Program of Studies. I enjoy scrolling through the online pages and seeing all of the amazing courses that we offer here in Stamford, from our various Advanced Placement (AP), International Baccalaureate (IB), and Early College Experience (ECE) courses, to our new Apprenticeship and Cooperative Work Education Program, not to mention the various Art, Music, and Physical Education opportunities.

It is always exciting to think about our students and families having the opportunity to review, discuss, and select their preferred courses each year. This year is extra special as I reflect on the work we are doing in continuing to grow our pathway programs, which include Agriculture Science, Finance, Business Management, Administration, Hospitality Culinary, and Construction Management, as well as Transportation Management, Education, Health Science, IT, Marketing, and STEM.

It is amazing to think about the opportunities our students have to experience “*Career Connected Learning for All*” both in the classroom and outside of our schoolhouse doors. This vision for community and school-based personalized learning opportunities is in direct line with the vision of the Stamford Public Schools to “... challenge, inspire and prepare all students to be productive, contributing members of society.”

In closing, I encourage students and families to work together to step outside of the box by selecting a course or two that not only cultivates a student’s mind but also their body and heart.

Enjoy this important moment!

Dr. Tamu Lucero  
Superintendent of Schools

**Stamford Public Schools Mission Statement:**

The mission of the Stamford Public Schools is to provide an education that cultivates productive habits of mind, body, and heart in every student.

**Stamford Public Schools Vision Statement:**

The Stamford Public Schools will be a learning organization that continuously improves its effective, innovative, and transformational teaching and learning. We will challenge, inspire and prepare all students to be productive contributing members of society.

This Program of Studies contains important information about educational opportunities available in our high schools. As you and your parent(s) review the information and course listings that appear in this guide, you should think about your strengths and interests as well as your short-term and long-term goals.

### **CREDIT REQUIREMENTS FOR GRADUATION**

To obtain a high school diploma from the Stamford Public Schools, students are expected to demonstrate proficiency in Reading, Writing, Mathematics, and Science. School counselors in partnership with students and families monitor student progress in reaching graduation requirements.

#### **District Required Courses and Credits for Graduation:**

Students are required to accumulate 25 or more course credits, distributed as follows:

<b>HUMANITIES</b>	<b>9 TOTAL CREDITS</b>
➤ English	4 credits
➤ Social Studies	3 credits (0.5 in Civics)
➤ Arts	1 credit
➤ Subject Area Elective	1 credit
<b>SCIENCE, TECHNOLOGY, ENGINEERING &amp; MATHEMATICS</b>	<b>9 TOTAL CREDITS</b>
➤ Mathematics (must earn credit in Algebra & Geometry)	3 credits
➤ Science	3 credits
➤ Subject Area Elective	3 credits
<b>WELLNESS</b>	<b>2 TOTAL CREDITS</b>
➤ Physical Education	1 credit
➤ Health and Safety Ed	1 credit
<b>WORLD LANGUAGE</b>	<b>1 TOTAL CREDIT</b>
<b>MASTERY-BASED LEARNING</b>	<b>1 TOTAL CREDIT</b>
<b>GENERAL ELECTIVES</b>	<b>3 TOTAL CREDITS</b>

### **CREDIT REQUIREMENTS FOR GRADE PROMOTION**

For students to be promoted to:

Grade 10 a minimum of 5.5 credits must be earned

Grade 11 a minimum of 11.5 credits must be earned

Grade 12 a minimum of 18 credits must be earned

**FOUR-YEAR COURSE PLANNING CHART**

		9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>HUMANITIES</b> 9 Total	<b>English</b> 4 credits required				
	<b>Social Studies</b> 3 credits required		.5 Civics		
	<b>Visual &amp; Performing Arts</b> 1 credit required				
	<b>Elective</b> 1 credit required				
<b>STEM</b> 9 Total	<b>Math</b> 3 credits required (must earn credit for Algebra 1 & Geometry)				
	<b>Science</b> 3 credits required				
	<b>STEM Elective</b> 3 credits required				
<b>WORLD LANGUAGE</b> 1 Total	<b>World Language</b> 1 credit required				
<b>WELLNESS</b> 2 Total	<b>Physical Education</b> 1 credit required (automatically schedule)	.5 PE	.5 PE		
	<b>Health &amp; Safety</b> 1 credit required (automatically schedule)	.5 Health	.5 Health		
<b>ANY ELECTIVE</b> 3 Total	<b>3 credits</b>	First-Year Seminar			

**25-Credits Total Required for Graduation, which includes Mastery-Based Learning Credit**

### **MASTERY-BASED LEARNING CREDIT (Course Code #3421)**

Mastery-based learning is to ensure that a student has acquired the knowledge and skills that are deemed to be essential to success in every postsecondary - college and career environment and in adult life. Students will receive one credit upon successful demonstration of subject matter content mastery achieved through educational experiences and opportunities that provide flexible and multiple pathways to learning. These options include:

- ACT Score of English 18, Math 22, Reading 22, Science 23, ELA 20
- Capstone Project (prior approval required)
- FCIAC Recognition
- For EL students who have lived in Connecticut for fewer than five years, a score of proficiency or above on the LAS Links assessment
- Independent Study
- Recognition as an AP Scholar (receives a score of 3 or more on 3 AP exams)
- Recognition of achievement in a state or national competition in the areas of debate, literary, STEM, visual, or performing arts
- SAT Score College and Career Readiness Benchmark for Evidence-Based Reading and Writing: 480
- SAT Score College and Career Readiness Benchmark for Math: 530
- Seal of Biliteracy
- Student Self-Designed Project (prior approval required)
- Internship\*
- Volunteer/Service Experience\*
- Work-study Experience\*

\*Students can complete any combination of these Pathways to meet the requirement of 120 hours

**Seal of Biliteracy** recognizes students who have studied and attained proficiency in English and another language and have met specific requirements at the time of graduation. The seal recognizes the value of the tangible benefits of being bilingual and bi-literate and prepares students to be productive contributing members of our global society.

### **COURSE LEVEL CURRICULA AND COLLEGE PARTNERSHIP PROGRAMS**

**College Prep (CP)** courses meet stringent scholastic requirements and prepare students to meet the academic demands necessary for two and four-year colleges and universities, technical schools, the military, and work-readiness for employment.

**Honors (H)** courses explore the subject matter in-depth and in a comprehensive and accelerated approach. The courses are intended for students who have demonstrated motivation, interests, and achievement in previous courses taken in that content area. Successful completion of Honors courses adds 0.5 weighted credit to a student's rank and GPA.

**Advanced Placement (AP)** offers students the opportunity to take college-level courses while in high school to earn college credit, advanced placement, or both. Each AP course concludes with a college-level assessment which is an essential part of the AP experience enabling students to demonstrate mastery of their college-level course work.



**Early College Studies (ECS)** program is offered to Stamford High School students allowing them to concurrently earn a high school diploma as well as an Associate's Degree in Software Engineering, Mobile Programming, or Web Development and Design from Norwalk Community College. ECS is modeled after a national program with a proven track record for increasing graduates' immediate enrollment into college while preparing them for immediate employment in the technology industry. Students benefit from rigorous coursework, mentoring, tutoring, and potential internships for qualified students. For additional program information visit: [College Programming for SHS Students](#).

**International Baccalaureate Diploma Programme (IBDP)** program is offered to Stamford High School juniors and seniors, preparing students to think critically about the world around them and equipping them with the knowledge and skills to take their care to the next level through intercultural understanding and respect. The goal is for IB students to keenly develop these strong attributes throughout their IB education and maturation: inquiry, knowledge, thinking, communicating, care, open-mindedness, principle, risk-taking, balance, and self-reflection. For additional program information visit: [College Programming for SHS Students](#).

**Norwalk Community College High School Partnership Program** offers highly motivated and academically qualified students to take credit-bearing NCC courses while a high school student at no cost. The courses the student is eligible to take are determined by NCC's placement and course prerequisite criteria. The student may take one or two courses per semester in the fall and/or spring semesters. The NCC courses must meet outside of regularly scheduled high school hours. For additional program information visit: [NCC High School Partnership Program](#).

**University of Connecticut - Early College Experience (ECE)** provides academically motivated students the opportunity to take challenging courses that allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and financial head start toward a college degree. UConn ECE instructors are high school teachers, certified as adjunct professors by the University. UConn ECE faculty fosters independent learning, creativity, and critical thinking – all-important for success in college. Students must complete the course with a grade of C or better to receive university credit on a UConn transcript. University credits are transferable to many colleges and universities. Courses are offered in a variety of content areas at each of Stamford's high schools. Students are charged registered course credit plus a resource fee. Fee waivers are available. For additional program information visit: [UConn Early College Experience](#).



Danielle Pareja – Westhill High School

## GRADING SYSTEM

All Stamford Public Schools course grades will be included in the calculation to qualify for Honor Roll. Grades not awarded by Stamford Public Schools will not be included in the Honor Roll determination.

GRADING SYSTEM					
High Honor Roll = 4.0			Honor Roll = 3.0		
Letter Grade	Number Value	Grade Point	Letter Grade	Number Value	Grade Point
A	93-100	4.00	D	63-66	1.00
A-	90-92	3.75	D-	60-62	0.75
B+	87-89	3.50	F	0-59	0.00
B	83-86	3.00	M	Medical	0.00
B-	80-82	2.75	P	Passing	0.00
C+	77-79	2.50	I	Incomplete	0.00
C	73-76	2.00	LC	Loss of Credit	0.00
C-	70-72	1.75	W	Withdrawn	0.00
D+	67-69	1.50	NG	No Grade	0.00

## GRADE POINT AVERAGE AND CLASS RANK

Both an unweighted and weighted rank is calculated for each student (who has attended Stamford Public Schools for at least four semesters), using the grade point average of the final marks earned in each course, except pass/fail courses and independent study. The unweighted, cumulative GPA is a simple average of all courses in grades 9-12 on a 4.0 scale. The weighted GPA is calculated by adding the following values to the unweighted GPA:

- .05 for each Honors course
- .07 for each (AP, ECE, NCC, and IBDP course)

## HONOR ROLL

The Stamford Public Schools believes in recognizing students who demonstrate significant academic achievement through hard work and commitment. To earn honors in a marking period a student must be enrolled in a minimum of 3 credits that marking period. There are three levels of Honors:

- Honors with Distinction: Straight A's (includes A and A-)
- High Honors: All A's, except for one B (includes B+, B, B-)
- Honors: All A's and/or B's except for one C (includes C+, C, C-)

## POST-SECONDARY PLANNING

**School Counseling:** Upon entering high school, you should develop a four-year plan of academic study that is challenging and fulfilling. Your plan will be shaped as you learn new information about yourself and the world of work. One of the services provided to help you with academic planning is Individual Planning Meetings between you and your school counselor. This meeting results in the development of your Student Success Plan with career, education, social-emotional, and post-secondary goals. You and your counselor will update the plan annually. Your plan is stored in *Naviance*, a web-based tool that also allows you to explore career options, research colleges and technical schools, complete interest inventories, and manage the college application process.

You will also participate in classroom or group school counseling lessons two-three times a year. Additionally, students will have the opportunity to participate in college and career events.

**Career Counseling:** Career development and awareness are integrated throughout the curriculum in all academic subject areas and across all grade levels. Your school counselor can assist you with all aspects of career development. Additionally, each high school is fully equipped with a career center as a resource for students and families to assist with post-high school planning. Some services include information about employment and volunteer opportunities, visits from college admissions representatives, financial aid/FAFSA assistance, scholarship application help, and military information sessions. The Career Center is supervised by a school counselor/career counselor.

**Standardized Testing:** Students should explore the various admission tests for post-secondary opportunities. The [ACT](#) (American College Test) is designed to measure high school students' college readiness in English, math, reading, science, and writing (optional). Students in their junior year and senior year in high school are encouraged to sit for the ACT. Students can qualify for fee waivers on test administration days throughout the year. For additional ACT information and test dates, visit [ACT resources](#).

The [ASVAB](#) is a multi-aptitude test, administered by the Department of Defense to students interested in joining the military. This test helps to establish if you are a good fit for the military and which branch of service. The better your [ASVAB score](#), the broader your options.

The [PSAT/NMSQT](#) (Preliminary Scholastic Aptitude Test) is a diagnostic tool, provides real-time/real-place experience of a standardized assessment similar to the SAT, and is the qualifying test for National Merit Corporation scholarship opportunities for Juniors. The exam is offered to all sophomore and junior students during the school day in October, free of cost. We encourage all sophomores and juniors to take the PSAT and explore the [PSAT resources](#) that are available.

The [TOEFL](#) (Test of English as a Foreign Language) measures the English language ability of non-native speakers wishing to enroll in an English-speaking university or college. The TOEFL is accepted by more than 11,000 universities and other institutions in over 190 countries. The TOEFL focuses on English used in an academic setting, which is why schools and universities use TOEFL scores for admissions purposes.

The [SAT](#) (Scholastic Aptitude Test) measures a high school student's readiness for college and provides colleges. The SAT is offered to all juniors in the spring, during the school day at their high school, free of cost. Students can qualify for fee waivers on test administration days throughout the year. Students should check the specific college requirements to determine if the institution is test-optional and if SAT Subject tests are required. For additional SAT information and test dates, visit [SAT resources](#).

## ONLINE COURSES AND INDEPENDENT STUDY

**Online** courses may be an option for a student to participate in online discussions and group projects while learning rigorous course content. Credit will only be given for courses taken with an accredited educational institution and pre-approved by the Stamford Public Schools. Credit for these courses will be counted in a student's GPA and class rank. For more information, contact your school counselor.

**Independent Study** enables a student to conduct an in-depth study of a specific topic in consultation with an advisory teacher. This course of study requires approval from the department head and is not counted in the grade point average.



Mason Boeger - Stamford High School

**The following pages contain all of the course offerings for the 2022-2023 school year. All courses will be run next year based upon student requests. If a course is not at 50% capacity, we may not run the course.**

## ENGLISH LEARNER PROGRAMS

Students identified as English Learners (EL) at the high school level may have a choice of Bilingual, Sheltered, and/or English as a Second Language (ESL) courses which assist them in acquiring listening, speaking, reading, and writing skills while learning content area material.

## PROGRAMA DE APRENDICES DEL INGLÉS

Los estudiantes identificados como Aprendices del Inglés (EL por las siglas en inglés) al nivel de escuela secundaria (escuela superior) pueden ser ubicados en asignaturas **Bilingües, de Inmersión Estructurada y/o de Inglés para Hablantes de Otros Idiomas (ESL por las siglas en inglés)** que les ayuden a adquirir destrezas de escuchar, hablar, lectura y escritura mientras aprenden el material en las áreas de contenido.

## BILINGUAL PROGRAM

Bilingual courses are offered to Spanish and Haitian-Creole speaking students who meet state and federal guidelines for entrance into the Bilingual Program. In accordance with Section 10-17a-j of the Connecticut General Statutes, only those students who have more than 30 months left toward graduation qualify for the Bilingual Program. The Spanish Bilingual Program is located at Westhill High School and the Haitian-Creole Bilingual Program is located at Stamford High School. The Bilingual Program can be offered for up to 30 months to eligible Spanish and Haitian-Creole speaking students, providing that the student enrolls before October 1 of his/her sophomore year. Students who arrive after October 1 of 10<sup>th</sup> grade are eligible to enroll in Sheltered content classes and/or ESL courses. The curriculum for Bilingual Health, Math, Science, and Social Studies courses mirrors the course of study in the mainstream education program, with instruction delivered in English with bilingual support.

An eligible student may spend up to an additional thirty months in a program of bilingual education if the Board of Education requests an extension from the State Department of Education which makes a determination whether an extension for such student is necessary.

## PROGRAMA BILINGÜE

Se brindan las asignaturas bilingües a alumnos hispanos y haitianos-francés criollo que llenan los requisitos estatales y federales para la admisión en el Programa Bilingüe. **El Programa Bilingüe en español está ubicado en Westhill High School y el Programa Bilingüe en criollo haitiano está ubicado en Stamford High School.**

Se puede brindar el Programa Bilingüe por hasta 30 meses a alumnos parlantes de español y haitianos-francés criollo con tal que los alumnos se inscriban antes del 1° de octubre de su segundo año. Todos los demás estudiantes que llegan al grado 10 después del 1° de octubre reúnen los requisitos para matricularse en clases con contenido "Sheltered" (de inmersión estructurada), que tienen una programación de ESOL intensiva. El currículo de las asignaturas Bilingües de Salud, Matemáticas, Ciencias, y Estudios Sociales refleja el programa de estudios del programa de educación regular pero con la instrucción brindada en español e inglés o en haitianos-francés criollo e inglés.

## SHELTERED PROGRAM

Sheltered courses are offered at both Stamford High School and Westhill High School to English Learners (ELs) in grades 9-12. The Sheltered Program was designed by State mandate for new arrival speakers of Spanish and Haitian Creole and is also available to students who speak other languages. Sheltered instruction is an approach for teaching content to EL students in strategic ways that make the subject matter concepts comprehensible while promoting the students' English language development. In order to succeed academically, EL students must master not only English vocabulary and grammar but also the way English is used in core content classes. The theoretical structure of the Sheltered model is that language acquisition is enhanced through meaningful use and interaction where language and content objectives are systematically woven into the instruction. The curriculum for Sheltered English, Health, Math, Science, and Social Studies mirrors the course of study in the mainstream education program, with instruction delivered in simple-to-understand English to make the content more comprehensible for English Learners.

## PROGRAMA SHELTERED (DE INMERSIÓN ESTRUCTURADA)

Se brindan las asignaturas Sheltered en ambos Stamford High School y Westhill High School para Aprendices del Inglés de los grados 9 a 12. El Programa Sheltered fue diseñado para hablantes de español y haitianos-francés criollo por mandato del Estado y está disponible también para estudiantes que hablan otros idiomas.

La instrucción Sheltered es un enfoque para enseñar contenido a los alumnos en formas estratégicas que hacen comprensibles los conceptos del material de las asignaturas en estudio a la vez que se promueve el desarrollo del inglés en los alumnos. Para lograr el éxito académico, los alumnos de EL deben dominar no solo el vocabulario y gramática del inglés sino también la forma en que se usa el inglés en las clases de contenido básico. La estructura teórica del modelo Sheltered es que la adquisición de lenguaje es mejorada por medio del uso significativo e interacción en que se entrelazan los objetivos del lenguaje y contenido sistemáticamente en la enseñanza.

El currículo de Inglés, Salud, Matemáticas, Ciencias, y Estudios Sociales Sheltered refleja el programa de estudios del programa de educación regular, con la instrucción brindada en un inglés sencillo de entender para lograr que el contenido sea más comprensible para los Aprendices del Inglés.

Un alumno que reúne los requisitos puede pasar hasta treinta meses adicionales en un programa de educación bilingüe si la Junta de Educación solicita una prolongación al Departamento de Educación del Estado, que es el que determina si es necesaria una prolongación para el antedicho alumno(a).

## ENGLISH AS A SECOND LANGUAGE

ESL (English as a Second Language) courses are offered to English Learners at the high school level. The ESL Program utilizes national standards in the development of English language skills with an intense focus on listening, speaking, reading, and writing. Students engage in meaningful and authentic use of the target language of English with certified TESOL teachers. Students are placed using a combination of language level and academic history. In addition, there are EL course offerings focusing on literacy skills and academic language to further specific English language domains necessary for academic success.

## PROGRAMA DE ESLEGADOS

Se brindan todas las asignaturas de ESL (Inglés como segundo Idioma) a todos los del Idioma Inglés al nivel de escuela secundaria (escuela superior). El programa ESL usa las normas nacionales de TESOL (Maestros de Inglés para Hablantes de Otros Idiomas) para el desarrollo de las destrezas del idioma inglés con un enfoque intenso en el uso significativo y auténtico del inglés, el idioma de enfoque, con maestros de TESOL certificados.

## NEW ARRIVAL CENTER

The New Arrival Center (NAC) is a program of support for non-English speaking students. The program is delivered in English by certified TESOL teachers (Teacher of English to Speakers of Other Languages). Identified English learners (ELs) who are both new to the country and to the language, and have limited or interrupted formal education (SLIFE) may qualify to attend a NAC. The main objectives of the newcomer program is to help new arrival ELs acquire beginning English skills, guide the students' acculturation into the school system within the United States, and provide instruction in core academic content areas.

## CENTRO DE RECIÉN LLEGADOS

New Arrival Center (Centro de Recién Llegados – NAC por las siglas en inglés) es un programa de apoyo para estudiantes que no hablan inglés. El programa es presentado en inglés por maestros de TESOL (Maestros de Inglés para Hablantes de Otros Idiomas por las siglas en inglés). Aprendices del Inglés (ELs por las siglas en inglés) para quienes el país y el idioma son nuevos, o haber interrumpido su educación formal (SLIFE por las siglas en inglés), pueden reunir los requisitos para asistir a NAC. Los objetivos principales del programa de recién llegados es ayudar a los recién llegados ELs a adquirir destrezas del principio del idioma inglés, guiar la aculturación de los estudiantes en el sistema escolar dentro de los Estados Unidos y proporcionar enseñanza en las áreas de contenido básicas.

## PROGRAMA BILINGÜE EN ESPAÑOL

### MATERIAS BRINDADAS

El Seminario de Primer Año bilingüe  
Salud 1  
Salud y Desarrollo Social 2  
Matemáticas Fundacionales  
Álgebra 1  
Geometría  
Álgebra 2

Física de Ciencias Físicas (0.5 crédito)  
Química de Ciencias Físicas (0.5 crédito)  
Biología  
Ciencias Sociales 9  
Historia Mundial Moderna  
Historia De Los Estados Unidos  
Cívica

### 9209 - EL SEMINARIO DE PRIMER AÑO BILINGÜE

**0.5 crédito**

Este curso examina las propiedades de los números reales, ecuaciones lineales y cuadráticas expresiones y funciones de polinomios, desiguales, expresiones y funciones exponenciales y sistemas de ecuaciones. El énfasis cae sobre representaciones algebraicas, geométricas y gráficas de estos temas a través de actividades de pensamiento crítico, además del uso de la computadora y la tecnología de calculadoras gráficas. Los estudiantes se enfocan durante el año completo en la solución de problemas y las aplicaciones auténticas.

### 9890 - SALUD 1

**0.5 crédito**

**WHS**

Este curso examina la relación que existe entre la salud física, emocional y social. Los estudiantes explorarán el proceso de tomar decisiones y aprenderán cómo sus decisiones contribuyen a mantener la salud personal. Los temas mayores incluyen, pero no están limitados a la salud emocional, nutrición, el bienestar, uso y abuso de sustancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.

### 9880 - SALUD Y DESARROLLO SOCIAL 2

**0.5 crédito**

**WHS**

Este curso examina la relación que existe entre la salud física, emocional y social. Los estudiantes explorarán el proceso de tomar decisiones y aprenderán cómo sus decisiones contribuyen a mantener la salud personal. Los temas mayores incluyen, pero no están limitados a la salud emocional, nutrición, el bienestar, uso y abuso de sustancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.



**6181 - MATEMÁTICAS FUNDACIONALES 1**  
**6180 - MATEMÁTICAS FUNDACIONALES 2**  
**6183 - MATEMÁTICAS FUNDACIONALES 3**  
**6184 - MATEMÁTICAS FUNDACIONALES 4**

<b>0.5 crédito</b>	Esta materia proporciona apoyo académico para los aprendices de inglés recién llegados que necesitan desarrollar un sentido de números fuerte mediante ver relaciones entre operaciones y números, hacer estimados razonables y divisar respuestas irrazonables. La enseñanza se enfoca en el uso de actividades prácticas, manipuladores y aplicaciones de la vida real. Los alumnos desarrollan una comprensión de las relaciones de proporciones en relación con las funciones lineares.
<b>WHS</b>	

**6104 - ALGEBRA 1**

<b>1 crédito</b>	Este curso examina las propiedades de los números reales, ecuaciones lineales y cuadráticas expresiones y funciones de polinomios, desiguales, expresiones y funciones exponenciales y sistemas de ecuaciones. El énfasis cae sobre representaciones algebraicas, geométricas y gráficas de estos temas a través de actividades de pensamiento crítico, además del uso de la computadora y la tecnología de calculadoras gráficas. Los estudiantes se enfocan durante el año completo en la solución de problemas y las aplicaciones auténticas.
<b>WHS</b>	

**6106 - GEOMETRÍA**

<b>1 crédito</b>	La matrícula puede que tome en cuenta la opinión profesional del personal escolar. Este curso examina aspectos geométricos del plano y figuras sólidas, tales como las propiedades de las líneas, los ángulos, triángulos, cuadriláteros, círculos, lo que incluye la longitud, el área, el área de la superficie y el volumen de los sólidos al igual que el razonamiento inductivo y la prueba. El énfasis recae en la representación algebraica, geométrica y gráfica de estos tópicos a través de actividades que usan el pensamiento crítico además del uso de la tecnología de las computadoras y la calculadora gráfica. Los estudiantes se enfocan a través del año en la solución del problema y su aplicación a la vida real.
<b>WHS</b>	
<b>Prerrequisito:</b>	Algebra 1

**6212 - ALGEBRA 2**

<b>1 crédito</b>	Este curso examina las propiedades de los números reales, ecuaciones lineales y funciones, desiguales, sistemas lineales, funciones cuadráticas y polinomios, exponentes radicales, funciones exponenciales, y logaritmo. El énfasis se basa en representaciones algebraicas, geométricas y gráficas de estos temas a través de actividades de pensamiento crítico, además del uso de la computadora y la tecnología de calculadoras gráficas. Los estudiantes se enfocan durante el año completo en la solución de problemas, y las
<b>WHS</b>	

	aplicaciones auténticas de la vida real, así como otras destrezas que se requieren para el examen de S.A.T. durante el año para entrar en la universidad.
<b>Prerrequisito:</b>	Geometría

### *8451 - FÍSICA DE CIENCIAS FÍSICAS*

<b>0.5 crédito</b>	Esta asignatura explora los principios básicos de la física con un enfoque completo. Los alumnos aprenden por medio de un enfoque basado en indagar que tiene el propósito de estimular las destrezas del pensamiento crítico, investigadoras y de la toma de decisiones así como las destrezas de colaboración e investigación básica. Las investigaciones de laboratorio son una parte íntegra de esta materia. Como resultado de esta asignatura, los estudiantes exploran y explican conceptos físicos básicos y sus aplicaciones relacionadas.
<b>WHS</b>	

### *8452 - QUÍMICA DE CIENCIAS FÍSICAS*

<b>0.5 crédito</b>	Esta asignatura explora los principios básicos de la química con un enfoque completo. Los alumnos aprenden por medio de un enfoque basado en indagar que tiene el propósito de estimular las destrezas del pensamiento crítico, investigadoras y de la toma de decisiones así como las destrezas de colaboración e investigación básica. Las investigaciones de laboratorio son una parte íntegra de esta materia. Como resultado de esta asignatura, los estudiantes exploran y explican conceptos químicos básicos y sus aplicaciones relacionadas.
<b>WHS</b>	

### *809 - BIOLOGÍA*

<b>1 crédito</b>	Este curso explora principios biológicos. El curso examina la ecología, biología de células, genética, evolución, micro-organismos, plan-tas, vertebrados e invertebrados. La comprensión estudiantil de la biología se fomenta con investigaciones en el laboratorio, solución de problemas y actividades que promueven el pensamiento crítico. Como resultado de este curso los estudiantes explorarán y explicarán conceptos de biología y aplicaciones relacionadas.
<b>WHS</b>	

### *5840 - CIENCIAS SOCIALES 9*

<b>1 crédito</b>	Este curso se enfoca en ambas civilizaciones, la occidental y la no-occidental, desde la civilización antigua hasta la era moderna. Al examinar varios temas y conceptos económicos y sociales, el curso sirve como fundación para la historia mundial moderna, permitiendo a los estudiantes evaluar y analizar eventos desde perspectivas múltiples.
<b>WHS</b>	

### 5180 - HISTORIA MUNDIAL MODERNA

<b>0.5 crédito</b>	Este curso se enfoca en la historia mundial desde la Primera Guerra Mundial hasta el presente. Como una continuación a Estudios Sociales 9, la historia mundial moderna examina la interdependencia y la interrelación del mundo, capacitando a los estudiantes a evaluar y analizar eventos desde perspectivas múltiples.
<b>WHS</b>	

### 5280 - HISTORIA DE LOS ESTADOS UNIDOS

<b>1 crédito</b>	Historia de los Estados Unidos se enfoca en el período entre la Era Colonial Era y el tiempo actual, considerando nuestras relaciones mundiales, el fondo de nuestras instituciones y eventos en el frente doméstico. La materia examina asimismo las contribuciones de diversas minorías étnicas y políticas al desarrollo de la civilización de los Estados Unidos.
<b>WHS</b>	

### 5740 - CÍVICA

<b>1 crédito</b>	El curso de Cívica se enfoca en los valores y principios de la democracia estadounidense y la estructura del gobierno federal, estatal y municipal. El curso examina la relación entre los Estados Unidos y otras naciones en cuanto a asuntos extranjeros, e incluye un estudio de la prensa, partidos políticos, grupos minoritarios y grupos con intereses especiales que sirve para preparar a los estudiantes para asesorar su papel y responsabilidad en el sistema político estadounidense.
<b>WHS</b>	

## PWOGRAM BILENG-KREYOL AYISIEN

Elèv yo idantifye kòm Elèv k ap Aprann Anglè (EL) nan nivo lekòl segondè ka gen yon chwa ant kou Bileng, Kou pwoteje, ak/oswa Angle kòm Dezyèm Lang (ESL) ki ede yo akeri kapasite pou koute, pale, li ak ekri pandan y ap aprann kontni matyè a.

Students identified as English Learners (EL) at the high school level may have a choice of Bilingual, Sheltered, and/or English as a Second Language (ESL) courses which assist them in acquiring listening, speaking, reading, and writing skills while learning content area material.

### 3496 - BILENG-KREYOL AYISIEN

<b>0.5 crédito</b>	Kou sa-a konsantre sou devlopman vokabilè yo itilize anpil nan plizyè matyè, tèt ke syans, matematik, avek syans sosyal. Se yon kou pou elèv ki fèk kòmanse aprann anglè, avek elèv ki pa twò genyen anpil tan depi yap aprann anglè. Pandan elèv yo ap aprann vokabilè sa yo, yap kapte langaj akademik la, avek teknik yo bezwen pou yo kapab byen travay nan klas yo.
<b>SHS</b>	

This course emphasizes the development of cross-disciplinary, high frequency vocabulary used in academic courses. Using science, math, social studies texts, beginning, and advanced beginning English learners (EL's) will acquire academic language and study skills needed in the respective areas.

**SHELTERED PROGRAM / PWOGRAM PWOTEJE/  
PROGRAMA "SHELTERED" (INTEGRADO)**

*See content areas for English, Health, Math, Science, Social Studies and Career and Technical Education-Business for descriptions of sheltered courses.*

*Gade domèn kontni yo pou anglè, sante, matematik, syans, syans sosyal epi ansèyman pwofesyonèl ak teknik-Biznis pou deskripsyon kou pwoteje yo.*

*Consulte las áreas de contenido de Inglés, Salud, Matemáticas, Ciencias, Estudios Sociales y Formación Profesional y Técnica Empresarial para ver las descripciones de las clases "sheltered" (integradas).*

**ENGLISH AS A SECOND LANGUAGE PROGRAM**

English Learners (ELs) at the high school level may participate in English Learner courses in some combination with Bilingual courses and/or Sheltered courses, or separately depending on their linguistic needs and level. The English Learner program is designed to provide students with instruction in speaking, listening, reading, and writing in the English language. Included are a variety of language development courses for various needs. Students who take ESL courses in their freshman and sophomore year receive English credit for those courses in order to meet some of the English graduation requirement. A combination of student's LAS links score and past academic history are used to place students in appropriate ESL or EL courses.

**3381 - ENGLISH AS A SECOND LANGUAGE (ESL-A1)**  
**3382 - ENGLISH AS A SECOND LANGUAGE (ESL-A2)**  
**3385 - ENGLISH AS A SECOND LANGUAGE (ESL-A3)**

**Credit(s) 1**

This is a double period course being offered as a one-semester course both semesters. This will allow for students who arrive after the beginning of either semester to have the opportunity to begin their language study. The course utilizes a literature-based approach to the learning of oral and written English. English usage is stressed through vocabulary and grammatical forms used in context. Students read novels, short stories, plays, narrative texts, and newspaper articles to which they respond in a variety of oral and written forms. Two semesters, or passing a proficiency test, are needed to progress to ESL B.

**SHS**

**WHS**

**3451 - ENGLISH AS A SECOND LANGUAGE (ESL-B1)**  
**3452 - ENGLISH AS A SECOND LANGUAGE (ESL-B2)**

<b>Credit(s) 0.5</b>		This course is offered as a one-semester course. Two semesters, or passing a proficiency test, are used to progress to ESL C. This course is designed for students at the intermediate level of learning the English language. Students focus intensively on listening, speaking, reading, and writing skills. Students read advanced texts and write using multiple genres.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		
		ESL-A or skilled proficiency

**3463 - ENGLISH AS A SECOND LANGUAGE (ESL-C1)**  
**3464 - ENGLISH AS A SECOND LANGUAGE (ESL-C2)**

<b>Credit(s) 0.5</b>		This course emphasizes intensive and extensive reading and writing instruction in English. Students read full-length novels, short stories, and newspaper and magazine articles that deal with current events. Students are responsible for oral presentations and papers that incorporate the language concepts learned through their readings.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		
		ESL-B or skilled proficiency

**3469 - ENGLISH AS A SECOND LANGUAGE (ESL ADVANCED 1)**  
**3468 - ENGLISH AS A SECOND LANGUAGE (ESL ADVANCED 2)**

<b>Credit(s) 0.5</b>		This course emphasizes intensive and extensive reading and writing instruction in English. Students will focus on the academic language needed to access core coursework, both in reading and writing. Students will incorporate study skills, structured writing, specific reading comprehension development with mini-lessons in grammar and usage as needed.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		
		ESL-C or skilled proficiency

**3470 - FRESHMAN ENGLISH LEARNER LAB 1**  
**3473 - FRESHMAN ENGLISH LEARNER LAB 2**

<b>Credit(s) 0.5</b>		This course is designed for 9 <sup>th</sup> grade EL students who need additional support in English Language learning, reading skills, and reading strategies. Students will focus on building English language proficiency and reading skills through speaking, listening, reading, and writing activities. Course enrollment requires careful screening and recommendation from middle school faculty and consultation with the high school EL Department Head.
<b>SHS</b>	<b>WHS</b>	

**3471 - EL LITERACY LAB 1**  
**3472 - EL LITERACY LAB 2**

<b>Credit(s) 0.5</b>		This course is designed for students in grades 10, 11, and 12 who need additional support in English language learning, reading skills, and reading strategies. Students will focus on building English language proficiency and reading skills through speaking, listening, reading, and writing activities. Course enrollment requires EL Department Head approval.
<b>SHS</b>	<b>WHS</b>	

**3241 - ENGLISH LANGUAGE ARTS 11**  
**3242 - ENGLISH LANGUAGE ARTS 12**

<b>Credit(s) 1</b>		<p><b>For 11:</b> Students participating in English/Language Arts 11 will learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author.</p> <p><b>For 12:</b> This course will continue to develop student's writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often forms the backbone of the writing assignments.</p>
<b>SHS</b>	<b>WHS</b>	

**2466 - BUSINESS ENGLISH FOR EL**  
**2468 - BUSINESS ENGLISH FOR EL 2**

<b>Credit(s) 0.5</b>		This course is designed to use the business world as the content to develop English language skills. Students will focus on building English proficiency in reading, writing, listening, and speaking by writing resumes, participating in mock interviews, and learning about the business world. This course may be taken after ESL A, or with the approval of the EL Department Head.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		ESL A or B and approval from the Department Head

**3592 - WRITING FOR COLLEGE AND CAREER (NEW)**

<b>Credit(s) 1</b>		Classes prepare students to write academically for research papers and/or technical reports. Academic writing, vocabulary selection, and syntax are developed in order to write research papers and essays. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Must be a current EL student who has completed the sequence of EL classes and has the approval of the department head

**NEW ARRIVAL CENTER**

**3383 - NEW ARRIVALS EL LAB 1**  
**3384 - NEW ARRIVALS EL LAB 2**

**Credit(s)1; 0.5**

This support course is designed for students with limited English proficiency. It provides academic support for new arrival EL students. Students receive additional assistance with coursework, homework, and projects from core content area classes.

**SHS**

**WHS**

**4355 - CULTURAL FOUNDATIONS**  
**4356 - CULTURAL FOUNDATIONS**

**Credit(s)1; 0.5**

Students participating in Cultural Foundations will gain exposure to Social Studies themes such as US Geography, American History, Citizenship, and Civics. This class has a thematic based-approach to learning basic reading, oral, and written English. The curriculum emphasizes vocabulary and reading in context. Students will read a variety of texts including informational, historical, and non-fiction passages in order to analyze, discuss and respond orally, as well as in writing. In addition, they will use technology to enhance learning and will interact with their teachers and peers on a daily basis.

**SHS**

**WHS**

**3480 - FOUNDATIONS LITERACY 1**  
**3481 - FOUNDATIONS LITERACY 2**

**Credit(s) 0.5**

This full-year course is designed for students who are identified as Students with Limited or Interrupted Formal Education (SLIFE) and have a LAS Links Placement Score of 1, OR have been recommended by a teacher. This course provides direct instruction in early literacy skills and strategies in English.

**SHS**

**WHS**

**6181 - FOUNDATIONS MATH 1**  
**6180 - FOUNDATIONS MATH 2**  
**6183 - FOUNDATIONS MATH 3**  
**6184 - FOUNDATIONS MATH 4**

**Credit(s) 0.5**

This course provides academic support for new arrival English learners that need to develop a strong number sense by seeing connections among operations and numbers, making reasonable estimates, and spotting unreasonable answers. Instruction focuses on the use of hands-on activities, manipulatives, and real-life applications. Students develop an understanding of proportional relations in connection to linear functions. Foundations Math 3 and 4 are the equivalent of pre-Algebra.

**SHS**

**WHS**

**8101 - FOUNDATIONS SCIENCE 1**  
**8102 - FOUNDATIONS SCIENCE 2**

**Credit(s) 0.5**

This course provides academic support for new arrival ELs that need to develop a strong foundational background on the principles of several scientific specialties: earth science, physical science, biology, chemistry, and physics. General science concepts are explored as are the principles underlying the scientific method and experimentation techniques.

**SHS**

**WHS**



Allie Colindres - Westhill High School



## ACADEMIC SUPPORT

Stamford Public Schools provide a wide range of services and supports. Differentiated instruction and inclusive best practices are implemented to address individual learning styles and needs.



Avery Mui - Stamford High School

### Course Offerings

Academic Support  
Transition Skills **(NEW)**  
Family Foods **(NEW)**  
Math Applications **(NEW)**

Leisure Skills **(WHS)**  
Employability Skills **(WHS)**  
Specialized Reading  
SEL Life Skills **(NEW) (WHS)**

Daily Living Skills  
Academic Intervention Mathematics  
Academic Intervention Literacy  
Life Skills for the 21<sup>st</sup> Century **(NEW)**

### 9741 - Academic Support *Administrative approval required*

<b>Credit(s) 1</b>		This class is designed to be a companion to required academic courses such as English, Math, Science and Social Studies. This course will provide additional instructional time and subject-specific learning strategies for students who need the extra assistance. Academic support classes may also provide opportunities for students to work on homework and supplemental assignments to practice their academic skills.
<b>SHS</b>	<b>WHS</b>	

**9796 - Transition Skills NEW!**  
*Administrative approval required*

<b>Credit(s) 1</b>		The course is designed to give upper class students the opportunity to investigate post-secondary options. Students will complete tasks designed to help the student understand opportunities available to them. Students will explore support services available to them through state agencies as well as post-secondary programs.
<b>SHS</b>	<b>WHS</b>	

**0658 - Family Foods NEW!**  
*Administrative approval required*

<b>Credit(s) 1</b>		This course is designed to prepare students to identify, use and care for kitchen tools, understand safety and sanitation in the kitchen. Students will also learn food preparation terminology needed to follow a recipe. Hands-on food preparations are practiced in a group setting.
<b>SHS</b>	<b>WHS</b>	

**6581 - Math Applications NEW!**  
*Administrative approval required*

<b>Credit(s) 1</b>		This course is designed to focus on pre-algebra and pre-geometry skills. It is designed to engage student involvement in problem solving, and reasoning, as well as continued reinforcement and application of computational skills.
<b>SHS</b>	<b>WHS</b>	

**9796 - SEL Life Skills (WHS) NEW!**  
*Administrative approval required*

<b>Credit(s) 1</b>		This is a class that provides an array of therapeutic activities and supports for students with emotional, behavioral, and academic challenges. The students have the ability to process and connect with fellow students, learn therapeutic techniques and skills to cope and manage challenges and learn executive functioning skills. The group discusses and explores strategies that develop emotional intelligence and strength in mental health. SEL Skills includes a Study Skills class where students are guided through the process of identifying their learning and study skill styles. Specific topics may change based on student need.
<b>WHS</b>		

**9670 - Leisure Skills**

*Administrative approval required*

<b>Credit(s) 1</b>	This course provides exposure to a variety of recreational/leisure activities. The course includes guidance to students in their decision-making process regarding after school activity participation and community related events. Skills developed while participating in these activities include organization and planning, problem solving, forecasting and predicting, and initiating and completing tasks.
<b>WHS</b>	

**9591 - Employability Skills (WHS)**

*Administrative approval required*

<b>Credit(s) 1</b>	Employability Skills is a year-long, collaboratively taught course for English Language Learners and students who are interested in a vocational/trade path that focuses on the development of knowledge and skills necessary to prepare for paid employment. This course will address vocabulary, receptive and expressive reading, writing and speaking as it pertains to job seeker activities (reading and evaluating job descriptions, writing resumes and cover letters, filling out forms, participating in interviews, etc).
<b>WHS</b>	

**9513 - Daily Living Skills**

*Administrative approval required*

<b>Credit(s) 1</b>	This course provides direct special education instruction in a special education class to develop, maintain and generalize skills leading to independence across settings including school, community and home. Instruction emphasizes independent living and self-help skills including: health/nutrition, hygiene, grooming, self-advocacy, domestic skills such as cooking, shopping, and housekeeping. <b><i>Placement in this course is based on the recommendation of The Planning and Placement Team.</i></b>
<b>SHS</b>	

**9744 - Academic Intervention - Mathematics**

*Administrative approval required*

<b>Credit(s) 0.5</b>	The goal of Academic Intervention is to provide short-term assistance to students who need academic support during the school day. Students are identified for placement through the Scientific Research-based Intervention (SRBI) process. Students will have the opportunity for small group direct instruction from a teacher as well as independent practice. Specific services, supports and goals will be determined on an individual basis by the Student Support Team (SST).
<b>SHS</b>	

**9743 - Academic Intervention - Literacy**  
*Administrative approval required*

<b>Credit(s) 0.5</b>		The goal of Academic Intervention is to provide short-term assistance to students who need academic support during the school day. Students are identified for placement through the Scientific Research-based Intervention (SRBI) process. Students will have the opportunity for small group direct instruction from a teacher as well as independent practice. Specific services, supports and goals will be determined on an individual basis by the Student Support Team (SST).
<b>SHS</b>	<b>WHS</b>	

**9794 - Life Skills for the 21st Century NEW!**  
*Administrative approval required*

<b>Credit(s) 0.5</b>		This class will provide students with skills that will help them to be independent and productive adults in our world. Skills taught will be money management, community access, housekeeping, building healthy relationships, vocational skills (resume writing, interviewing etc.)
<b>SHS</b>	<b>WHS</b>	

**3999 - Specialized Reading**  
*Administrative approval required*

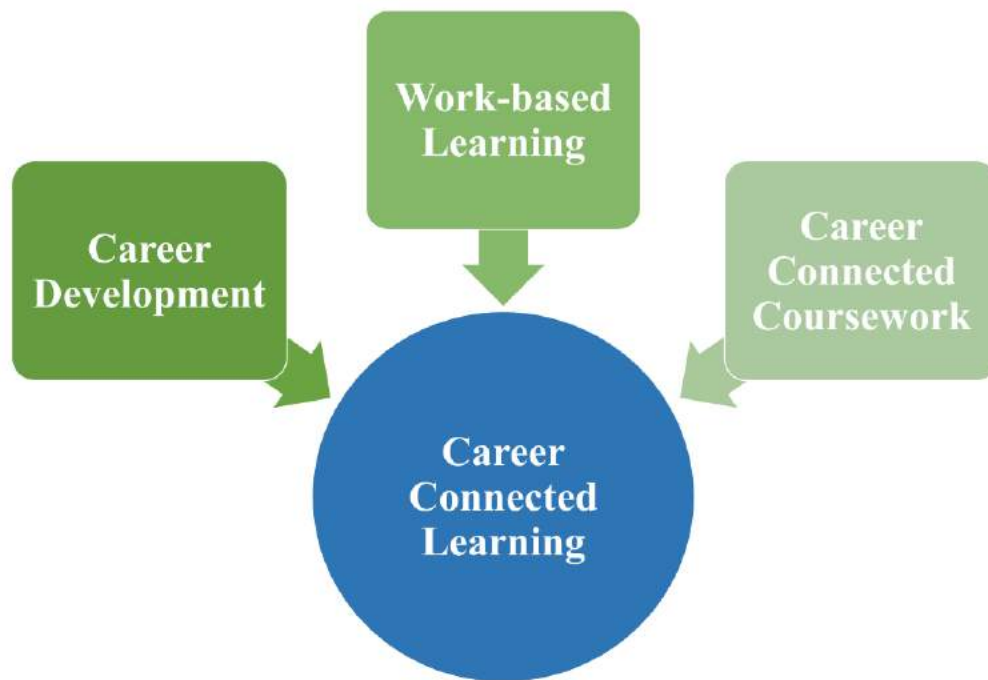
<b>Credit(s) 0.5</b>		This course provides comprehensive literacy support for students in grades 9 and 10, with a focus on mastery of foundational reading skills which include phonics, spelling, sentence structure and fluency. Frequent opportunities to practice foundational skills are provided as students engage in close reading and critical analysis of authentic grade level text, while simultaneously developing the advanced literacy skills needed to gain meaning from text, understand sentence structure and build critical skills for writing.
<b>SHS</b>	<b>WHS</b>	

## PATHWAYS SYSTEM AND CAREER CONNECTED LEARNING FOR ALL

Stamford Public Schools is engaged with the State of Connecticut in developing a Pathway System over the course of three years. A Pathway System is the coordinated interaction of key components – career development, pathway programs, dynamic teaching and learning, employer and community engagement, and cross-sector partnerships- designed to develop a high level of career and life readiness among youths and in schools, colleges, workforce programs and across the broader community, resulting in enhanced workforce competitiveness and community prosperity.

An integral part of the Pathway System is to engage all students in Career Connected Learning. Career Connected Learning helps students connect learning to the real world and develop the knowledge, skills, and mindset to successfully enter the adult world of work, careers, and community life.

The three components of Career Connected Learning:



Career exploration and career-relevant learning benefits all students to make better-informed choices after high school. A Pathways System approach helps embed career-connected learning across the education system.

### **Career Development - College & Career Readiness**

We are committed to all students being prepared to enter a career through either a 2-year or 4-year college, the military, technical school, or an industry certification or pre-apprenticeship program. We want to ensure every student has opportunities throughout the high school years to acquire knowledge, assess interests, build skills, and design a personalized pathway to postsecondary goals.

### **Career Connected Coursework - Career Clusters and Pathways Explained**

The National Career Clusters™ Framework is comprised of 16 [Career Clusters](#)™ and related Career Pathways to help students explore different career options and better prepare for college and career. The Career Clusters™ and related Career Pathways serve as an organizing tool for schools to develop career-oriented programming. Students are encouraged to identify pathways of interest that align with their future personal and professional goals and plans.

A Pathway is a program of interconnected academic and elective courses revolving around a career theme. The program is integrated with experiential learning, training, and possibly apprenticeship. It is designed to support the development of career and life readiness for the learner so that the individual can successfully enter and advance in a career path.

Stamford High School and Westhill High School are currently offering several pathways. Some are simply a sequence of different courses tied to a career field, others are academies or programs that require an application (JROTC-WHS, Agriscience- WHS, Finance Academy-WHS, and Early College Studies-SHS) or meet industry standards (Pre-Apprenticeships).

### **Work-based Learning**

Work-based Learning is an umbrella term used to describe activities in which schools and employers work collaboratively to provide students with structured learning experiences. Some activities included in these experiences are: apprenticeships, job shadowing, internships, externships, mentorships, clinical experiences, worksite tours, and in-school company-based projects as well as cooperative work education. These experiences provide students with the opportunity to develop a strong connection to the world of work and provide them with a sense of purpose to their daily academics.

## Agriscience & Technology

WHS

### Pathway Summary:

The agriscience & pathways is part of the Agriscience & Technology Academy at Westhill High School. For more information on this academy please see page TBD. This pathway focuses on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products and resources.

### Pathway Courses:

- Agriscience and Technology I
- Agriscience and Technology II
- See Agriscience and Technology on pg. 135 for a list of additional courses.

### Additional Recommended Courses:

- See Agriscience and Technology on pg. 135 for a list of additional courses.

### Recommended Clubs & Organizations:

- Doggie Daycare



### Future Careers:

**(4yrs of college):** Animal scientist, Food scientist, Soil and plant scientists, Microbiologist, Zoologist and wildlife biologist, Conservation scientist, Forester, Agricultural inspector

**(2yrs of college):** Animal Science, Plant, and Soil Science, Horticulture, Precision Agriculture, Agricultural Production, Agricultural Business

**(Certification):** Veterinary technician

**RECOMMENDED PROGRAM OF STUDY – AGRISCIENCE**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>		See Agriscience and Technology on pg. 135	See Agriscience and Technology on pg. 135	See Agriscience and Technology on pg. 135

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Agriscience and Technology I	Agriscience and Technology II	See Agriscience and Technology on pg. 135	See Agriscience and Technology on pg. 135

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
Veterinary technician	Animal Science Plant and Soil Science Horticulture Precision Agriculture Agricultural Production Agricultural Business	Animal science Food science Soil and plant scientists Microbiology Zoology and wildlife biology Conservation science Forestry



## Business Management and Administration

WHS

SHS

### Pathway Summary:

Business Management and Administration focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

### Pathway Courses:

- Business Concepts
- Career Pathways & Success Skills
- Personal Finance
- Business Law
- Accounting 1
- IB Business Management 1 (SHS)
- IB Business Management 2 (SHS)

### Other Recommended Courses:

- Entrepreneurship
- Business Exploration (SHS)
- Information Technology
- Information Technology & Design

### Recommended Clubs & Organizations:

- Future Business Leaders of America (FBLA)
- Distributive Education Clubs of America (DECA) (SHS)
- Westhill Entrepreneurs (WHS)

### Business and Industry Partners:

- Network for Teaching Entrepreneurship (NFTE)



### Future Careers:

**(4yrs of college):** Compensation and benefits specialist/manager, Human resources specialist/manager, Training and development specialist/manager, Buying and purchasing agent, Compliance officer, Management analyst

**(2yrs of college):** First-line supervisor of office & administrative support workers, First-line supervisor of non-retail sales workers, Human resource assistant, Payroll & timekeeping clerk, bookkeeping, accounting, & auditing clerk

**(Certification):** Bookkeeping, Real Estate Agent, Travel Associate

**RECOMMENDED PROGRAM OF STUDY – BUSINESS MANAGEMENT AND ADMINISTRATION**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>	Information Technology	Information Technology and Design	Entrepreneurship	Entrepreneurship Business Exploration

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Business Concepts	Personal Finance	IB Business Management 1 (SHS)	IB Business Management 2 (SHS)
Career Pathways & Success Skills		Business Law	Accounting 1

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
Accounting Assistant Accounting Technician Business Skills Business Administration Human Resources Management Non-Profit Management	Business	Business Administration Business Data Analytics Management Supply Chain Management Human Resources Management

# Construction Management

WHS

## Pathway Summary:

Construction Management focuses on careers in designing, planning, managing, building, and maintaining the built environment. The offered courses center around the most widely used construction and manufacturing materials. Through a series of projects and problem-solving activities, students are exposed to the techniques and processes common to designing and finishing construction products. Students will design, plan, identify and solve problems, and build prototypes. Students use electrical and mechanical equipment to build solutions to technical problems. Upon completion of the courses students earn the equivalent credit of a first-year carpenter apprenticeship as well as high school credit and have the opportunity to continue in their apprenticeship or pursue any related 2 year or 4 year degree. **For more information about the Pre-Apprenticeship see pg. 148.**

## Pathway Courses:

- Woodworking (including Woodshop Fridays)
- General Construction - Emerging Technologies - Carpenter Pre-Apprenticeship

## Business and Industry Partners:

- New England Carpenters Training Fund (NECTF)
- United Brotherhood of Carpenters and Joiners of America



## Future Careers:

**(4yrs of college):** Architect, Civil Engineer, Mechanical Engineer, Construction Management, Landscape Architect

**(2yrs of college):** Architectural & Civil Drafter, Surveyor, Cost Estimator, Energy Auditor, First-Line Supervisor of Mechanics & Installers, Electrical Power Line Installer & Repairer, Construction Management

**(Certification):** Journeyman Carpenter, Carpenter Foreman, Field Super Manager, Project Superintendent, Estimator, Project Manager

**RECOMMENDED PROGRAM OF STUDY – CONSTRUCTION MANAGEMENT**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>				

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
		Woodworking	General Construction - Emerging Technologies - carpenter pre-apprenticeship

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
Construction Carpentry Electrician Pipefitter & Steamfitter	Energy Technician HVACR / Maintenance Architectural Technology Geographic Information Systems	Construction Management Civil Engineering Architecture

## Culinary

SHS

### Pathway Summary:

The pathway gives the students an opportunity to learn the basics of professional restaurant food production and hospitality through project-based food practicums. The daily living and career benefits of developing culinary skills are emphasized. Students are exposed to advanced culinary techniques, restaurant equipment, and operating procedures of restaurants and Institutions. Students are offered the opportunity to compete regionally and nationally. Upon completion of the Pro-Start program students are able to earn college scholarships and 3 credits at Norwalk Community College.

### Pathway Courses:

- Introduction to Culinary Arts
- Culinary Arts / Pro-Start I
- Baking and Pastry / Pro-Start II
- International Foods/Pro-Start II

### Additional Recommended Courses:

- Business Concepts
- Photography 1 & 2

### Recommended Clubs & Organizations:

- Family, Career and Community Leaders of America (FCCLA)

### Business and Industry Partners:

- National Restaurant Association



### Future Careers:

**(4yrs of college):** Agricultural Engineer, Baking & Pastry Chef, Dietitian & Nutritionist, Executive Chef, Culinary Teacher, Food scientist, Kitchen Designer, Restaurant Manager, Sous Chef, Hotel General Manager

**(2yrs of college):** Caterer, Cook, Fitness trainer, Food photographer, Food taster, Food writer, Hospitality Management, Tourism, Event planner, bartender, server, Quality Assurance Specialist, Personal chef, Cake designer/decorator, Food Safety Certification

**(Certification):** Culinary Arts and Food Services, Professional Baker, Cottage Food Operator (CFO)

**RECOMMENDED PROGRAM OF STUDY – CULINARY**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
<b>Pathway Courses</b>	Fine Arts: One credit at any time during Grades 9-12			
	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
	Business Concepts		Photography 1	Photography 2

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Introduction to Culinary Arts	Culinary Arts / Pro-Start 1	Baking and Pastry / Pro-Start II International Foods/Pro-Start II	

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
Culinary Arts and Food Services Professional Baker Cottage Food Operator (CFO)	Baking and Pastry Arts Culinary Arts Nutrition and Dietetics	Hospitality and Tourism Nutritional Sciences Dietetics Culinary Arts & Food Service Management Baking and Pastry Arts

## Education

SHS

### Pathway Summary:

The education pathway is intended for those who wish to serve as mentors and educators to students of all ages. In this pathway, students will learn how to provide education and training related to learning and provide support services to a variety of learners. Students will learn how to use subject matter knowledge to plan and prepare effective instruction.

### Pathway Courses:

- Honors Educators Rising 1
- Honors Educators Rising 2
- UConn ECE If You Love It, Teach It

*Note: The Connecticut State Department of Education requires those pursuing certification in secondary education to complete a postsecondary program which includes professional education courses as well as courses in a subject area major. Students interested in becoming a teacher should enroll in as many advanced courses in their desired teaching area while in high school in order to better prepare for post-secondary studies. Students who wish to become elementary school teachers should also enroll in advanced core courses in science, language arts, mathematics, and social studies.*

### Additional Recommended Courses:

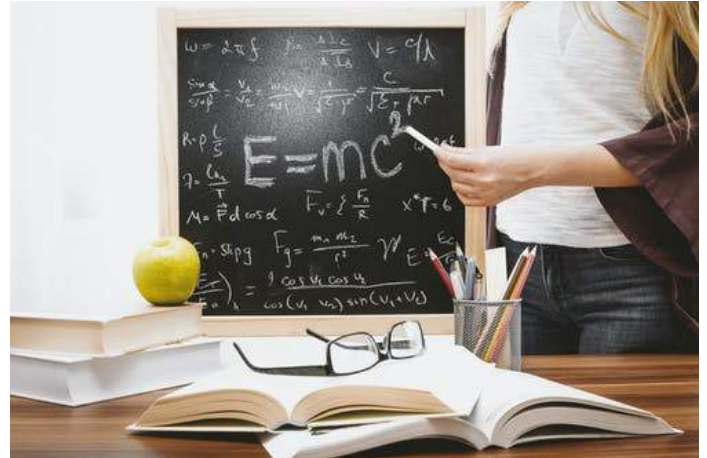
- Child Development
- UConn ECE Human Development & Family Science

### Recommended Clubs & Organizations:

- Family, Career and Community Leaders of America (FCCLA)

### Business and Industry Partners:

- Rogers School Community Center Organization (ROSCCO)



### Future Careers:

**(4yrs of college):** Early Childhood Education, Elementary School Teacher, Secondary School Teacher(biology, chemistry, physics, general science, world language, English, mathematics, history/social studies, career/technical, Medical Field), Special Education Teacher, Art Education Teacher, Physical Education Teacher

**(Certification):** Early Childhood Education, Paraeducator, Teacher Assistant, Home Child Care, Library Technical Assistant

**RECOMMENDED PROGRAM OF STUDY – EDUCATION**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>	Child Development		UConn ECE Human Development & Family Science	

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
	Honors Rising Educators 1	Honors Rising Educators 2	UConn ECE If You Love It, Teach It

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees	Master's Degrees
Early Childhood Education Para-educator Teacher Assistant Home Child Care Library Technical Assistant		Early Childhood Education Elementary Education Secondary Education (biology, chemistry, physics, general science, world language, English, mathematics, history/social studies, career/technical) Special Education Art Education Physical Education	Education administrator



# Finance

WHS

SHS

## Pathway Summary:

Finance focuses on services for financial and investment planning, banking, insurance, and business financial management.

Students interested in the Finance Pathway might also be interested in the Finance Academy at Westhill High School. See page 133 for more information.

## Pathway Courses:

- Business Concepts
- Career Pathways & Success Skills
- Personal Finance
- Introduction to Investments and the Stock Market
- Accounting 1
- Advanced Principles of Accounting (WHS)
- Accounting 2 (SHS)

## Additional Recommended Courses:

- Business Law
- Entrepreneurship
- Information Technology
- Information Technology and Design

## Recommended Clubs & Organizations:

- Future Business Leaders of America (FBLA)
- Distributive Education Clubs of America (DECA) (SHS)
- Westhill Entrepreneurs (WHS)
- Math Team



## Future Careers:

**(4yrs of college):** Financial Manager, Accountants and auditors, Budget Analyst, Credit Analyst, Personal financial advisor, Insurance underwriter, Financial examiner, Credit counselor, Loan Officer, Financial and investment analyst, Securities, commodities, and financial services sales agent

**(Certification):** Accounting Assistant, Accounting Technician, Bookkeeper

**RECOMMENDED PROGRAM OF STUDY – FINANCE**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>	Information Technology	Information Technology and Design	Business Law	Business Law
	Business Explorations		Entrepreneurship	Entrepreneurship

<b>PATHWAY COURSES*</b>			
Students entering the pathway for the first time begin by enrolling in the Level One course.			
Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Business Concepts	Personal Finance	Accounting 1	Accounting 2 (SHS)
Career Pathways & Success Skills	Intro to Stocks and Investments		Advanced Principles of Accounting (WHS)
<b>*for students interested in a finance pathway through the Academy of Finance (WHS) please see page 133</b>			

<b>COLLEGE AND CAREER PATHS</b>		
Industry Certifications	Associate’s Degrees	Bachelor’s Degrees
Accounting Assistant Accounting Technician Business Skills Bookkeeping	Business Finance	Accounting Economics Finance Business Data Analytics Management Supply Chain Management

## Health Science

WHS

### Pathway Summary:

Health Science focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

### Pathway Courses:

- Health Science Technology I
- Health Science Technology II

### Additional Recommended Courses:

- Sports Medicine
- Human Physiology

### Recommended Clubs & Organizations:

- Future Medical Professionals



### Future Careers:

**(4yrs of college):** Medical and health services managers, Emergency management director, Dietitian, Nutritionist, Recreational therapist, Exercise physiologist, Registered nurse, Athletic trainer

**(2yrs of college):** Registered Nurse, Dental Hygienist, Occupational Therapy Assistant, , Respiratory Therapist, Radiography, Medical Laboratory Technician, Pharmacy and Surgical Technician

**(Certification):** Emergency medical technician, Paramedic, Psychiatric technician, Surgical technologist, Ophthalmic medical technician, Licensed practical nurse, certified nursing assistant, Dental assistant, Medical assistant, Phlebotomist, EKG Technician, Homemaker Companion, Medical Billing Professional, Medical Coding Specialist, Medical Coding Professional, Patient Care Technician, Physical Therapy Aide

**RECOMMENDED PROGRAM OF STUDY – HEALTH SCIENCE**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>			Human Physiology	Sports Medicine

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One	Level Two	Level Three	Level Four
		Health Science Technology I	Health Science Technology II

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees	Master's Degrees
Emergency medical technician Paramedic Psychiatric technician Surgical technologist Ophthalmic medical technician Licensed practical nurse Certified nursing assistant Dental assistant Medical assistant Phlebotomist	Registered Nurse Dental Hygienist Occupational Therapy Assistant Physical Therapy Assistant Respiratory Therapy Radiography Medical Laboratory Technician Pharmacy and Surgical Technician	Medical and health services management Emergency management Dietitian Nutrition Recreational therapy Exercise physiology Registered nurse Athletic Trainer	Physician assistant Occupational therapy Speech-language pathology Nurse anesthetist Nurse practitioner Acupuncture

## Information Technology

WHS

SHS

### Pathway Summary:

Information Technology focuses on building linkages in information technology occupations for entry level, technical and professional careers related to the design, development, support, and management of hardware, software, multimedia and systems integration services.

Students interested in the Information Technology pathway may be interested in the Computer Science Pathway at WHS (see pg. 118) or the Early College Studies Program at SHS (see pg. 150).

### Pathway Courses:

- Introduction to Computer Science
- Introduction to Game Design
- Web Design
- AP Computer Science Principles
- AP Computer Science A (WHS)
- NCC Web Development and Design 1 (SHS)
- NCC Database Development 1 (SHS)
- NCC Introduction to Programming (SHS)

### Additional Recommended Courses

- CP/Honors Cybersecurity (WHS)
- Honors Data Science (WHS)
- Introduction to Robotics
- Python A and B (WHS)

### Recommended Clubs & Organizations:

- Girls Who Code (WHS)



### Future Careers:

**(4yrs of college):** Computer systems analyst, Information security analyst, Computer network architect, Network and computer systems administrator, Database administrator and architect, Computer programmer, Software developer, Web Developer

**(2yrs of college):** Computer network support specialist, Field Service Technicians, Technical Support Specialists

**(Certification):** Database administrator, IT specialist, Tech support specialist, Help desk technician, IT assistant, Data technician,

## RECOMMENDED PROGRAM OF STUDY – INFORMATION TECHNOLOGY

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>	Python A and B (WHS)	Introduction to Robotics	Introduction to Robotics	Introduction to Robotics
		CP/Honors Cybersecurity (WHS)	CP/Honors Cybersecurity (WHS)	CP/Honors Cybersecurity (WHS)
		Honors Data Science (WHS)	Honors Data Science (WHS)	Honors Data Science (WHS)

### PATHWAY COURSES

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Introduction to Computer Science	Web Design	AP Computer Science Principles	AP Computer Science A (WHS)
Introduction to Game Design	NCC Web Development and Design (SHS)	NCC Database Development 1 (SHS)	Data Structures and Algorithms (WHS)  NCC Introduction to Programming (SHS)

### COLLEGE AND CAREER PATHS

Industry Certifications	Associate's Degrees	Bachelor's Degrees
IT Support Data Analytics UX Design Android Development	Computer Information Technology Computer Networking	Computer Engineering Computer Science Computer Information Systems

## Marketing

WHS

SHS

### Pathway Summary:

Careers in planning, managing and performing marketing activities to reach organizational objectives, including research and development.

### Pathway Courses:

- Business Concepts
- Marketing in the 21st Century
- Entrepreneurship in the 21st Century
- Marketing Education (SHS)
- Sports and Entertainment Management and Marketing

### Additional Recommended Courses:

- Career Pathways & Success Skills
- Business Law
- Personal Finance
- Information Technology
- Information Technology and Design

### Recommended Clubs & Organizations:

- Future Business Leaders of America (FBLA)
- Distributive Education Clubs of America (DECA) (SHS)
- Westhill Entrepreneurs (WHS)



### Future Careers:

**(4yrs of college):** Marketing Research Analysis and Marketing Specialists, Marketing managers, Public Relations and Fundraising Managers, Public Relations Specialist

**RECOMMENDED PROGRAM OF STUDY – MARKETING**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
	Fine Arts: One credit at any time during Grades 9-12			
<b>Pathway Courses</b>	Pathway Level One (see below)	Pathway Level Two (see below)	Pathway Level Three (see below)	Pathway Level Four (see below)
<b>Additional Recommended Electives</b>	Career Pathways	Information Technology and Design	Business Law	Business Law
	Information Technology		Personal Finance	Personal Finance

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Business Concepts	Marketing in the 21st Century	Marketing in the 21st Century	Marketing Education 2 (SHS)
	Entrepreneurship	Entrepreneurship	Sports Entertainment Management and Marketing

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
		Advertising and Promotion Manager Marketing Manager Sales Manager Public Relations and Fundraising Manager Market research analyst



## Science, Technology, Engineering, & Mathematics (S.T.E.M.)

WHS

SHS

### Pathway Summary:

STEM focuses on planning, managing and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and reach and development services.

### Pathway Courses:

- Introduction to Computer Science
- Introduction to Robotics
- Robotics 2 (WHS)
- Engineering Fundamentals (SHS)
- UConn ECE Applied Mechanics I (SHS)

### Additional Recommended Courses:

- AP Computer Science Principles
- AP Computer Science A (WHS)
- NCC Introduction to Programming (SHS)

### Recommended Clubs & Organizations:

- Engineering Tomorrow
- Math Team



### Future Careers:

**(4yrs of college):** Engineering (Aerospace, Civil, Electrical, Mechanical, Transportation, Nuclear, Environmental, Biomedical, Chemical, Nuclear, Computer, Software, Industrial, Materials), Environmental Scientists and Specialists, Physicist, Chemist, Computer Scientist

**(2yrs of college):** Web Developers, Computer user support specialists, Geological and petroleum technicians, Environmental engineering technicians, Computer network support specialists, Civil engineering technicians, aerospace engineering and operations technicians

**(Certification):** Help Desk Technician, Mechatronics Automation Technician, Smartphone App Development, Web Developer, Field Service Technicians, Technical Support Specialists

**RECOMMENDED PROGRAM OF STUDY – SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
	Fine Arts: One credit at any time during Grades 9-12			
<b>Pathway Courses</b>	Pathway Level One	Pathway Level Two	Pathway Level Three	Pathway Level Four
<b>Additional Recommended Electives</b>			AP Computer Science Principles	NCC Introduction to Programming (SHS)  AP Computer Science A (WHS)

PATHWAY COURSES			
Students entering the pathway for the first time begin by enrolling in the Level One course.			
Level One (9th grade)	Level Two (10th grade)	Level Three (11th grade)	Level Four (12th grade)
Introduction to Computer Science	Introduction to Robotics	Robotics 2 (WHS)  Engineering Fundamentals (SHS)	UConn ECE Applied Mechanics I (SHS)

COLLEGE AND CAREER PATHS		
Industry Certifications	Associate's Degrees	Bachelor's Degrees
Help Desk Technician Mechatronics Automation Technician Smartphone App Development Web Developer IT Support Data Analytics UX Design Android Development	Engineering Science Transfer Ticket Technology Studies Transfer Ticket Computer Science Software Engineering Mobile Programming Web Development and Design	Engineering: <ul style="list-style-type: none"> <li>● Civil</li> <li>● Computer</li> <li>● Mechanical</li> <li>● Electrical</li> <li>● Environmental</li> <li>● Nuclear</li> <li>● Transportation</li> <li>● Aerospace</li> <li>● Materials Science</li> <li>● Manufacturing</li> </ul> Computer Science

## Transportation Management

WHS

### Pathway Summary:

The transportation management pathway focuses on the planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

### Pathway Courses:

- Introduction to Automobiles
- Power and Mechanics

### Recommended Clubs & Organizations:

- Math Team



### Future Careers:

**(4yrs of college):** Engineering (Civil, Computer, Mechanical, Electrical, Transportation, Aerospace, Materials Science, Manufacturing)

**(2yrs of college):** Aerospace engineering and operations technologists and technicians, Civil engineering technologists and technicians, Electrical and electronic engineering technologists and technicians, Electro-mechanical and mechatronics technologists and technicians, Industrial engineering technologists and technicians, Mechanical engineering technologists and technicians

**(Certification):** Aircraft mechanics and service technicians, Automotive mechanics and service technicians, Motorcycle mechanic, Heating, air conditioning, and refrigeration mechanics and installers, Wind turbine service technician

**RECOMMENDED PROGRAM OF STUDY – TRANSPORTATION MANAGEMENT**

The following is a suggested sequence of courses required to successfully complete this pathway.

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Language Arts</b>	English 9 (H or CP)	English 10 (H or CP)	English 11 (AP, H or CP)	English 12 (AP, ECE, H or CP)
<b>Social Studies</b>	Social Studies 9 (H or CP)	Civics / Modern World	U.S. History (AP, ECE, H, or CP)	
	AP Human Geography	AP World History		
<b>Mathematics</b>	Algebra 1 (H or CP)	Geometry (H or CP)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)
	Geometry (H)	Algebra 2 (H or CP)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)
	Algebra 2 (H)	Pre-Calculus (H or CP)	Calculus (AP, CP) Statistics (AP)	
<b>Science</b>	Biology (H or CP)	Chemistry (H or CP)	Physics (AP, H or CP)	
	CP Physical Science	Biology (H or CP)	Chemistry (H or CP)	
<b>Other Required Courses</b>	First-Year Seminar			
	Civics: One half credit at any time during Grades 9-12			
	Health: One credit at any time during Grades 9-12			
	Physical Education: One credit at any time during Grades 9-12			
	World Language: One credit at any time during Grades 9-12			
Fine Arts: One credit at any time during Grades 9-12				
<b>Pathway Courses</b>	Pathway Level One	Pathway Level Two	Pathway Level Three	Pathway Level Four
<b>Additional Recommended Electives</b>				

**PATHWAY COURSES**

Students entering the pathway for the first time begin by enrolling in the Level One course.

Level One	Level Two	Level Three	Level Four
Introduction to Automobiles	Power and Mechanics		

**COLLEGE AND CAREER PATHS**

Industry Certifications	Associate's Degrees	Bachelor's Degrees
Aircraft mechanics and service technicians Automotive mechanics and service technicians Motorcycle mechanic Heating, air conditioning, and refrigeration mechanics and installers Wind turbine service technician	Aerospace engineering and operations technologists and technicians Civil engineering technologists and technicians Electrical and electronic engineering technologists and technicians Electro-mechanical and mechatronics technologists and technicians Industrial engineering technologists and technicians Mechanical engineering technologists and technicians	Engineering: <ul style="list-style-type: none"> <li>● Civil</li> <li>● Computer</li> <li>● Mechanical</li> <li>● Electrical</li> <li>● Transportation</li> <li>● Aerospace</li> <li>● Materials Science</li> <li>● Manufacturing</li> </ul>

## ENGLISH

The four-year English program is designed to provide students with reading, writing, and oral skills to encourage responsible social interaction, to enhance the learning process, and to generate enthusiasm for the power of language. All students are required to take four years of English. In addition, students are encouraged to select English electives that will broaden their experience and enrich their knowledge of language and literature.

The English curriculum emphasizes skills for college readiness and advanced courses. In order to prepare students for their role in a diverse society, literature encompasses texts from a multitude of cultures.

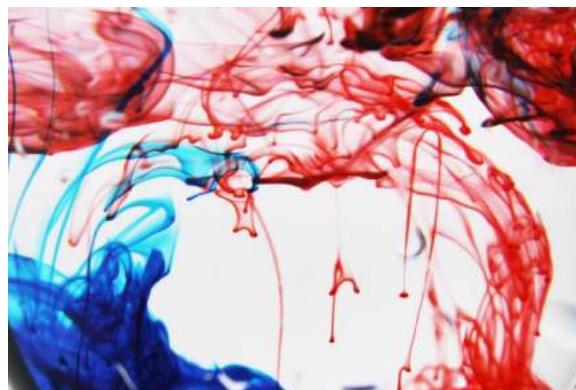
**(For information on Honors, AP, IB, and UConn ECE courses, see pages 9-10)**

### Graduation Requirement 4 Credits - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
English 9 Honors English 9	English 10 Honors English 10	English 11 Honors English 11 AP English Language and Composition UConn ECE English Language and Composition 11 <b>(WHS)</b> IB Language and Literature HL1 <b>(SHS)</b>	English 12 Honors English 12 AP English Literature and Composition <b>(WHS)</b> UConn ECE English Literature and Composition 12 <b>(SHS)</b> IB Language and Literature HL2 <b>(SHS)</b>

### Electives

Creative Writing 1 Creative Writing 2 <b>(WHS)</b> Diverse Perspectives in Literature English Lab 9 <b>(WHS)</b>	Literacy Lab <b>(SHS)</b> Credit Recovery 9 <b>(WHS)</b> Credit Recovery 11 <b>(WHS)</b>	Reading Science Fiction and Fantasy Speech <b>(SHS)</b> Sports Literature	Writing Center <b>(WHS)</b> Writers Workshop <b>(SHS)</b> Literature Through a Lens <b>(WHS)</b>
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Olivia Ciardulli – Westhill High School

**3010 - English 9****3000 - Honors****3140 - Sheltered****337 / 965 - Administrative approval required****Credit(s) 1****SHS****WHS**

This 9th grade course focuses on developing students' reading, writing, speaking, and listening skills at grade level. Students read and analyze a wide variety of texts including fiction, poetry, non-fiction, and non-literary texts. Students build writing skills through instruction in a variety of modes including informative/explanatory, literary analysis, rhetorical analysis, synthesis, narrative, and passage-based analysis. Students in English 9 engage in both process-based and impromptu writing experiences.

**3110 - English 10****3100 - Honors****3240 - Sheltered****339 / 956 - Administrative approval required****Credit(s) 1****SHS****WHS**

This 10th grade course focuses on developing students' reading, writing, speaking, and listening skills at grade level. Students read and analyze a wide variety of texts including fiction, poetry, non-fiction, and non-literary texts. Students build writing skills through instruction in a variety of modes including informative/explanatory, literary analysis, rhetorical analysis, synthesis, narrative, and passage-based analysis. Students in English 10 engage in both process-based and impromptu writing experiences.

**3210 - English 11****3200 - Honors****3231 - Sheltered****957 - Administrative approval required****Credit(s) 1****SHS****WHS**

This 11th grade course focuses on developing students' reading, writing, speaking, and listening skills at grade level. Sophistication of text increases in 11th grade as students read and analyze a wide variety of texts including fiction, poetry, non-fiction, and non-literary texts. Students build writing skills through instruction in a variety of modes including informative/explanatory, literary analysis, rhetorical analysis, synthesis, narrative, and passage-based analysis. Students in English 11 engage in both process-based and impromptu writing experiences, with more focus on synthesis of texts.

**3260 - AP English Language and Composition 11**

**3261 - UConn ECE (WHS)**

**Credit(s) 1**

**SHS  
3260**

**WHS  
3260/3261**

This course primarily focuses on the study of rhetoric and persuasion. Students read and analyze nonfiction selections to identify and explore purposeful choices made by sophisticated writers.

**3281 - English 12**

**3280 - Honors**

**3340 - Sheltered**

**958 - Administrative approval required**

**Credit(s) 1**

**SHS**

**WHS**

This 12th grade course focuses on developing students' reading, writing, speaking, and listening skills at grade level. Sophistication of text increases in 12th grade as students read and analyze a wide variety of texts including fiction, poetry, non-fiction, and non-literary texts. Students build writing skills through instruction in a variety of modes including informative/explanatory, literary analysis, rhetorical analysis, synthesis, narrative, and passage-based analysis. Students in English 12 engage in both process-based and impromptu writing experiences, with more focus on synthesis of texts.

**3300 - AP English Literature and Composition 12 (WHS)**

**3301 - UConn ECE (SHS)**

**Credit(s) 1**

**SHS  
3301**

**WHS  
3300/3301**

This course primarily focuses on the critical analysis of imaginative literature. Students read and analyze English literature as well as literature from other countries and cultures, including poetry.

**3361 - Creative Writing 1**

**Credit(s) 0.5**

**SHS**

**WHS**

This course requires students to demonstrate an ability to write in a creative manner in a variety of literary formats that include the short story, drama, and poetry. Group reading of works in progress is expected and revision based on peer critique is required. Students analyze the writing of established writers to demonstrate their understanding of the creative process and learn to discover their own creative voices.

**3590 - Creative Writing 2 (WHS)**

**Credit(s) 0.5**

**WHS**

This course builds upon the skills fostered in Creative Writing 1 and requires students to produce more involved, sophisticated, and polished written works. Students work closely with their peers and the instructor to create, revise, and edit works of fiction and

	nonfiction, including studies in extended short story and novella. Students publish their works outside of the classroom community.
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### 383 - *Diverse Perspectives in Literature*

<b>Credit(s) 0.5</b>	This course explores the concept of voice in literature; the emphasis is on those voices often left out of traditional literary study. Voice may refer to the author of a work or its subject that provides a singular perspective on life experiences. Minority voices may include but are not limited to African-American, Native-American, Asian-American, Latin-American, female, or other diverse communities.
<b>Grades: 10, 11, 12</b>	
<b>SHS</b> <b>WHS</b>	

### 3791 - *English Lab (WHS)*

<b>Credit(s) 0.5</b>	This course is for freshman who need additional time and support to improve their basic literacy skills. Course enrollment is determined by grades, standardized testing scores, and teacher recommendation.
<b>Grades: 9</b>	
<b>WHS</b>	

### 3792 - *Literacy Lab (SHS)*

<b>Credit(s) 0.5</b>	This course provides additional time and support for those students who need to improve their basic literacy skills. Course enrollment is determined by grades and teacher recommendation.
<b>Grades: 9</b>	
<b>SHS</b>	

### 3700 - *Credit Recovery 9 (WHS)*

### 3701 - *Credit Recovery 11 (WHS)*

<b>Credit(s) 0.5</b>	This is a workshop course designed for students who have not successfully completed the requirement of 9 <sup>th</sup> or 11 <sup>th</sup> grade English language arts. Credit Recovery is a skill based course; students will complete a variety of activities designed to support close reading and analysis of a variety of complex literary and visual texts. Assignments will be differentiated to meet the needs of individual students and support the requirements of the particular grade level. In order to receive a passing grade for this course, students will need to submit a portfolio of work and earn a passing grade on a reading and writing assessment.
<b>Grades: 10 (3700), 12 (3701)</b>	
<b>WHS</b>	



**8650 - Reading**

*Administrative approval required*

**Credit(s) 1**

<b>SHS</b>	<b>WHS</b>
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This course provides direct assistance and remediation in decoding, overall reading skills, study skills, vocabulary development, and written language. This course emphasizes the strengthening of oral reading fluency, structural analysis, word attack skills, specific comprehension development, writing skills, vocabulary usage, and reference/study skills. Students apply overall reading skills to the classroom setting, practical life situations, and post-graduate situations/careers.

**3820 - Science Fiction and Fantasy**

**Credit(s) 0.5**

<b>SHS</b>	<b>WHS</b>
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This semester course focuses on imaginative fiction (both science fiction and fantasy) in which traditional themes such as time travel, paradox, wizardry, and after-death experiences are discussed. Students read short stories and student-selected novels, which are augmented by movies of the genre and critical and creative writing assignments. As a result, students broaden their understanding and appreciation of science fiction and fantasy.

**3350 - Speech (SHS)**

**Credit(s) 0.5**

**Grades: 10, 11, 12**

<b>SHS</b>
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This course develops students' abilities to speak and to present oral material. Principles of effective speaking (purpose, organization, etc.) and mechanics of speech (voice, control, placement, enunciation, and pronunciation) are introduced and practiced. Public audiences are used whenever possible.

**3740 - Sports Literature**

**Credit(s) 0.5**

**Grades: 10, 11, 12**

<b>SHS</b>	<b>WHS</b>
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This course examines a variety of universal themes as portrayed in literature and media. Guest speakers, stories, article readings, and films of the greatest sport figures, past and present, are featured. Through frequent writing, students demonstrate and learn to improve basic skills in composition and oral presentation.

**3812 - Writing Center (WHS)****3810 - Writing Center (WHS)****Credit(s) 0.5 - 3812  
1 - 3810****Grades: 12****WHS**

The Writing Center is a course of study for those interested in improving their own writing skills while also serving the school as peer coaches. Students concentrate on the writing process to develop personal style in their own writing and work with students from other classes to improve their writing skills across disciplines. This course is appropriate for those who are serious about the importance of writing and may wish to explore language, genre, and professional writing opportunities.

**3430 - Writers Workshop (SHS)****Credit(s) 0.5****SHS**

This course focuses on developing structured writing in the descriptive, narrative, and expository modes. It emphasizes the process of writing from planning through conferring, writing, revising, editing, and self-evaluating. Mini-lessons are presented as needed addressing grammar and usage problems. Students foster writing skills and gain an appreciation of how writers write.

**3321 - Literature Through a Lens (WHS)****Credit(s) 0.5****WHS**

Using seminal literary works as the thematic anchor each semester, this course explores the importance of film as a form of language arts visualization. Students will view various film forms and write about why it matters contextually. The course is designed to foster and support literary skills of students who are visual and auditory learners. There is an emphasis on film as social commentary and protest art. Students will also hone their research skills as each film's development will be discussed using a "space and time" concept focus.



Briceida Contreras Perez – WestHill

## CO-CURRICULAR ELECTIVES

### Course Offerings

Jr SAT Review 11 (SHS)  
Sr SAT Review 12 (SHS)  
Communications  
Journalism

Yearbook: Design and Publications (SHS)  
Yearbook: Design and Publications (WHS)  
Independent Study – Capstone Experience (SHS)

### 6450 - Jr SAT Review 11 (SHS) 3600 - Sr SAT Review 12 (SHS)

**Credit(s) 0.5**

**Grade 11, 12**

**SHS**

This course is designed to strengthen reading, writing, and math skills necessary for success on the SATs.

### 3250 - Communications

**Credit(s) 1**

**Grade 11, 12**

**SHS**

**WHS**

**Prerequisite:**

Communications exposes students to a variety of media techniques and theory. The course highlights all current media forms, including print and TV journalism. Students write in the various modes of interviewing, researching, verifying, and reporting, becoming effective users of language. Students become critical readers able to recognize bias and to recognize and apply the techniques of editorializing. Students work closely with journalism tutors to become proficient in newswriting, page makeup, photojournalism, and advertising sales.

English 10

### 3270 - Journalism

**Credit(s) 1**

**Grade 11, 12**

**SHS**

**WHS**

**Prerequisite:**

Students participate in the publication of the school paper. The course includes a broad range of activities: basic newswriting, layout techniques, basic copy-editing, and working with Communications students in a leadership capacity. Prospective students must demonstrate a mastery of newspaper fundamentals and a strong commitment to improving the role of the newspaper in the high school setting.

Communications and consultation with department head

**0300 - Yearbook Design and Publication (SHS)**

<b>Credit(s) 1</b>	Design and Publication offers an inter-disciplinary approach to the production of the school's yearbook. Students learn layout design, photojournalism, business management, marketing, and advertisement while using graphics software and the Internet. The yearbook is produced on-line utilizing interactive programs provided by the publishing company. After-school commitment is encouraged.
<b>SHS</b>	

**3650 - Yearbook Design and Publication (WHS)**

<b>Credit(s) 1</b>	The Yearbook course offers an interdisciplinary approach to the production of the school yearbook. Students study contemporary print design, photojournalism, business management, marketing, and technology (Photoshop, and Yearbook Avenue), and apply this learning to the creation of the yearbook. During the first quarter, students apply for and take on specific roles, like that of the page editor, photographer, business manager, and supplement writer, for the remainder of the year. Some positions require additional hours after school.
<b>WHS</b>	

**3420 - Independent Study - Capstone Experience (SHS)**

<b>Credit(s) 1 (over a semester or a year)</b>	Students are expected to select a topic, career path, or academic pursuit that relates to an area of personal passion. Individual students develop a product or service to address a problem or conduct scientific research to work towards a solution. Students will use the skills learned through their previous years of high school to guide their success. Projects might include prototypes, films, research findings, and visual or performing arts presentations. Projects will be "pitched" or presented as on Shark Tank.
<b>Grade 11, 12</b>	
<b>SHS</b>	

## SOCIAL STUDIES



Charlotte Saunders  
Stamford High School

The Social Studies program is designed to prepare students to take an active role in the affairs of their local, state, and national community. It explores the traditions and ideals of our national heritage and their relationship to the history of the world. The focus is on the process of reaching rational decisions based on facts gathered through research, the rules and responsibilities of a just society, the importance of economic and geographic relationships, and the richness of our history and its diversity. With a thorough knowledge of the historic foundations, students develop the skills and competencies to become responsible citizens in our democratic society.

**(For information on Honors, AP, IB, and UConn ECE courses, see pages 9-10)**

### Graduation Requirement 3 Credits - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
Social Studies 9	Modern World History (0.5 credit) / Civics * (0.5 credit)	United States History	Economics African American/ Latino Puerto Rican Studies
Honors Social Studies 9	Honors Modern World History (0.5 credit) / Honors Civics * (0.5 credit)	Honors United States History	Law & Justice AP United States Government and Politics
AP Human Geography	AP World History and *Honors Civics (0.5 credits)	AP United States History or UConn ECE United States History	AP European History or UConn ECE European History ( <b>WHS</b> ) AP Psychology
	*Civics is a required course		

### Course Offerings

Social Studies 9	AP United States Government and Politics	Introduction to Psychology (0.5 credit)	Genocide Studies ( <b>WHS</b> ) (0.5 credit) Educational Psychology ( <b>WHS</b> ) 0.5 credit)
Honors Social Studies 9	Honors Seminar in Philosophy	Law and Justice (0.5 credit)	Broadcasting ( <b>WHS</b> )
Modern World History (0.5 credit)	AP Psychology	American History through Pop Culture (0.5 credit)	African American /Latino Puerto Rican Studies
Honors Modern World History (0.5 credit)	Economics	World Geography and Cultures (0.5 credit)	IB Geography SL 1&2 ( <b>SHS</b> )
AP World History	UConn ECE Essentials of Economics	AP Human Geography	IB Geography HL 1&2 ( <b>SHS</b> )
*Civics (0.5 credit)	AP Microeconomics	Women in American Society: Part 1 ( <b>SHS</b> ) (0.5 credit)	IB History HL 1&2 ( <b>SHS</b> )
*Honors Civics (0.5 credit)	UConn ECE Microeconomics	Women in American Society: Part 2 ( <b>SHS</b> ) (0.5 credit)	IB Environmental Systems and Societies SL 1&2 ( <b>SHS</b> )
United States History	AP Macroeconomics	Stress Management and Intervention Strategies (SHS)	IB Psychology SL 1&2 ( <b>SHS</b> )
Honors United States History	UConn ECE Macroeconomics	Pre-AP World History & Geography ( <b>WHS</b> )	IB Psychology HL 1&2 ( <b>SHS</b> )
AP United States History	Applied Economics (0.5 credit)		IB Economics SL 1&2 ( <b>SHS</b> )
UConn ECE United States	Contemporary Issues (0.5 credit)		IB Economics HL 1&2 ( <b>SHS</b> )
AP European History			
UConn ECE European History ( <b>WHS</b> )			

**5010 - Social Studies 9****5000 - Honors****5080 - Sheltered****963 - Administrative approval required****Credit(s) 1**

This course focuses on both Western and Non-Western Civilizations from Ancient Civilizations to the Modern Era. By examining various social and economic themes and concepts, the course serves as the foundation for Modern World History, enabling students to evaluate and analyze events from multiple perspectives.

**SHS****WHS****5110 - Modern World History****5100 - Honors****5080 - Sheltered****Credit(s) 0.5**

This course focuses on world history from World War I to the present. As a sequel to Social Studies 9, Modern World History examines the interdependence and interconnectedness of the world, enabling students to evaluate and analyze events from multiple perspectives.

**SHS****WHS****5050 - AP World History****Credit(s) 1**

The Advanced Placement World History course requires students to engage with the dynamics of continuity and change from approximately 8000 BCE to the present.

**SHS****WHS****5710 - Civics\*****5700 - Civics Honors\*****5760 - Sheltered\*****977 - Administrative approval required****Credit(s) 0.5**

The Civics course focuses on values and principles of American democracy and the structure of state, local, and federal government. The course examines the relationship between the United States and other nations in regards to foreign affairs and includes a study of media, political parties, minority groups, and special interest groups in the service of preparing students to assess their roles and responsibilities in the American political system.

**SHS****WHS**

*5210 - United States History*  
*5240 - Honors*  
*5260 - Sheltered*  
*5200 - AP United States History*  
*5230 - UConn ECE United States History*  
*976 - Administrative approval required*

<b>Credit(s) 1</b>		United States History focuses on the period between the Colonial Era and present times, considering our world relationships, the background of our institutions, and events on the domestic front. The course also examines the contributions of various ethnic and political minorities to the development of American civilization.
<b>SHS</b>	<b>WHS</b>	

*5410 - AP European History*  
*5411 - UConn ECE European History (WHS)*

<b>Credit(s) 1</b>		This course, focused on providing students with a detailed knowledge of the narrative of European history from 1500 to the present, is designed to meet the requirements of a first-year college course in European history.
<b>SHS</b>	<b>WHS</b>	

*5950 - AP United States Government and Politics*

<b>Credit(s) 1</b>		The course focuses on six thematic units: Constitutional Underpinnings; Institutions of National Government; Civil Rights and Civil Liberties; Public Policy; Political Parties and Participation; Interest Groups and the Media.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<b>United States History</b>

*5360 - Honors Seminar in Philosophy*

<b>Credit(s) 1</b>		This course traces the history of ideas. This is done by student research in original sources, student reports, lectures, and discussions. Critical thinking skills are emphasized in examining how Western people have molded political, social, moral, and economic institutions.
<b>Grade 12</b>		
<b>SHS</b>	<b>WHS</b>	

*5320 - Economics*

<b>Credit(s) 1</b>		This course focuses on the theoretical components of micro and macroeconomics. It examines how income is distributed and why goods are produced, exchanged, and consumed, emphasizing students' abilities to understand the interplay within domestic markets and across markets internationally.
<b>SHS</b>	<b>WHS</b>	

**5981 - UConn ECE Essentials of Economics**

<b>Credit(s) 1</b>		This course is a general introduction to micro-and macroeconomics. Economic concepts taught include opportunity costs; demand and supply; incentives; comparative advantage; inflation and employment policies; balance of international payments; and economic growth. This is a college-level accredited course.
<b>SHS</b>	<b>WHS</b>	

**5960 - AP Microeconomics****5961 - UConn ECE Microeconomics**

<b>Credit(s) 1</b>		This course focuses on the behavior of individuals and businesses as they exchange goods and services in the marketplace through the study of economic concepts such as understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. This is a college-level accredited course.
<b>SHS</b>	<b>WHS</b>	

**5983 - AP Macroeconomics****5980 - UConn ECE Macroeconomics**

<b>Credit(s) 1</b>		This course provides students with a thorough understanding of the principles of economics that apply to an economic system as a whole. It places particular emphasis on the study of national income and price determination and developing students' familiarity with economic performance measures, economic growth, and international economics.
<b>SHS</b>	<b>WHS</b>	

**5420 - Applied Economics**

<b>Credit(s) 0.5</b>		Students gain practical experience applying economic concepts. Emphasis is placed on the role of the entrepreneur, the effects of advertising and marketing, and both domestic and international business. This course makes considerable use of technology, simulations, and portfolio-type assessments that encourage creativity.
<b>SHS</b>	<b>WHS</b>	

**5310 - Contemporary Issues**

<b>Credit(s) 0.5</b>		This course deals with issues and events of the present day that have significance for the individual in modern society. The immediate implication of events is explored. Basic communication and critical thinking skills necessary for citizenship are stressed.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		United States History



**5610 - Introduction to Psychology**

<b>Credit(s) 0.5</b>		This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		1.5 credits in Social Studies

**5550 - Law and Justice**

<b>Credit(s) 0.5</b>		This course examines the American system of justice. Students study, analyze, and apply the laws of society. They examine police enforcement and the court system as it applies to criminal justice and juvenile justice. Students discuss the rights of individuals and their accountability to society. Additional topics include the Supreme Court, precedent cases, and why the Constitution is a corner-stone document.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Civics

**5681 - American History through Pop Culture**

<b>Credit(s) 0.5</b>		This course explores post-World War II America from the 1950's to today through the lens of popular culture with an emphasis on major shifts in music, movies, sports, television, and technology. Extensive hands-on research and technology is used in this class. Students research independent or collaborative projects that relate to the development of popular culture and subcultures of the eras.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		United States History

**5810 - World Geography and Cultures**

<b>Credit(s) 0.5</b>		This course is dedicated to the study of the world around us. The class starts with an introduction to geography in which students learn the five themes of geography, the features that define the earth, the climate patterns of the earth, how to study peoples and cultures of the earth, and how to use various geographic tools. Students use the skills they have learned to apply to the areas of the world we are studying. These areas are addressed in terms of physical features and culture, which includes studies of population patterns, history and government, and cultures/lifestyles. Finally, each area's recent history/current events and status within the international community are studied.
<b>SHS</b>	<b>WHS</b>	

**5690 - AP Human Geography**

<b>Credit(s) 1</b>		This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface. Students are
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<b>SHS</b>	<b>WHS</b>	expected to take the Advanced Placement examination at the conclusion of the course. This course is an alternative to the Social Studies 9 requirement.
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### *5394 - Women in American Society: An Examination of Women's History in Colonial America and Early Republic - Part 1 (SHS)*

<b>Credit(s) 0.5</b>	This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface. Students are expected to take the Advanced Placement examination at the conclusion of the course. This course is an alternative to the Social Studies 9 requirement.
<b>SHS</b>	

### *5395 - Women in American Society: An Examination of Women's Role in US History from 1865 - Present Day - Part 2 (SHS)*

<b>Credit(s) 0.5</b>	This course will be an examination of women's lives from 1865 to present, placing them at the center of our interpretation. We will consider the social political, cultural, and economic histories of women in the United States from 1865 to the present, paying attention to how women have played active roles in shaping American history and society from 1865 to present day. Women's history reveals larger themes in US history, and we will examine the ties between the two. Together, we will work to find answers to the following questions: How did women's lives from 1865 to present day change throughout history? How did women shape their lives then and now? How is history different when viewed from a woman's perspective? What is the value of examining women's roles in American Society from 1865-present?
<b>SHS</b>	

### *5520 - Stress Management and Intervention Strategies (SHS)*

<b>Credit(s) 0.5</b>	If you experience stress in your life, this course is for you. Chronic stress not only impairs our brain functions it also does lasting damage to our brains and bodies. Luckily, there is a lot we can do, as we will see in this course that focuses on positive psychology. First, we will analyze stress (where it comes from, what it does), including different types of stress, and its impact on the brain and body. Next, we will investigate a myriad of psychological techniques for the mind, body and spirit to address and combat stress. Students will learn how to identify stressors, techniques that address those stressors, and ideally learn how to become more mindful, relaxed and productive instead of stressed, frazzled and burned out.
<b>SHS</b>	

### *5800 - Pre-AP World History and Geography (WHS)*

<b>Credit(s) 1</b>	Pre-AP World History is a social studies course that focuses on utilizing the methods of historians and geographers to first closely examine sources to generate insights and build claims. In this course, students will uncover and imitate the roles of historians using tools to learn about the world, its inhabitants, and the decisions that impacted world history.
<b>WHS</b>	

**5460 - Genocide Studies (WHS)**

<b>Credit(s) 0.5</b>	Pre-AP World History is a social studies course that focuses on utilizing the methods of historians and geographers to first closely examine sources to generate insights and build claims. In this course, students will uncover and imitate the roles of historians using tools to learn about the world, its inhabitants, and the decisions that impacted world history.
<b>WHS</b>	
<b>Prerequisite</b>	Completion of Civics and United States History

**5612 - Educational Psychology (WHS)**

<b>Credit(s) 0.5</b>	Educational Psychology is a Social Studies elective that focuses on the psychology of education. Enrolled students should be interested in pursuing a career in education. Students will reflect, research, and apply pedagogical practices. Students must have successfully completed Civics, United States History, and Introduction to Psychology or AP Psychology.
<b>WHS</b>	
<b>Prerequisite</b>	Successful completion of Civics, United States History, and either Intro to Psychology or AP Psychology

**5470 - Broadcasting (WHS)**

<b>Credit(s) 1</b>	Broadcasting is a Social Studies elective that focuses on research, content development, organization and production. Students must have successfully completed Civics and United States History in order to be eligible and apply for enrollment.
<b>WHS</b>	
<b>Prerequisite</b>	Successful completion of Civics and United States History

**5391 - African American/Latino Puerto Rican Studies**

<b>Credit(s) 1</b>	This course is offered as a <b>full-credit</b> elective course that provides students with a better understanding of the African-American, Black, Puerto Rican, and Latino contributions to United States history, society, economy, and culture. The first half will be African American Studies with emphasis on African Origins and Contributions of Ancient African Empires, Slavery and Freedom stories of Resistance and Agency, Black Literacy, Organization, and Liberation, History of Equity, Black Movement for Equity and Protest, Politics and Power.	
<b>Grades 10-12</b>		
<b>SHS</b>		<b>WHS</b>
		The second half will be Latin American/Puerto Rican Studies with emphasis on Who are we? Early beginnings, Blood and Beauty, Sweat, Resistance, and Where are we now? Contributions in Connecticut. This course is aligned with Connecticut Social Studies Frameworks.

## Visual Arts

In the visual arts area, a wide range of coursework is designed to develop an understanding of art, art production, cultural diversity, art history, and creative problem-solving. The Elements and Principles of Art and Design are emphasized in the curriculum for all art courses. Students interested in careers including architecture, fine and commercial art, photography, and crafts will find it useful to take as many art courses as possible. Individuals critique their own work and work of peers to establish confidence and understand assessment. Art courses may be used for personal satisfaction as well as for acceptance to art schools or colleges.

**(For information on Honors, AP, IB, NCC, and UConn ECE courses, see pages 9-10)**



Criscia Aquino - Westhill High School

### Course Offerings

Drawing and Painting 1,2 Color and Design (0.5 credit)	Jewelry and Metalsmithing 1	Printmaking (0.5 credits)	Advanced 3D Media <b>(WHS)</b>
Studio Art 2D	Jewelry and Metalsmithing 2 <b>(SHS)</b>	Computer Graphic Art and Design	Smart Phone & Digital Photography <b>(SHS)</b> (0.5 credit)
AP Art Design	Photography 1,2	Working with Adobe Photoshop <b>(SHS)</b> (0.5 credit)	NCC Two Dimensional Design <b>(SHS)</b> (0.5 credit)
2D/Drawing	AP Art and Design: Photography <b>(WHS)</b>	Art Partners <b>(WHS)</b>	NCC Graphic Design 1 Skill and Principles <b>(SHS)</b> (0.5 credit)
Art History 1,2 <b>(NEW)</b>	Sculpture 1 (0.5 credit)	UConn ECE Digital Foundations <b>(WHS)</b>	Art and Yoga <b>(WHS)</b> (0.5 credit)
Ceramics 1,2	Sculpture 2 <b>(SHS)</b> (0.5 credit)	UConn ECE Drawing 1	<b>(NEW)</b>
Potter's Wheel 1,2 (0.5 credit)			IB Visual Arts SL 1&2 <b>(SHS)</b>
Advanced Clay <b>(WHS)</b>			IB Visual Arts HL 1&2 <b>(SHS)</b>
Crafts			

**0150 - Drawing and Painting 1**

<b>Credit(s) 1</b>		This course explores basic aspects of drawing and painting including fundamentals of composition, color, and two-dimensional design using a variety of media, methods, and techniques. Class assignments incorporate art history with projects designed to foster conceptual as well as technical understanding.
<b>SHS</b>	<b>WHS</b>	

**0250 - Drawing and Painting 2**

<b>Credit(s) 1</b>		This course is designed to help students develop an ability to interpret and represent still life, nature, and portraiture through an in-depth study of the elements and principles of art and design. Various media including pencil, chalk and watercolor are used to produce a variety of projects. Critiques, student work, and portfolio development are emphasized.
<b>SHS</b>	<b>WHS</b>	

**0850 - Color and Design**

<b>Credit(s) 0.5</b>		Students study two-dimensional design and composition with a focus on visual elements and principles of art and design. A study of color and color relationships is applied with projects such as optical design, collage, and printmaking. Craftsmanship, creativity, and critique of student work are stressed. Students pursuing careers in fashion may also find this course helpful in the development of a portfolio.
<b>SHS</b>	<b>WHS</b>	

**0400 - Studio Art 2D**

<b>Credit(s) 1</b>		This course is designed for the advanced visual arts student wishing to engage in higher levels of study in 2-D; drawing, painting, printmaking, photography, and computer graphics. This course directly prepares students for participation in the AP Art and Design 2D/Drawing course. The framework and instructional materials in this course include a deliberate focus on the process of producing creative works, including generating and refining ideas, practicing skills and techniques, revision, reflection, and collaboration. The goals and levels of achievement are demonstrated through the student's portfolio at the midterm and conclusion of each marking period. Students will also be asked to write about their work to prepare them for the required written reflections in AP Art and Design. It is recognized that students need to work outside the classroom and beyond the scheduled calls periods.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Successful completion of 2 credits of Visual Art, concentrating in 2D (any sequence or combination of: Drawing and Painting, Color and Design, Computer Graphics or Printmaking) with final grades of B or higher or Department Leader approval

**0460 - AP Art and Design 2D/Drawing****Credit(s) 1****SHS****WHS**

This course serves as a capstone for students in their third or fourth year of successful art-making in high school. It is designed for students working in a wide variety of 2D media such as graphite, ink, paint, photographic and digital media. Students create a self-directed portfolio of work to demonstrate inquiry through art and design and the development of materials, processes, and ideas over the course of a year. As in introductory college courses, students will need to work inside and outside the classroom and beyond scheduled periods. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluations based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practices, experimentation, and revision, guided by questions. Students may choose to submit any or all of the AP Portfolio Exams.

**Prerequisite:**

Minimum two full years or equivalent successful completion (B or better final grade) of 2D Visual Arts courses (Drawing and Painting, Printmaking, Color, and Design, Photography or Computer Graphics) or Department Leader approval

**0431 - Art History 1 NEW!****0433 - Art History 2 NEW!****Credit(s) 1****SHS****WHS**

These courses are strongly recommended to all students pursuing an interest in history and/or visual arts and any related studio areas. Students may choose to take one or both. Students who have taken both courses may opt to take the AP Art History Exam. Review sessions will be provided. Through readings, slide lectures, interactive assessments, and studio practice the student will be able to: Identify stylistic characteristics of art from many parts of the world from

**Art History 1:** Global Prehistory through the Middle Ages,

**Art History 2:** Renaissance through the Contemporary era Critically compare and contrast various works of art from around the world Identify and analyze global works of art that demonstrate the variety and interdependence of the art of different cultures.

Describe the geography, history, religion, politics, and artifacts of various cultures around the world.

Identify the various visual elements of works of art from around the world and explain how one uses these to analyze and evaluate works of art. Describe the various techniques and materials used in creating sculpture, paintings, and architecture from around the world.

**0240 - Ceramics 1**

**Credit(s) 1**

This course explores basic clay building techniques including pinch, coil, slab, sculpture, and wheel throwing. Elements and principles of art and design are stressed in the construction of both functional and non-functional pieces. Surface decoration, under-glazing, and glazing techniques are included in the production of ceramic art.

SHS

WHS

**0310 - Ceramics 2**

**Credit(s) 1**

This course is designed to help students refine and master basic clay building skills and explore new possibilities with advanced functional, non-functional, wheel thrown, and sculptural clay forms. Emphasis is placed upon the mastery of techniques through individual direction in this art form, enabling the student to create a more advanced art piece.

SHS

WHS

**0730 - Potter's Wheel 1**

**Credit(s) 0.5**

This course explores the basic techniques including throwing, centering, opening, raising walls, trimming, and finishing. Students create cups, bowls, vases, and plates using stamps, decorative techniques, and assorted glazing methods. Students may elect to repeat this course for a second semester to refine skills previously learned in the creation of larger, more challenging forms, both functional and sculptural.

SHS

WHS

**0731 - Potter's Wheel 2**

**Credit(s) 0.5**

This course is for experienced students who have mastered basic wheel techniques and wish to create larger and more challenging forms, both functional and sculptural

SHS

WHS



Rebecca Gordon - Stamford High School

**0311 - Advanced Clay (WHS)**

<b>Credit(s) 1</b>	This course is designed to allow advanced potters and/or ceramic students to become more competent in throwing, and/or hand-building techniques, concepts, and work on developing a personal expression in clay. Students will extend their knowledge of various ceramic techniques, experiment independently with new techniques, and develop a body of artwork. Because this class is designed to further the student's personal artistic expression and agenda, each student has the option to direct their own projects with guidance by the instructor. The assignments given will usually be open enough to allow the student's agenda to be executed. Writing and critiques are mandatory in this class.
<b>WHS</b>	
<b>Prerequisite:</b>	Successful completion of Ceramics 1, Pottery Wheel 1 or permission from Instructor and Department Head. Successful completion is defined as a final numerical score of 80 or above.

**0260 - Crafts (SHS)****0262 Crafts (WHS)**

<b>Credit(s) 1 - 0260 0.5 - 0262</b>	This course explores the basic design concepts and functional considerations of fine craft production. Students refer to historical and contemporary examples of craft art from various cultures. Craftsmanship, design, creative expression, and cultural purpose are stressed in the production of a variety of craft projects.
<b>SHS</b> <b>WHS</b>	

**0230 - Jewelry and Metalsmithing 1**

<b>Credit(s) 1</b>	Students study basic design concepts and functions of fine metalworking using a variety of metals, alternative materials, tools, and techniques. Craftsmanship, design, creative expression, and cultural purpose are stressed in the production of a variety of jewelry and metalsmithing projects.
<b>SHS</b> <b>WHS</b>	

**0370 - Jewelry and Metalsmithing 2**

<b>Credit(s) 1</b>	Students refine and master fine metalworking skills using a variety of techniques such as casting, enameling, cloisonné, and stone setting. Historical and cultural influences are researched as students produce a variety of jewelry and sculptural pieces.
<b>SHS</b>	



**0190 - Photography 1**

<b>Credit(s) 1</b>		Students explore black and white photography using a manual 35mm SLR camera and a digital camera. They learn chemistry, dark-room procedures, methods, and techniques necessary for proper film and paper development. Through a variety of assignments students incorporate the elements and principles of art and design, aesthetics, history, and philosophy of photography. <b>Ownership of a 35mm SLR camera and a digital camera is recommended.</b> A limited number of loaner cameras are available from the department.
<b>SHS</b>	<b>WHS</b>	

**0190 - Photography 2**

<b>Credit(s) 1</b>		Students refine and master both traditional and digital photography techniques. While mastering manual camera functions, electronic imaging, computer manipulation, digital cameras, and scanners, students produce a series of advanced photographic images. At SHS only, students may also create “C” prints from color negatives.
<b>SHS</b>	<b>WHS</b>	

**0192 - AP Art and Design : Photography (WHS)**

<b>Credit(s) 1</b>		This course is designed for the highly motivated student committed to serious study in Photography. The course is considered to be an Advanced Placement course in terms of content, rigor, and creative efforts. The individual works of art created by students in this course are expected to be advanced examples of photographic processes and techniques showing a deep understanding of the concept with conscious use of supporting elements and principles of design, technical ability, craftsmanship, originality, and creativity. Through the creation of a conceptual portfolio of photographic work, students will strengthen their abilities to use unique and individualized high-order thinking skills such as creating, evaluating, analyzing, applying, understanding, and remembering in regards to the visual arts. Class sessions include individual and group critiques. It is recognized that students need to work outside the classroom and beyond scheduled class periods to prepare for the Advanced Placement Exam.
<b>WHS</b>		
<b>Prerequisite:</b>		Successful completion of both Photography 1 and 2 with final grades of B or higher or Department Leader approval

**0340 - Sculpture 1**

<b>Credit(s) 0.5</b>		This course explores three-dimensional form and anatomy in sculpture while working with various media that may include clay, plasticine, plaster, soft stone, paper-mâché, found objects, and wood. Casting and armature support techniques are explored in the production of various three-dimensional forms.
<b>SHS</b>	<b>WHS</b>	

**0388 - Sculpture 2 (SHS)****Credit(s) 0.5****SHS**

Students refine and master advanced sculpting techniques in the study of three-dimensional methods and materials. While using a variety of media, techniques, and tools, students produce a number of sculptural projects while developing individual preferences and style.

**0516 - Printmaking****Credit(s) 0.5****SHS****WHS**

This course introduces students to a variety of printmaking techniques using processes such as relief printing (monoprint, collagraph block); intaglio (etching and engraving); and perigraphy (silkscreen films, stencils, block-out). These courses emphasize design elements and principles and introduce art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures.

**0440 - Computer Graphic Art and Design****Credit(s) 1****SHS****WHS**

Students develop and enhance graphic design skills while creating original works of art using a variety of techniques, tools, media, and processes. Scanners, printers, external devices, digital cameras, and other storage devices are used in the creation of traditional and electronic portfolio development. Class sessions include group critiques.

**0740 - Working with Adobe Photoshop (SHS)****Credit(s) 0.5****SHS**

Students use basic and intermediate Photoshop techniques to scan and enhance images. Photo composites are created utilizing special effects filters, layers, import and export features, color, contrast, and distortions to create digital images. Images are prepared for print, critique, portfolio, and exhibit through a variety of different formats.

**0155 - Art Partners (WHS)****Credit(s) 0.5****WHS**

This course is for students who may not otherwise have the opportunity to work together and engage in collaborative art-making experiences. Borrowing from the Best Buddies model, through this course, typical high school students will learn about the benefits of a work environment that is inclusive of both typical adolescents and adolescents with ID, ASD, or other disabilities that may prevent them from fully engaging in a regularly scheduled visual arts course. Students with cognitive, developmental, and/or physical challenges will be paired with typical students, as role models, in the creation of engaging, hands-on art projects that are achievable for all participants. Team building, student

agency, communication, and interpersonal skills will be emphasized. As with all visual art classes, the elements of art and principles of design will be incorporated into each project.

### 1151 - UConn ECE Digital Foundations (WHS)

**Credit(s) 1**

**WHS**

This course is an intensive experience in designing for the digital arts. Students are expected to engage in a wide range of real work projects in order to better understand the media and methodologies that form their foundations. Students explore new ways to share and communicate information by creating digital work. Applying effective uses of communication media and the ways in which information can be visualized and perceived by an audience will stimulate students to critically explore, develop, and comment upon digital work in a rapidly growing industry.

### 0450 - UConn ECE Drawing 1

**Credit(s) 1**

**SHS**

**WHS**

Students will gain an in-depth understanding of perspective, composition, proportion, value, and space through direct observation, concentration, and practice. This course provides students with an intensive drawing experience using a variety of media, techniques, and methods. Students will develop strategies while working from observation, which emphasizes weight, volume, and form. Still life objects, interior, and exterior spacial drawing are a key emphasis of this class. Individual and group critiques are used to inform and strengthen the student's awareness of key concepts and to allow dialogue about the various aesthetics, strategies, and methods used in the creation of the work.

**Prerequisite:**

Drawing and Painting 1

### 0443 - Advanced 3D Media (WHS)

**Credit(s) 0.5**

**WHS**

This course explores three-dimensional form while working with various media that may include clay, plaster, papier-mâché, found objects, metal and wood. Additive and subtractive techniques will be explored along with casting, armature and kinetic designs. The objective of this course is to create a variety of projects that demonstrate a student's understanding of the elements and principles of design to familiarize students with art making techniques and processes and to broaden student's understanding of diverse cultures and artistic traditions through art making.

**Prerequisite:**

Successful completion, including final grade of B or higher, in minimum of a full year level 1 or 2 half-year 3D media course(s) (Ceramics, Sculpture, Crafts, Potter's Wheel, Jewelry and Metalsmithing) or Instructor and Department Leader approval.

**0771 - Smart Phone and Digital Photography (SHS)**

<b>Credit(s) 0.5</b>	This course will cover the use of the Smartphone camera, apps and advance to Digital SLR camera controls (traditional camera with lens), including f/stops, shutter speeds, film speeds and the production of a correct exposure. Skills will include composition, criticism, lighting, and image editing software. Students will also learn the history and invention of photography. Assignments will include creative use of the camera controls including depth of field and action motion, shadows and light, alternative camera angels, portrays, still life's, and compositions based on the principles and elements of design. Students will receive basic instruction, demonstration, and see samples of the desired outcomes; students will post their photography work and writing on class blog. At the end of the course, students will have a Google site featuring their artwork.
<b>SHS</b>	

**0464 - NCC Two-Dimensional Design (SHS)**

<b>Credit(s) 0.5</b>	This introductory course focuses on the basic elements and principles of design such as line, texture, space, balance, unity and scale.
<b>SHS</b>	
<b>Prerequisite:</b>	Placement into English 088 via Norwalk Community College Accuplacer

**0463 - NCC Graphic Design 1: Skill and Principles (SHS)**

<b>Credit(s) 0.5</b>	An introductory course focusing on the fundamental nature, skills and principles of graphic design. Students will learn about composition, communication and technology. Classes consist of lectures, demonstrations, applied practice and critiques.
<b>SHS</b>	
<b>Prerequisite:</b>	Placement into Math 136 via Norwalk Community College Accuplacer

**0155 Art and Yoga (WHS) NEW!**

<b>Credit(s) 0.5</b>	Art and Yoga is designed to support the social and emotional needs of students who are looking to bring the practice of yoga and mindfulness together with the creative arts. Students will participate in mindfulness activities and chair yoga sequences to become more aware of their own mental and physical state. Students will participate in a range of art making activities integrating the elements of art to express themselves and create awareness, which will include exercises that teach students to be more connected to their own feelings and creative processes. Students will focus on intuitive art exercises, mindful journaling and the process of exploration and internal inquiry through art.
<b>WHS</b>	

## Performing Arts - Theatre

The Theatre Arts program is designed for both the student who is interested in developing their artistic range for purposes of personal expression and the student who intends to pursue a career in theater. In conjunction with Drama Club activities, students are able to explore all fields of theater work.

### Course Offerings

Dramatic Arts	Acting Workshop
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#### *0360 - Dramatic Arts*

**Credit(s) 1**

**SHS**

**WHS**

This course is an introduction to the study of theater. Students read and perform scenes and monologs, develop memorization and improvisation skills, and write personal responses to their peer actors. Students may also create their own scripts and plays.

#### *0330 - Acting Workshop*

**Credit(s) 1**

**SHS**

**WHS**

This course explores various internal and external crafts of acting so that students learn to express individual creativity, become aware of the discipline and rigors that acting demands, and apply these skills for themselves. Through classroom exercises, students explore and participate in the following areas: relaxation, concentration, awareness, vocal expression, interrelationship, and a beginning approach to character.

## Performing Arts - Music



The music program offers a wide variety of individual and group listening, creating, and performing opportunities on a totally elective basis.

Music provides students with opportunities to participate in a number of performances as a member of a variety of dynamic and active groups.

A broad range of courses provides instruction in instrumental and choral settings, theory, music history, appreciation, and contemporary elements of music. These courses will enable students to experience group interaction and to develop a sense of dedication and commitment through music.

**(For information on AP and UConn ECE courses, see pages 9-10.)**

### Course Offerings

<p><b>Choral:</b>                  Concert Choir                  Advanced Choir:                  -Chamber Singers  <b>(WHS)</b>                  - Madrigal Singers <b>(SHS)</b>                  Voice Class (.5 credit)  <b>(SHS)</b></p>	<p><b>Instrumental:</b>                  Concert / Marching                  Band (0.5 credit)                  Jazz Ensemble                  Orchestra (0.5 credit)</p>	<p>Piano Instruction 1,2 (0.5 credit)                  Guitar Instruction 1,2 (0.5 credit) <b>(SHS)</b>                  Percussion <b>(WHS)</b></p>	<p>Non-Performance:                  AP Music Theory <b>(WHS)</b>                  UConn ECE                  Fundamentals/Ear Training  <b>(SHS)</b>                  Introduction to the Music                  Business (0.5 credit) <b>(WHS)</b>                  Digital Music Production (0.5 credit) <b>(WHS)</b>                  UConn popular Music and                  Diversity in American                  Society (0.5 credit) <b>(SHS)</b></p>
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**7210 - Concert Choir**  
**7211 - Concert Choir**

**Credit(s) 1 - 7210**  
**0.5 - 7211**

<b>SHS</b>	<b>WHS</b>
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This course explores opportunities in ensemble singing of a varied repertoire of traditional, contemporary, sacred and secular music from across the eras and around the world. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette is developed through daily study and performance. Active participation, attendance in class, at rehearsals, and at concerts are integral elements of the student's grade.

*Advanced Choir*

7230 - Chamber Singers (WHS)

7231 - Madrigal Singers (SHS)

7232 - Madrigal Singers (SHS)

<b>Credit(s)</b> 1 - 7230 1 - 7231 0.5 - 7232		This course explores opportunities in ensemble singing of a varied repertoire of traditional, contemporary, sacred and secular music from across the eras and around the world. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette is developed through daily study and performance. Active participation, attendance in class, at rehearsals, and at concerts are integral elements of the student's grade.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite</b>		Vocal audition and director approval

*7470 - Voice Class (SHS)*

<b>Credit(s)</b> 0.5	This class is intended to help develop untrained voices in the basic fundamentals of singing. Techniques in breathing, tone development, and style are stressed. Students are encouraged to perform in solo and in ensemble situations.
<b>SHS</b>	

*7220 - Concert/Marching Band*

7225 - Concert/Marching Band

<b>Credit(s)</b> 1 - 7220 0.5 - 7225		This is a performance-based class dedicated to advanced instrumental music. Participation in concert and marching band in the fall is required. Each student participates at band performances in school and the community. All band students must read music and have played in a middle school band for at least one year.
<b>SHS</b>	<b>WHS</b>	

*7510 - Jazz Ensemble (WHS)*

7515 - Jazz Ensemble (SHS)

<b>Credit(s)</b> 1 - 7510 0.5 - 7515		Jazz Ensemble is an advanced class utilizing music theory and history. A varied repertoire of jazz music is studied and rehearsed, exploring the melody, harmony, rhythm, and style unique to jazz music. Improvisation is taught and performed on a daily basis. Jazz is a performance-based class with required participation in class and at concerts.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite</b>		By audition and director approval

**7120 - Orchestra**  
**7125 - Orchestra**

**Credit(s) 1 - 7120**  
**0.5 - 7125**

Membership in the orchestra is open to all students interested in continuing to play a string instrument. Auditions are held for instrumentalists on wind, brass, and percussion to complete the orchestra. This is a performance-based class with participation, performance, and attendance in class, at rehearsals, and at concerts as integral parts of the student's grade.

**SHS**

**WHS**

**7700 - Piano Instruction 1**

**Credit(s) 0.5**

This course is intended for students who have little or no experience on a musical instrument. Students will learn how to read notation for the piano while playing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups. Students will also use computers to aid instruction and evaluation.

**SHS**

**WHS**

**7710 - Piano Instruction 2**

**Credit(s) 0.5**

This course is intended for students who have had experience on the piano. The focus of this class is to further the students' abilities on the piano through sight-reading and composition. Students will also learn how to use Midi software to record and produce their own compositions. This is a performance-based class where students will be working alone and in groups. Students will also use computers to aid instruction and evaluation.

**SHS**

**WHS**

**7720 - Guitar Instruction 1 (SHS)**

**Credit(s) 0.5**

This course is intended for students who have little or no experience on a musical instrument. Students will learn the basics of chords, rhythm, and notation for the guitar. This class will focus on the fundamentals of playing the guitar while performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups. (Students will be provided acoustic guitars to use in class.)

**SHS**

**7730 - Guitar Instruction 2 (SHS)**

**Credit(s) 0.5**

This course is intended for students who have experience on the guitar. The focus of this class is to further the students' abilities on the guitar through sight-reading and performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups. (Students must own or rent their own guitar. An acoustic guitar is recommended; no amplifiers will be allowed.)

**SHS**



**7750 - Percussion (WHS)**  
**7751 - Percussion (WHS)**

<b>Credit(s) 1 - 7750</b> <b>0.5 - 7751</b>	This course is intended for students who have experience on the guitar. The focus of this class is to further the students' abilities on the guitar through sight-reading and performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups. (Students must own or rent their own guitar. An acoustic guitar is recommended; no amplifiers will be allowed.)
<b>WHS</b>	

**752 - AP Music Theory (WHS)**

<b>Credit(s) 1</b>	This course is designed as an introductory college course in music theory and is intended for the serious music student. It develops a student's ability to compose, analyze, and sight-sing. It addresses advanced aural and compositional skills using both listening and written exercises. Students must read music and demonstrate proficiency on an instrument or voice.
<b>WHS</b>	
<b>Prerequisite</b>	Instructor approval

**99AP- UConn ECE Fundamentals/Ear Training (SHS)**

<b>Credit(s) 1</b>	This course is intended for students who have experience on the guitar. The focus of this class is to further the students' abilities on the guitar through sight-reading and performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups. (Students must own or rent their own guitar. An acoustic guitar is recommended; no amplifiers will be allowed.)
<b>SHS</b>	

**7740 - Introduction to the Music Business (WHS)**

<b>Credit(s) 0.5</b>	This course explores the job opportunities available to students with an interest in and love of music. Designed for both music and non-music students interested in working in the music/entertainment industry, students are given an opportunity to learn and understand the requirements and training needed to pursue a music-oriented career. Class sessions include guest lecturers, field trips, research-based and practical projects, and written tests.
<b>WHS</b>	

**1960 - Digital Music Production (WHS)**

<b>Credit(s) 0.5</b>	This is a project-based class where students will compose and produce their own music that will be recorded to CD. Students will learn a variety of recording and production software that they will use to create their own compositions. Students will also learn the fundamentals of music and the piano.
<b>WHS</b>	

**7530 - UConn ECE Popular Music and Diversity in American Society (SHS)****Credit(s) 0.5****SHS**

An introduction to popular music and diversity in America: Jazz, Blues, Top-Pop, Rock, Hip-Hop, and other genres. Musicians and their music studied in the context of twentieth-century and contemporary American society, emphasizing issues of race, gender, class, and resistance. No prior musical training or knowledge is required.



Angelina Visser - Stamford High School

## SCIENCE

The State of Connecticut and the Stamford Public Schools' frameworks foster the development of *interest* in global issues and the ability to collect, analyze, and use data to explore and explain related science concepts for students in grades 9 and 10.



For students in grades 11 and 12, the focus of learning shifts to the development of *deep understanding* of science concepts and principles and to the preparation for future studies and careers. Interactive boards and web-based resources are used extensively in every course.

**(For information on Honors, AP, IB, and UConn ECE courses see pages 9-10)**

### Graduation Requirement 3 Credits - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
Physical Science Physics & Physical Science Chemistry	Biology	Chemistry or Other Electives	Physics or Other Electives
Honors Biology	Honors Chemistry	Honors Physics or Other AP/UConn ECE/IB Courses	Other AP/UConn ECE/IB Courses or Electives

### Course Offerings

Physical Science Physics (0.5 credit) Physical Science Chemistry (0.5 credit) Biology Honors Biology Chemistry Honors Chemistry Physics Honors Physics Foundations of Science 1 (0.5 credit) Foundations of Science 2 (0.5 credit)	<b>AP Courses:</b> AP Biology (WHS) AP Chemistry (WHS) AP Physics 1 AP Physics 2 AP Physics C Part 1 (SHS) AP Physics C Part 2 (SHS) AP Environmental Science AP Capstone Seminar (WHS) AP Capstone Research (WHS)  <b>IB Courses:</b> IB Chemistry SL 1&2 (SHS) IB Chemistry HL 1&2 (SHS) IB Physics SL 1&2 (SHS) IB Biology SL 1&2 (SHS) IB Biology HL 1&2 (SHS) IB Environmental Systems and Societies SL 1&2 (SHS)	<b>UConn ECE Courses:</b> UConn ECE Biology 1 Fall Semester (SHS) UConn ECE Biology 2 Spring Semester (SHS) UConn ECE Chemistry 1 Fall Semester 1127Q (SHS) UConn ECE Chemistry 2 Spring Semester 1128Q (SHS) UConn ECE Physics 1 1201Q UConn ECE Physics 1 1202Q UConn ECE Physics C 1401Q Part 1 (SHS) UConn ECE Physics C 1401Q Part 2 (SHS) UConn ECE Environmental Science UConn ECE Applied Mechanics (SHS)	<b>Electives:</b> Environmental Science (0.5 credit) Earth Science (0.5 credit) Space Systems (0.5 credit) Human Physiology Consumer Chemistry (0.5 credit) Marine Biology (0.5 credit) Bioethics (0.5 credit) Biotechnology (0.5 credit) Forensic Science Forensic Science (0.5 credit) Introduction to Robotics Robotics 2 (NEW) (WHS) Independent Study Science Teaching Science Research Public Health (WHS) Beekeeping (NEW) (SHS)
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**8373 - Physical Science Physics****8375 - Sheltered****8377 - Administrative approval required**

<b>Credit(s) 0.5</b>		This course explores the basic principles of physics in a comprehensive approach. Students learn through an inquiry-based approach designed to foster critical thinking, investigative, and decision-making skills, as well as cooperative and basic research skills. Laboratory investigations are an integral part of this course. As a result of this course students explore and explain core physics concepts and their related applications.
<b>SHS</b>	<b>WHS</b>	

**8374 - Physical Science Chemistry****8376 - Sheltered****8369 - Administrative approval required**

<b>Credit(s) 0.5</b>		This course explores the basic principles of chemistry in a comprehensive approach. Students learn through an inquiry-based approach designed to foster critical thinking, investigative, and decision-making skills, as well as cooperative and basic research skills. Laboratory investigations are an integral part of this course. As a result of this course, students explore and explain core chemistry concepts and their related applications.
<b>SHS</b>	<b>WHS</b>	

**8110 - Biology****8060 - Sheltered****861/987 - Administrative approval required****8121 - Honors****8362 - AP (WHS - double period)**

<b>Credit(s) 1</b>		This course explores biological principles in a comprehensive approach. The course examines: ecology, cell biology, genetics, evolution, microorganisms, plants, vertebrates, and invertebrates. Students' understanding of biology is fostered through laboratory investigations, problem-solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students explore and explain concepts of biology and its related applications.
<b>Credit (s) 2 (8362)</b>		
<b>SHS (except 8362)</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<b>861/987:</b> One year of high school science <b>8121 Honors:</b> B average in science <b>8362 AP:</b> Biology, Chemistry and two years of mathematics with a minimum grade of B

**8361 - UConn ECE Biology 1 (SHS) (Fall Semester)**

<b>Credit(s) 1</b>	<p>This course is a comprehensive 4 credit college laboratory science, prerequisite to further study in Biology, and transferable to most colleges and universities at their discretion. Topics investigated include: Biochemistry, Enzymes, Osmosis, Cells, Prokaryotes, Respiration, DNA, Protein Synthesis, Molecular Genetics, Cell Division, Reproduction and Development, Anatomy and Physiology, Genetics.</p> <p>Students will participate through collaborative laboratory investigations and problem-solving, from which skills they develop will be useful in the workplace, and necessary to be successful in further study at higher levels.</p> <p>To be prepared for the optional College Board Advanced Placement Biology Exam scheduled in May, students must successfully complete both semester 1 and 2 - BIOL 1107 and BIOL 1108.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	Successful completion of two years of laboratory science including Biology and Chemistry, along with Algebra II (Honors level recommended)

**8363 - UConn ECE Biology 2 (Spring Semester) (SHS)**

<b>Credit(s) 1</b>	<p>This course is a comprehensive 4 credit college laboratory science, prerequisite to further study in Biology, and transferable to most colleges and universities at their discretion. Topics investigated include: Genetics, Evolution, Population Genetics, Speciation, Molecular Evolution, Photosynthesis, Ecosystem Productivity, Plant Evolution, Plant Anatomy, and Physiology, Animal Evolution, Animal Behavior, Protista, Fungi, Biosphere, Community Ecology, Population Ecology, Restoration Ecology</p> <p>Students will participate through collaborative laboratory investigations and problem-solving, from which skills they develop will be useful in the workplace, and necessary to be successful in further study at higher levels.</p> <p>BIOL 1108 in semester II will be completed in May in time for students to take College Board Advanced Placement Exams, and for Seniors to begin Spring internships.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	BIOL 1107 Principles of Biology 1 (semester 1 Fall)

8210 - Chemistry

8221 - Sheltered

8280 - Honors

8422 - AP (WHS - double period)

<b>Credit(s) 1, 2 -8422</b>		This course explores chemical principles in a comprehensive approach. The course examines: matter and energy, atomic structure, periodicity, ionic and covalent compounds, chemical equations, stoichiometry, theory of gases, solutions and chemical equilibrium, acids and bases, reaction rates, electro-chemistry, and nuclear chemistry. Students' understanding of chemistry is fostered through laboratory investigations, problem-solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of chemistry and its related applications.
<b>SHS (except 8422)</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<p><b>8210:</b> Algebra 1 or Geometry and one year of high school science. Concurrent enrollment in Algebra 2 recommended</p> <p><b>8280 Honors:</b> B Average in science and mathematics (Geometry or Algebra 1). Concurrent enrollment in Algebra 2 recommended</p> <p><b>8422 AP:</b> Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics</p>

8424 - UConn ECE General Chemistry 1 Fall Semester 1127Q (SHS)

<b>Credit(s) 1</b>		This course is a comprehensive 4 credit college laboratory science, designed to provide a foundation for more advanced college courses in chemistry, and transferable to most colleges and universities at their discretion. The course explores chemical principles in a comprehensive approach. The course examines: matter and energy, atomic structure, periodicity, bonding, reactions, and chemical behavior of gases. Quantitative measurements illustrating the laws and theories concerning the physical and chemical change are included in the laboratory component. To be prepared for the optional College Board Advanced Placement Biology Exam scheduled in May, students must successfully complete both semester I and II - 1127Q and 1128Q
<b>SHS</b>		
<b>Prerequisite:</b>		Successful completion of two years of laboratory science including Chemistry (Honors Chemistry is recommended) and successful completion of Algebra 2

**8421 - UConn ECE General Chemistry 2 Spring Semester 1128Q (SHS)**

<b>Credit(s) 1</b>	<p>This course is a comprehensive 4 credit college laboratory science, designed to provide a foundation for more advanced college courses in chemistry, and transferable to most colleges and universities at their discretion. The course explores chemical principles in a comprehensive approach.</p> <p>The course examines: physical properties of solutions, kinetics, chemical equilibrium, thermodynamics, and electrochemistry. Rates of chemical changes, equilibrium in solutions, and reactions of the common cations and anions are included in the laboratory component.</p> <p>1128Q in semester II will be completed in May in time for students to take College Board Advanced Placement Exams, and for Seniors to begin Spring internships.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	A student must pass CHEM 1127Q with a grade of a "C" or higher to continue to CHEM 1128Q.

**8310 - Physics**  
**8400 - Honors**

<b>Credit(s) 1</b>	<p>This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermo-dynamics, electricity and magnetism, waves and optics, historical astronomy, and nuclear physics. Students' understanding of physics is fostered through laboratory investigations, problem-solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of physics and its related applications.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	Algebra 2 (or concurrent enrollment) and two years of high school science

**8101 - Foundations of Science 1**  
**8102 - Foundations of Science 2**

<b>Credit(s) 0.5</b>	<p>This course is for New Arrivals English Learners develops a strong foundational background on the principles of several scientific specialties. Basic science concepts are explored, as are the principles underlying the scientific method and experimentation.</p>
<b>SHS</b>	

**8384 - AP Physics 1**

<b>Credit(s) 1</b>		This course is the equivalent of a first-semester college course in algebra-based physics. Topics include: Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Inquiry-based investigations are emphasized. These investigations are designed to foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal. Laboratory investigations are an integral part of this course.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Geometry and concurrent enrollment in Algebra 2

**8385 - AP Physics 2**

<b>Credit(s) 1</b>		This course is the equivalent to a second-semester college course in algebra-based physics. Topics include: fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Inquiry-based investigations are emphasized. These investigations are designed to foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal. Laboratory investigations are an integral part of this course. Students are expected to take the Advanced Placement examination at the conclusion of the course.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

**8390 - UConn ECE Physics 1201Q**

<b>Credit(s) 1</b>		This full-year college physics course is designed to provide a strong physics foundation for more advanced courses in college science. The topics covered include classical dynamics, rigid-body motion, harmonic motion, waves, fluids, and thermo-dynamics, as well as other selected topics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students must have a very strong science and mathematics background to ensure successful comprehension and completion of this course.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year



**8391 - UConn ECE Physics 1202Q**

<b>Credit(s) 1</b>		This full-year college physics course is designed to provide a strong physics foundation for more advanced courses in college science. The topics covered include classical electrostatics, electricity, magnetism, optics, and modern physics as well as other selected topics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students should have a very strong science and mathematics background to ensure successful comprehension and completion of this course.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Completion of UCONN 1201Q with a C or better and a summer assignment prior to the start of the academic year

**8388 - AP Physics C Part 1**  
**8388 - UConn ECE Physics 1401Q Part 1**

<b>Credit(s) 1</b>		This course meets the objectives of a rigorous course in first-year calculus-based physics at a college level. The course delves deeply into Newtonian Mechanics, including kinematics, Newton's laws, work, energy, and power. Laboratory investigations are an integral part of this course. Students will participate through collaborative laboratory investigations and problem-solving. The skills they develop will be useful in the workplace, and necessary to be successful in further study at higher levels. Note: Earning of 4 college credits is dependent on successful completion of both Physics 1401Q Part 1 and Physics 1401Q Part 2. <b><i>To be prepared for the College Board Advanced Placement Physics C Exam scheduled in May, students must successfully complete both Physics 1401Q part 1 and Physics 1401Q part 2.</i></b>
<b>SHS</b>		
<b>Prerequisite:</b>		Two years of laboratory science including Physics and concurrent enrollment in Calculus.



Dilan Ordenez - Westhill High School

**8386 - AP Physics C Part 2****8376 - UConn ECE Physics 1401Q Part 2****Credit(s) 1****SHS**

This course meets the objectives of a rigorous course in first-year calculus-based physics at a college level. The course delves deeply into Newtonian Mechanics, including rotation, oscillations, and gravitation. Laboratory investigations are an integral part of this course. Students will participate through collaborative laboratory investigations and problem-solving. The skills they develop will be useful in the workplace, and necessary to be successful in further study at higher levels.

Note: Earning of 4 college credits is dependent on successful completion of both Physics 1401Q Part 1 and Physics 1401Q Part 2.

**Physics 1401 Part 2 in semester 2 will be completed in May in time for students to take College Board Advanced Placement Exams.**

**Prerequisite:**

Successful completion of Physics 1401Q Part 1

**8740 - AP Environmental Science****8741 - UConn ECE****Credit(s) 1****SHS****WHS**

This course is planned to meet the objectives of a rigorous course in first-year environmental science at the college level. Topics include: interdependence of earth's systems, the living world, population, land and water use, energy resources and consumption, pollution, and global change. Laboratory investigations are an integral part of this course. Each student completes a lab notebook or portfolio of lab reports.

**Prerequisite:**

Biology and Chemistry

**8379 - UConn ECE Applied Mechanics 1****Credit(s) 1****SHS**

This is a college-level course focusing on the fundamentals of statics using vector methods. Topics include: resolution and composition of forces; equilibrium of force systems; analysis of forces acting on structures and machines; centroids; moment of inertia. Laboratory investigations are an integral part of this course.

**Prerequisite:**

Calculus or concurrent enrollment in Calculus

**8960 - AP Capstone - Seminar****Credit(s) 1****WHS**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, foundational literacy, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information

from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

### 8961 - AP Capstone - Research

**Credit(s) 1**

**WHS**

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea for individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

**Prerequisite:**

AP Capstone Seminar

### 8750 - Environmental Science

**Credit(s) 0.5**

**SHS**

**WHS**

This course explores the relationships that exist between people and the environment. This course examines: scientific analysis, interdependence of earth systems, human population dynamics, renewable and non-renewable resources, environmental quality, global changes, and their consequences, environment, and society, and choices for the future. Laboratory and field investigations are an integral part of this course.

**Prerequisite:**

Two years of science

### 8930 - Earth Systems

**Credit(s) 0.5**

**SHS**

**WHS**

This course explores earth science in a comprehensive approach. The course examines: the dynamic forces that shape the earth, weather and the oceans, and the geophysical earth. Students' understanding of earth science is fostered through laboratory investigations, problem-solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of earth science and related applications.

**Prerequisite:**

One year of high school science

**8940 - Space Systems****Credit(s) 0.5****SHS****WHS**

This course explores space science in a comprehensive approach. The course examines: the earth and its relationship to the solar system and the universe. Students' understanding of space science is fostered through laboratory investigations, problem-solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of the earth and its relationship to space and related scientific applications.

**Prerequisite:**

One year of high school science

**8200 - Human Physiology****Credit(s) 1****SHS****WHS**

This course explores the structure and function of the human body. This course examines: body organization, systems for support and movement, systems of communication, control, and integration, transportation, respiration, nutrition, excretion, reproduction, defense, and adaptation. This course satisfies the requirement of a laboratory science for college admission. Laboratory investigations are an integral part of this course.

**Prerequisite:**

Biology and Chemistry

**8222 - Consumer Chemistry****Credit(s) 0.5****SHS****WHS**

This course explores the various applications of consumer chemistry. Students perform lab experiments and complete long-term projects that involve student research and collaborative group work. This course examines the study of cosmetics /dyes/cleaners, food/biochemistry, pharmaceuticals, and nanotechnology. Laboratory investigations are an integral part of this course. Students work independently and as teams to develop, communicate, and explain how chemistry impacts people in society.

**Prerequisite:**

Two years of science

**8760 - Marine Biology****Credit(s) 0.5****SHS****WHS**

This course investigates the marine environment of Long Island Sound. The course includes the biological, physical, and chemical factors of the marine environment, and includes marine diversity and ecology. Students' understanding of marine biology is fostered through laboratory investigations and field experiences that include the collection and identification of plant and animal populations from aquatic samples. As a result of this course, students develop a deeper understanding of the concepts and principles of marine biology and its related applications. Laboratory investigations are an integral part of this course.

**Prerequisite:**

Two years of science, one being Biology

**8470 - Bioethics**

**Credit(s) 0.5**

**SHS**

**WHS**

This course examines the reasonableness of human choices and actions in situations such as euthanasia, surrogacy, and organ donation. The course will investigate how problems in bioethics can be approached from a variety of perspectives as well as the complexities of ethical decision making. Students will be expected to merge scientific and philosophical thinking when evaluating the morality of choices. Finally, bioethical practices of different cultures will be examined.

**8800 - Biotechnology**

**Credit(s) 0.5**

**SHS**

**WHS**

This course explores the emerging interdisciplinary field of biotechnology. The course examines: stem cell research, DNA analysis, genetic engineering, biological weapons, medical applications, and ethics. Students' understanding of biotechnology is fostered through the extensive use of laboratory investigations that connect the theoretical and the real-life applications of the topics of the course. Laboratory investigations are an integral part of this course.

**Prerequisite:**

Two years of science. Concurrent enrollment in Chemistry is recommended.

**1702 - Introduction to Robotics**

**Credit(s) 1**

**SHS**

**WHS**

Students will be introduced to robotics and robot kinematics and will be involved in the development, building, and programming of robots. Students will apply the fundamentals of electronics and networking to build a remotely controlled robot that can perform specific tasks. Students will have the opportunity to participate in Robotics Competition.

**1705 - Robotics 2**

**Credit(s) 1**

**WHS**

This course is an advanced study of robotics and robot kinematics. Students will be involved in the development, building, and programming of robots. Students will apply the fundamentals of electronics and networking to build a remotely controlled robot that can perform specific tasks. Students will have the opportunity to participate in robotics competitions.

**Prerequisite:**

B or better in Math and Science, Knowledge of a programming language is recommended

**8510 - Forensic Science**

**Credit(s) 1**

**SHS**

**WHS**

This course explores the various scientific applications of solving crimes in a comprehensive approach. Students perform numerous laboratory techniques including some that may be referenced on television shows. This course examines analyzing

		fingerprints, bodily fluids, DNA, firearms and ballistics, arson and explosives, natural and synthetic fibers, documents, glass fragments, and case studies. Laboratory investigations are an integral part of this course. Students work independently and as teams to develop, communicate and defend scientific arguments based on their findings to solve crime scene investigations and to analyze case studies.
<b>Prerequisite:</b>		Biology and Chemistry

### 8511 - Forensic Science

<b>Credit(s) 0.5</b>		This course explores the various scientific applications of solving crimes. Students perform numerous laboratory techniques including some that may be referenced on television shows. This course examines the study of legal issues, trace evidence, impression evidence, bodily fluids, documentation, the psychology of a criminal, and the processing of a crime scene. Laboratory investigations are an integral part of this course. Students work independently and as teams to develop, communicate, and defend scientific arguments based on their findings to solve crime scene investigations and to analyze case studies.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Biology and Chemistry

### 8431 - Independent Study Science Teaching

<b>Credit(s) 0.5</b>		This course is designed for juniors and seniors in good academic standing who have a possible interest in teaching (especially science) or working in social services. They will work with students, under the guidance of the classroom teacher, in Physical Science and Biology classrooms (including Bilingual, Academic, and Sheltered classes) to create an environment that creates a growth mindset in regards to science and that significantly improves student achievement.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<i>Administrative approval required.</i>

### 8501 - Science Research

<b>Credit(s) 1</b>		Science Research is a full-year course where students: apply the methods of scientific investigation to identify and solve problems in science, technology, engineering, and/or mathematics; develop questions based on data or research, plan experimental design, and analyze data to form conclusions; work individually or as part of a team to complete a research project. Over the course of the year, students will complete a science research project on a more professional level than they may have done in the past. Ideas and research techniques will be explored and students will design and implement several smaller research projects in addition to one major scientific investigation.
<b>SHS</b>	<b>WHS</b>	

<b>Prerequisite:</b>	Successful completion of two years of Science
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**8830 - Public Health**

<b>Credit(s) 1</b>	This course is designed to introduce students to the history, biological science, and careers in public health. This course explores communicable and non-communicable disease and their impact on global health. Students will explore causes and types of disease, modes of disease transmission, epidemiology, medical and community response. Main topics of study include infectious diseases including viruses & bacteria that lead to pandemics and plagues, non-communicable disease and their societal impact, history of widespread diseases, careers in public health, and public policy that impact aspects of the community such as workforce health and safety. Research projects are an integral part of this course. This course is appropriate for any student who is considering careers in the medical health care field.
<b>WHS</b>	
<b>Prerequisite:</b>	Biology

**8770 - Beekeeping (SHS) NEW!**

<b>Credit(s) 1</b>	This is an introductory course to beekeeping and apiary science. It is designed to give students the career skills needed in a beekeeping enterprise and to emphasize the importance of honey bees in our daily lives and in agricultural production. Topics covered: anatomy/physiology, colony organization, housing and equipment, bee selection, apiary location, hive management, pest control and diseases, and honey production.
<b>SHS</b>	
<b>Prerequisite:</b>	Biology

**Alternatives to Dissection**

Dissection is one of many instructional methods used in life science courses. Students may request alternatives to dissection. Alternatives include such materials as videos, computer programs, films, models, transparencies, charts, diagrams, dissecting microscopes, and textbook overlays. If alternatives to dissection are requested, teacher assistance will be available at all times, and no grades may be adversely affected because alternatives are requested.

# MATH



The mathematics department is organized to develop and implement a curriculum that will give every graduate of Stamford Public Schools the knowledge, understanding, and skills they will need in mathematics to compete in the 21<sup>st</sup> century world economy.

Instruction is varied and includes teacher-centered, group work, inquiry-based, and individual learning. Interactive boards and graphing calculators are used extensively in every course. Most classes also include computer software applications and web-based resources.

Homework is given regularly and is expected to be completed. Tests and quizzes model homework and class work. Both homework and assessments play a vital role in the teacher evaluation of a student.

**(For information on Honors, AP, IB, and UConn ECE courses, see pages 9-10)**

## Graduation Requirement 3 Credits - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
Algebra 1 Honors Algebra 1 Geometry Honors Geometry Honors Algebra 2	Geometry Honors Geometry Algebra 2 Honors Algebra 2 Honors Pre-Calculus	Algebra 2 Honors Algebra 2 Pre-Calculus Honors Pre-Calculus AP Calculus	Pre Calculus Honors Pre-Calculus Calculus AP Calculus Multivariable Calculus

## Course Offerings

Algebra 1 Honors Algebra 1 Geometry Honors Geometry Algebra 2 Honors Algebra 2 Pre-Calculus Honors Pre-Calculus Calculus	<p><b>AP Courses:</b> AP Calculus AB AP Calculus BC AP Statistics AP Computer Science (WHS) AP Computer Science Principles AP Data Structures &amp; Algorithms (WHS)</p> <p><b>UConn ECE Courses:</b> UConn ECE Calculus AB (WHS) UConn ECE Statistics (WHS)</p>	<p><b>IBDP Courses:</b> IB Mathematics: Analysis and Approaches HL 1&amp;2 (SHS) IB Mathematics: Analysis and Approaches SL 1&amp;2 (SHS) IB Mathematics: Applications and Interpretations SL 1&amp;2 (SHS)</p> <p><b>Electives:</b> Multivariable Calculus Advanced Algebra and Geometry (SHS) Algebra 3 and Trigonometry (0.5 credits) Statistics and Probability Statistics and Probability (0.5 credits)</p>	<p><b>Electives (cont.):</b> Introduction to Computer Science (0.5 credits) Cyber Security (WHS) Honors Cyber Security (WHS) Computer Based Investigative Mathematics Mathematical Logic and Inquiry Engineer Fundamentals Math Lab Bridges Math Foundations Math 1,2,3,4 (EL) Independent Study Math Teaching (WHS)</p>
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637 - Math 9  
961 - Math 10

*Administrative approval required*

<b>Credit(s) 1</b>		This course is an activity-based mathematics course focusing on pre-algebra and pre-geometry skills. It is designed to engage student involvement in problem solving, reasoning, communications, and mathematical connections, as well as continued reinforcement and application of computation skills. Students apply the skills learned to everyday problem solving and real life applications.
<b>SHS</b>	<b>WHS</b>	

6100 - Algebra 1  
6520 - Honors  
6500 - Sheltered

<b>Credit(s) 1</b>		This course examines the properties of real numbers, linear equations, inequalities, piecewise equations, linear programming, and systems of equations and applications. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications.
<b>SHS</b>	<b>WHS</b>	

6250/6251 - Geometry  
6241 - Honors  
6660 - Sheltered

<b>Credit(s) 1</b>		This course examines the geometric aspects of plane and solid figures such as properties of lines and angles, triangles, quadrilaterals, circles, including length, area, surface area, and volume of solids as well as inductive reasoning and proof. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<b>6241 Honors:</b> Algebra 1 with a minimum grade of B <b>6660 Sheltered:</b> Algebra 1

6200 - Algebra 2  
6502 - Sheltered  
6210 - Honors

<b>Credit(s) 1</b>		This course examines the properties of real numbers, linear equations and functions, inequalities, linear systems of equations, quadratic and polynomial functions, radical exponents and functions, and exponential and logarithmic functions. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking
<b>SHS</b>	<b>WHS</b>	

		activities as well as the use of computers and graphic calculator technology. Students focus on problem-solving and real-life applications as well as skills required for the SAT examination throughout the year.
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<b>Prerequisite:</b>	<b>6502 Sheltered:</b> Algebra 1 and Geometry <b>6210 Honors:</b> Algebra 1 and Honors Geometry or Geometry with a minimum grade of B
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*6181 - Foundations Math 1*  
*6182 - Foundations Math 2*  
*6183 - Foundations Math 3*  
*6184 - Foundations Math 4*  
*(EL Courses)*

<b>Credit(s) 0.5</b>	This course provides academic support for <u>new arrival English learners</u> that need to develop a strong number sense by seeing connections among operations and numbers, making reasonable estimates, and spotting unreasonable answers. Instruction focuses on the use of hands-on activities, manipulatives, and real-life applications. Students develop an understanding of proportional relations in connection to linear functions. Foundations Math 3 and 4 are the equivalent of pre-Algebra.	
<b>SHS</b>	<b>WHS</b>	

*6764 - Advanced Algebra and Geometry*

<b>Credit(s) 1</b>	Advanced Algebra and Geometry is an elective course that will revisit topics from Algebra 1 and Geometry that are essential to success on the SAT and other advanced math classes. The course would benefit students who have missed key skills and concepts that need to be mastered prior to taking Algebra 2.	
<b>SHS</b>		
<b>Prerequisite:</b>	Algebra 1, Geometry	

*6850 - Algebra 3 and Trigonometry*

<b>Credit(s) 0.5</b>	This semester course examines mathematical concepts required for taking trigonometry at college. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem-solving and real-life applications as well as skills required for the SAT examination throughout the semester.	
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>	Algebra 2	

**6861 - Statistics and Probability**

<b>Credit(s) 1</b>		This semester course examines mathematical concepts required for taking trigonometry at college. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications as well as skills required for the SAT examination throughout the semester.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Geometry

**6860 - Statistics and Probability**

<b>Credit(s) 0.5</b>		This semester course examines basic data analysis and probability concepts. Emphasis is on algebraic and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications as well as skills required for the SAT examination throughout the semester.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Algebra 2

**6320 - Pre-Calculus**  
**6330 - Honors**

<b>Credit(s) 1</b>		This course examines the properties of functions and modeling, radical exponents and functions, exponential and logarithmic functions, trigonometric analysis, polar coordinates, and complex numbers. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem solving and real-life applications as well as skills required for the SAT examination throughout the year.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		<b>6320:</b> Algebra 2 <b>6330 Honors:</b> Honors Algebra 2 or Algebra 2 with a minimum grade of B

**6340 - Calculus**

<b>Credit(s) 1</b>		This course examines the advanced properties of functions, including limits and continuity, the techniques of differential and integral calculus. Emphasis is on algebraic, trigonometric, and exponential functions of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem-solving and real-life applications throughout the year.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Pre-Calculus

**6290 - AP Calculus AB**  
**6341- UConn ECE (WHS)**

<b>Credit(s) 1</b>		This intensive college-level calculus course examines the advanced properties of functions, limits, and continuity. The techniques of differential and integral calculus will be developed and applied to algebraic, trigonometric, and exponential functions. Student experiences focus and emphasize on problem-solving and real-life applications through critical thinking activities as well as the use of computers and graphic calculator technology
<b>SHS</b> 6290	<b>WHS</b> 6290 6341	
<b>Prerequisite:</b>		Honors Pre-Calculus or Pre-Calculus with a minimum grade of B

**6342 - Multivariable Calculus**

<b>Credit(s) 1</b>		Multivariable Calculus is a rigorous second-year course in college-level calculus. This course provides an in-depth study of vectors and the calculus of several variables for the student who has successfully completed Calculus BC. The successful student will bring to the course a solid understanding of the concepts of first-year calculus as well as the ability to approach complex problems and applications with insight, imagination, and persistence. Major topics will include vector problems and analysis, functions of two or more variables and their partial derivatives, and multiple integrals.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		AP Calculus BC

**6360 - AP Statistics**  
**6361 - UConn ECE (WHS)**

<b>Credit(s) 1</b>		This intensive college-level non-calculus based statistics course examines four broad conceptual themes: (1) Exploring data: observing patterns and departures from patterns; (2) Planning a study: Deciding what and how to measure; (3) Anticipating patterns: producing models using probability and simulation; and (4) Statistical inference: confirming models. Student experiences focus and emphasize problem-solving and real-life applications through critical thinking activities as well as the use of computers and graphic calculator technology.
<b>SHS</b> 6360	<b>WHS</b> 6360 6361	
<b>Prerequisite:</b>		Algebra 2

**6630 - Introduction to Computer Science**

<b>Credit(s) 0.5</b>		This introductory course examines programming techniques, teaches the fundamentals of programming language (currently Java) and syntax, and prepares students to develop applications in computer programming. This class is an introductory class preparing students for further study in AP Computer Science.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Algebra 1

**6640 - AP Computer Science (WHS)**

<b>Credit(s) 0.5</b>		This intensive college-level Computer Science course examines the advanced properties of data structures, design, and algorithm development using Java as the programming language. Student experiences focus and emphasize problem-solving and real-life applications through critical thinking activities including the social and ethical implications of computer use.
<b>WHS</b>		
<b>Prerequisite:</b>		Algebra 2 with a minimum grade of B

**6644 - AP Computer Science Principles**

<b>Credit(s) 1</b>		This course introduces the essential ideas of computer science and shows how computing and technology can influence the world around us. Real-world issues and concerns will be creatively addressed while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life.
<b>SHS</b>	<b>WHS</b>	

**6643 - AP Data Structures & Algorithms (WHS)**

<b>Credit(s) 1</b>		This course follows AP Computer Science. It focuses on data structures and consists of the following topics: Java Collections Framework, Lists, Linked-Lists, Big Omega Analysis, Iterators, Stacks and Queues, Trees, Binary Trees, Regular Expressions, and Hashing. After establishing a theoretical framework on Big Omega, the remainder of the course is highly practical with each topic being taught using programming projects.
<b>WHS</b>		
<b>Prerequisite:</b>		AP Computer Science

**6600 - Computer-Based Investigative Mathematics (SHS)**

<b>Credit(s) 1</b>		This course examines a wide range of problems requiring the applications of mathematics. Emphasis is on data and graphic representation of these topics through the use of appropriate software packages including the internet. Students focus on problem-solving and real-life applications through critical thinking activities.
<b>SHS</b>		

**2511 - Cyber Security (WHS)**

<b>Credit(s) 1</b>	This full-year course teaches students how to construct defenses for individuals and organizations from online threats both human and automated. It focuses on the following seven principles: Ethics and Society; Security Principles; Classic Cryptography; Modern Cryptography; Malicious Software; Physical Security; and Web Security.
<b>WHS</b>	
<b>Prerequisite:</b>	Algebra 1

**2511 - Honors Cyber Security (WHS)**

<b>Credit(s) 1</b>	This full-year course teaches students how to construct defenses for individuals and organizations from online threats both human and automated. It focuses on the following seven principles: Ethics and Society; Security Principles; Classic Cryptography; Modern Cryptography; Malicious Software; Physical Security; and Web Security
<b>WHS</b>	
<b>Prerequisite:</b>	Algebra 1

**6111 - Mathematical Logic and Inquiry**

<b>Credit(s) 0.5</b>	This course explores the application of logic and inquiry to mathematical problems and questions. As part of the course, students learn that we analyze intellectual concepts much more clearly in mathematical terms, that we can derive effective conclusions from theoretical assumptions by mathematical proof, and that we can build mathematical models to solve real-world problems.
<b>SHS</b> <b>WHS</b>	

**6121 - Engineering Fundamentals**

<b>Credit(s) 0.5</b>	This course examines the field of engineering, introducing students to the engineering design process as well as to the most common engineering disciplines. Emphasis is on solving introductory design problems in these disciplines as well as learning about engineering as a profession.
<b>SHS</b> <b>WHS</b>	

**695 - Math Center****Administrative approval required**

<b>Credit(s) 1</b>	This course is designed to support students in improving math fluency, problem-solving, and reasoning skills. Emphasis is on algebraic, geometric, and graphic representation of topics using individual and group activities as well as targeted computer-based learning. Throughout the year, students focus on the real-life applications of math concepts and skills.
<b>SHS</b> <b>WHS</b>	

**6901 - Math Lab**

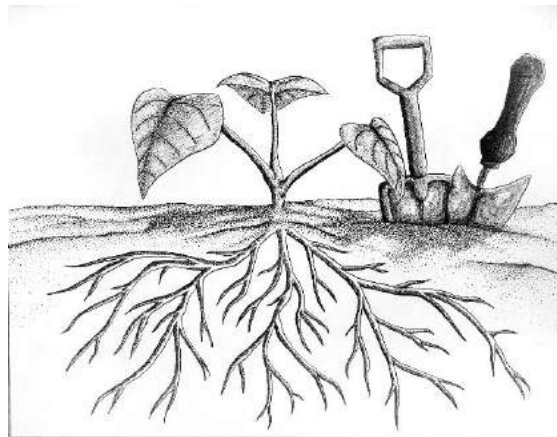
<b>Credit(s) 1</b>		This course is designed to assist ninth graders with various areas of growth in mathematics to ensure their success in high school algebra. During the Math Lab, students will develop a conceptual understanding with followed-up procedural fluencies based on conceptual understanding. Course enrollment is determined by grades, assessment data, and teacher recommendation.
<b>Grade 9</b>		
<b>SHS</b>	<b>WHS</b>	

**6530 - Independent Study Math Teaching (WHS)**

<b>Credit(s) 0.5</b>		This course is designed for juniors and seniors in good academic standing who have a possible interest in teaching (especially math) or working in social services. They will work with students, under the guidance of the classroom teacher, in Algebra 1, Geometry, and Algebra 2 classrooms (including Bilingual, Academic, and Sheltered classes) to create an environment that creates a growth mindset in regards to math and that significantly improves student achievement.
<b>Grades 11, 12 2 semesters</b>		
<b>WHS</b>		
<b>Prerequisite:</b>		Administrative approval required

**640 - Bridges Math**

<b>Credit(s) 1</b>		This full-year course is designed for high school seniors. In a partnership with Norwalk Community College and Stamford Public Schools, the course aligns high school and college curriculum and instruction to Common Core State Standards providing students with specific academic support in order to prevent the need for remediation in college.
<b>Grade 12</b>		
<b>SHS</b>	<b>WHS</b>	



Erika Tom - Stamford High School

## CAREER & TECHNICAL EDUCATION TECHNOLOGY

The Technology program provides students with an opportunity to participate in well-organized career and/or vocational experiences. In these courses the fundamental skills of reading, writing, and mathematics are applied to creative projects and the students learn by doing. Students are instructed in the use of hand tools and power machines. They become acquainted with materials, industrial processes, labor information, and job/career opportunities.

### COURSE OFFERINGS

Introduction to Automobiles (0.5 credit) <b>(WHS)</b>	General Construction Emerging Technology (0.5 credit)
Video Technology (0.5 credit) <b>(SHS)</b>	<b>(WHS) (NEW)</b>
Woodworking (0.5 credit) <b>(WHS)</b>	Power and Mechanics (0.5 credit) <b>(WHS) (NEW)</b>

#### *1210 - Introduction to Automobiles (WHS)*

**Credit(s) 0.5**

**WHS**

Primarily intended as a personal automobile mechanics course, but also useful for students exploring future careers in automotive technologies, this Introduction to Automobiles course expose students to the various mechanical systems in automobiles and provide basic experience in maintenance tasks. The course will also cover career opportunities in the automotive and/or transportation fields.

#### *1560 - Video Technology (SHS)*

**Credit(s) 0.5**

**SHS**

This course provides the student with a basic understanding of the technology behind video as an information medium, and ways in which it is created to achieve its desired effect on an audience. Students will be able to demonstrate production skills and techniques as it relates to producing a variety of video formats. Example formats include producing a school news program, narrative shorts, PSAs, and many other visual media.

#### *1190 - Woodworking (WHS)*

**Credit(s) 0.5**

**WHS**

This course focuses on humans' most widely used construction and manufacturing materials. Through a series of projects and problem-solving activities, the student is exposed to the techniques and processes common to designing and producing a product. This is an activity-oriented lab-based class.



***1220 - General Construction Emerging Technology (WHS) NEW!***

<b>Credit(s) 0.5</b>	Students will design, plan, identify and solve problems, and build prototypes. This is an activity-based class in which students use electrical and mechanical equipment to build solutions to technical problems. Students in this class will first study the building of structures. Full size and model buildings will be reviewed. Conventional and modern technologies are discussed and used in the design and production process. Students will then move on to the practical application of mechanical devices, products, or substances, to contribute to the harmony between humans and their environment.
<b>WHS</b>	
<b>Prerequisite:</b>	Woodworking

***1230 - Power and Mechanics (WHS) NEW!***

<b>Credit(s) 0.5</b>	Students will design, plan, identify and solve problems, and build prototypes. This is an activity-based class in which students use electrical and mechanical equipment to build solutions to technical problems. Students in this class will first study the building of structures. Full size and model buildings will be reviewed. Conventional and modern technologies are discussed and used in the design and production process. Students will then move on to the practical application of mechanical devices, products, or substances, to contribute to the harmony between humans and their environment.
<b>WHS</b>	
<b>Prerequisite:</b>	Introduction to Automobiles

## CAREER & TECHNICAL EDUCATION BUSINESS



The business program is designed to develop problem-solving skills for everyday life, to identify goals, to analyze methods of achieving those goals, and to assist students in making informed career choices. These courses are not only valuable preparation for those students who are planning for a career in business, but also for those interested in other career paths. The business methods and skills taught will be useful to students entering the business field immediately after graduation, as well as to those planning to attend college or a business school.

**(For information on Honors, AP, IB, NCC and UConn ECE courses, see pages 9-10)**

### COURSE OFFERINGS

Introduction to Word Processing (0.5 credit) <b>(WHS)</b>	Managerial Accounting (0.5 credit) <b>(SHS)</b>
Technology Skills for the 21 <sup>st</sup> Century (0.5 credit)	Marketing in the 21 <sup>st</sup> Century
Information Technology (0.5 credit)	Marketing Education 2 <b>(SHS)</b>
Information Technology and Design (0.5 credit)	Personal Finance (0.5 credit)
Accounting 1, 2	Sports and Entertainment Management and Marketing
Advanced Principles of Accounting	Web Design
Business Concepts (0.5 credit)	Introduction to Game Design (0.5 credit)
Business Exploration <b>(SHS)</b>	Python A (0.5 credit) / Python B (0.5 credit) <b>(WHS)</b>
Business Law	Honors Data Science <b>(WHS)</b>
Career Pathways and Success Skills (0.5 credit)	UConn ECE Essentials of Economics (0.5 credit) <b>(SHS)</b>
Business Math	NCC Web Development & Design I (0.5 credit) <b>(SHS)</b>
Entrepreneurship	NCC Database Development 1 (0.5 credit) <b>(SHS)</b>
Entrepreneurship in the 21 <sup>st</sup> Century	NCC Introduction to Programming (0.5 credit) <b>(SHS)</b>
International Business (0.5 credit) <b>(SHS)</b>	IB Business Management HL 1&2 <b>(SHS)</b>
Introduction to Investments and the Stock Market (0.5 credit)	IB Computer Science SL 1&2 <b>(SHS)</b>
	IB Computer Science HL 1&2 <b>(SHS)</b>

#### *2450 - Introduction to Word Processing (WHS)*

#### *2454 - Sheltered*

**Credit(s) 0.5**

**WHS**

This course focuses on mastery of the touch typing system. The formatting of personal business letters, business letters, MLA Reports and resumes are covered.

**2465 - Technology Skills for the 21st Century**  
**2466 - Sheltered**

**Credit(s) 0.5**

<b>SHS</b>	<b>WHS</b>
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This course is designed for students who have already mastered the touch typing system. Students are challenged to improve their written communication skills by engaging in several office simulations and creating business letters, memos, and their personal resumes. Students learn proper email etiquette and strategies for developing effective presentation skills. They collaborate with each other on several projects using the Cloud application and Google Docs.

**2115 - Information Technology**

**Credit(s) 0.5**

<b>SHS</b>	<b>WHS</b>
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This course focuses on Microsoft Word for word processing, Microsoft PowerPoint for presentations, and Microsoft Excel for spreadsheets. In the word processing application, students create and edit an MLA report, resume, and cover letter. Using the presentation software, students create and edit a presentation with illustrations and shapes. Using the spreadsheet software, students create a worksheet with embedded charts, learn to use formulas, functions, web queries, what-if analysis charting, and learn to work with large worksheets.

**2075 - Information Technology and Design**

**Credit(s) 0.5**

<b>SHS</b>	<b>WHS</b>
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This course focuses on Microsoft Publisher for desktop publishing and Microsoft Access for databases. In the desktop publishing application, students create and edit a publication, design a newsletter, create business cards, create letterhead, and create an interactive website. In the database application, students create a database, query a database, and prepare reports and forms.

**2170 - Accounting 1**

**Credit(s) 1**

**Grade 10, 11, 12**

<b>SHS</b>	<b>WHS</b>
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This course introduces financial accounting theory and practices for the sole proprietor, partnership, and corporate forms of business organization. Students learn the basics of the accounting cycle and learn how to use accounting information as a basis for decision-making. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.

**2170 - Accounting 2**

**Credit(s) 1**

**Grade 11, 12**

This course is designed for those students who are considering a business course of study in college. Accounting 2 focuses on the applications of accounting principles and techniques used in the majority of business transactions. Students use standard accounting

<b>SHS</b>	<b>WHS</b>	practices and business procedures with an emphasis on the various managerial aspects of a business operation. Computers are used to perform the various accounting applications such as spreadsheets. After completing this course, students may earn 3 college credits by passing the CLEP exam (College Level Exam Program) in Financial Accounting.
<b>Prerequisite:</b>		Accounting 1

### 2275 - Advanced Principles of Accounting (WHS)

<b>Credit(s) 1</b>	<b>WHS</b>	<p><b>NOTE:</b> Westhill High School participates in the University of Bridgeport Dual Enrollment program. Students will be awarded academic credit equal to the same course at the University of Bridgeport (Accounting 101).</p> <p>This course is an introduction to the basic principles of Accounting and how to account for business transactions. Emphasis is on the understanding of how financial statements are prepared, and how they are used as a basis for decision making by business owners, investors, creditors, government and others interested in the financial condition of an economic entity and the result of its operations. Topics include Analyzing Transactions; the Matching Concept and the Adjusting Process; Completing the Accounting Cycle; Accounting for Merchandising Business; Accounting Systems, Internal Controls, and Cash; and Receivables.</p>

### 2390 - Business Concepts

<b>Credit(s) 0.5</b>	<b>WHS</b>	This introductory course includes an in-depth study of business concepts and the world of work. It contains units on principles of economic and consumer education, as well as business standards and ethics. An introduction to international business is included.
<b>Grade 9, 10</b>		
<b>SHS</b>		

### 2120 - Business Exploration (SHS)

<b>Credit(s) 1</b>	<b>SHS</b>	This course is designed for the senior who is considering a business course of study in college. The accelerated format prepares students for the rigors of a college course in both pace and subject matter. Students concentrate their studies in Management, Technology & Information, Finance, Marketing Management, and Global Business Environment. The Course incorporates the Internet e-learning tools including video lectures, digitized videos, tutorials/quizzes with feedback, and integrated e-books.
<b>Grade 12</b>		

### 2370 - Business Law

<b>Credit(s) 1</b>	<b>Grade 10, 11, 12</b>	<p><b>NOTE:</b> Westhill High School participates in the University of Bridgeport Dual Enrollment program. Students will be offered 3 semester hours if they achieve a grade of B or better.</p>

<b>SHS</b>	<b>WHS</b>	This course is designed for those students who are considering a business course of study in college. Business Law focuses on the study of the state and federal court structure, the laws of business, contracts, sales, bailments, negotiable paper, agency insurance, and business organization. Students learn about the importance of the law in our form of government and their legal rights and obligations with respect to the juvenile justice system.
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**2100 - Career Pathways and Success Skills**

<b>Credit(s) 0.5</b>		The curriculum of this course is designed to teach students the skills necessary to transition to high school, be college ready, and prepared to succeed in the various roles they will play as educated citizens in society. While exploring several career options students learn how to utilize all available career and college resources (e.g. Bureau of Labor Statistics, Naviance, and Financial Aid) to their advantage. They also examine their personal strengths and determine how these strengths are valuable in post-secondary education and the workforce. Students are given the opportunity to develop written and oral communication skills, technological skills, and collaborating skills.
<b>SHS</b>	<b>WHS</b>	

**2400 - Business Math  
2401 - Sheltered**

<b>Credit(s) 1</b>		This course introduces students to practical math principles with an emphasis on discounts, interest, bills, fractions, decimals, percentage, gains and losses, budgets, insurance, checking accounts, and simple records. Business Math, a basic course for students preparing to enter the business world immediately after graduation, may be used to complete one year of the math graduation requirement.
<b>Grade 10, 11, 12</b>		
<b>SHS</b>	<b>WHS</b>	

**2080 - Entrepreneurship**

<b>Credit(s) 1</b>		Designed for students interested in an entrepreneurial career, this course is offered in conjunction with the Network for Teaching Entrepreneurship (NFTE) <a href="http://www.nfte.com">www.nfte.com</a> . Students in this course acquire knowledge in the areas of business opportunity recognition, market research, estimating start-up costs, financing and operating a business. This course has a strong emphasis on business conduct, speaking and presentation skills. Each student is required to write a complete business plan and create a multimedia presentation using Power Point. A class and county competition at the end of the year is held to determine the best business plan and a monetary award is given.
<b>SHS</b>	<b>WHS</b>	

**2081- Entrepreneurship in the 21st Century**

<b>Credit(s) 1</b>		<i><b>NOTE:</b> Stamford High School and Westhill High School participates in the University of Bridgeport Dual Enrollment program. Students will be offered 3 semester hours if they achieve a grade of B or better.</i>
<b>Grade 10, 11, 12</b>		
<b>SHS</b>	<b>WHS</b>	This course is offered as a full-year course and is Designed for students interested in an entrepreneurial career, students will study the basics of marketing, financing, and managing a business. Students will develop their Entrepreneurial mindset while also developing an understanding for analyzing the marketplace, marketing a product or service and business financials. This course has a strong emphasis on business conduct, speaking and presentation skills. Concepts will be delivered with an experiential, conceptual and formal approach. Class participation is key, students' understanding of the concepts introduced will be reinforced and evaluated through discussion, in-class group activities and practical application. Each student is required to write a complete business plan, supported by an oral presentation. A competition at the end of the year will be held to determine the best business plan.

**2090 - International Business (SHS)**

<b>Credit(s) 0.5</b>		This course introduces the study of the global economy and how the United States fits into the worldwide spectrum. The focus is on identifying the social, cultural, political, and economic differences that are unique to the various countries with which Americans do business. An emphasis is on the customs, behavior styles, negotiating techniques, and protocols to use when working with people from around the world. This includes cultural overviews, behavior styles, negotiating techniques, and protocol.
<b>SHS</b>		

**2830 - Introduction to Investments and the Stock Market**

<b>Credit(s) 0.5</b>		This course is an introduction to investments and the stock market in conjunction with direct student participation in the Securities Industries and Financial Markets Association (SIFMA) Foundations Stock Market Game. The course emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Stock market simulations are incorporated into the course.
<b>SHS</b>	<b>WHS</b>	

**2274 - Managerial Accounting (SHS)**

<b>Credit(s) 0.5</b>		This course focuses on the use of fundamental accounting concepts and applications in the decision-making processes that businesses face daily. The topics to be covered include: how information can be provided to companies on the effectiveness of the relevant costs of an organization's product or service; how businesses utilize a budget for planning more
<b>SHS</b>		

	efficiently; and how performance evaluations are used. These topics will be investigated using case studies.
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**2180 - Marketing in the 21st Century**

<b>Credit(s) 1</b>	<i>NOTE: Sacred Heart University credit (3 semester hours) will be offered to students who achieve a grade of B or higher.</i>
<b>Grade 10, 11, 12</b>	
<b>SHS</b>	<p>This course provides an understanding of the business world and development of the student's knowledge and ability in the marketing field. Marketing introduces the students to the processes and strategies involved in transferring business products or services to a consumer. Through interactive discussions and projects, the course's main focus is on analyzing the marketing mix, their interrelationships, and how they are used in the marketing process. Topics include: customer behavior, product policy, channels of distribution, advertising and promotion, price policy, marketing programs and the legal aspects of marketing. Students will recognize the customer-oriented nature of marketing and analyze the impact of marketing activities on the individual, business, and society.</p>
<b>WHS</b>	

**2280 - Marketing Education 2 (SHS)**

<b>Credit(s) 1</b>	This course helps students learn specialized phases of marketing and marketing management. Topics include sales, business organization, display, marketing math, public speaking, color fashion design, and sales promotion. Considerable work may also be done in the field of textile training.
<b>Grade 11, 12</b>	
<b>SHS</b>	
<b>Prerequisite:</b>	Marketing in the 21st Century

**2361 - Personal Finance**

<b>Credit(s) 0.5</b>	This course introduces students to keeping and balancing a checkbook, preparing tax returns, developing a budget, and understanding the social security and tax withholding systems. The focus is on learning how to make wise financial decisions including investing and insurance, as well as establishing and maintaining credit.
<b>Grade 11, 12</b>	
<b>SHS</b>	
<b>WHS</b>	

**2352 - Sports and Entertainment Management and Marketing**

<b>Credit(s) 1</b>	This course covers the foundations of consumer behavior as it relates to the sports and entertainment business industry. Students learn how to design and implement business and marketing plans. Students also learn the integration of product, pricing, goods, and services. Finally Students conduct an analysis of the management of leagues, teams,
<b>SHS</b>	
<b>WHS</b>	

		events, properties, corporations, and manufacturers in the industry. The role of ethics in the business of sports and entertainment is also addressed.
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### 2630 - Web Design

		<p><b>Credit(s) 1</b></p>
		<p>This course helps students plan and develop well-designed websites that combine effective use of graphics, text, and color. The student uses techniques that let users easily and quickly access information. Web sites are built from scratch and redesigned using methods that make using HTML and Dreamweaver web content more interesting, accessible and visually attractive.</p>

		<p><b>Grade 10, 11, 12</b></p>
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		<p><b>SHS</b></p>
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		<p><b>WHS</b></p>
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### 2473 - Introduction to Game Design

		<p><b>Credit(s) 0.5</b></p>
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		<p><b>SHS</b></p>
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		<p><b>WHS</b></p>
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This course introduces students to the history, structure, creation, and developmental strategy of game development. The history, player, and game elements will be examined, as well as the overall creation of the game from storytelling, characters, game play, levels, interface, and audio content based on the summer reading. The developmental strategy will focus on the roles and responsibilities, production and management, and marketing and maintenance of game development.

### 2760 - Python A (WHS)

### 2761 - Python B (WHS)

		<p><b>Credit(s) 0.5 each</b></p>
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		<p><b>WHS</b></p>
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Our Python A/B curriculum is a deep dive into the fundamentals of programming concepts and teaches text-based coding using Python. Python A/B is predicated on the notion that learning about programming and computer science should be fun and engaging. In this introductory programming course we expose students to graphics-based problem solving because it is visually engaging, allows for multiple correct solutions, and provides visual cues when a solution goes awry. Each course is 0.5 credits. Python A is a prerequisite for Python B. Students taking Python A are not committed to continuing with Python B.

		<p><b>Prerequisite:</b></p>
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		<p><b>2761: Python A</b></p>
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### 2650 - NCC Introduction to Programming (SHS)

		<p><b>Credit(s) 0.5</b></p>
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		<p><b>SHS</b></p>
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This course covers Fundamentals of programming and program development techniques. Topics include data types, functions, storage class, selection, repetition, pointers, arrays, and file processing. Programming laboratory projects in a closed laboratory environment are supervised by the instructor.

		<p><b>Prerequisite:</b></p>
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		<p>Placement into Math 172 via Norwalk Community College Accuplacer.</p>
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**2082 - Honors Data Science (WHS)**

<b>Credit(s) 1</b>	In Data Science, students form their own questions about the world around them, analyze data using multiple methods, and write a research paper about their findings. The module covers functions, looping and iteration, data visualization, linear regression, and more. While some basic coding skills are taught in the class, computer programming is not the focus. Instead, students learn how to use programming techniques to search through data to create information.
<b>WHS</b>	
<b>Prerequisite:</b>	Algebra 1

**5981 - UConn ECE Essentials of Economics (SHS)**

<b>Credit(s) 0.5</b>	A general introduction to micro and macroeconomics. Economic concepts include: opportunity costs, demand and supply, incentives, comparative advantage, inflation and employment policies, balance of international payments, and economic growth.
<b>SHS</b>	
<b>Prerequisite:</b>	Successful completion or concurrent enrollment in Geometry & Algebra II

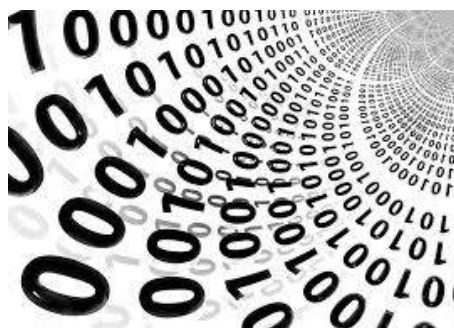
**2652 - NCC Web Development and Design 1 (SHS)**

<b>Credit(s) 0.5</b>	This course provides the entry into the fast moving website development industry. With its heavy hands-on mode of delivery, students will learn XHTML, Cascading Style Sheets, and be exposed to JavaScript. Adhering to standards, specifically from the World Wide Web Consortium (W3C) and the European Computer Manufacturers Association (ECMA), will play a dominant role in the creation of web pages that are both platform and browser independent.
<b>SHS</b>	
<b>Prerequisite:</b>	Placement into English 101 via Norwalk Community College Accuplacer.

**2651 - NCC Database Development I (SHS)**

<b>Credit(s) 0.5</b>	Relational database development including data modeling, database design and database implementation. The student learns to create and alter tables, retrieve, insert, update, and delete data using a fourth generation language (ORACLE) in a supervised laboratory setting. Uses of database technology, understanding DBMS and RDBMS concepts, normalizing designs, transforming of logical design into physical databases, embedded SQL, and the role of the DBA are also covered.
<b>SHS</b>	
<b>Prerequisite:</b>	Placement into English 101 via Norwalk Community College Accuplacer.

## COMPUTER SCIENCE PATHWAY WESTHILL HIGH SCHOOL

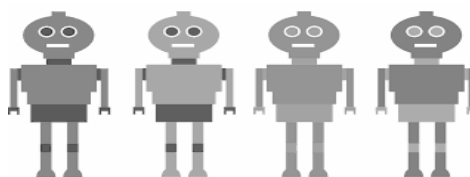


The computer science pathway is a program that provides **special recognition on a student's transcript** based on achievement in computer science-based coursework.

Students who take at least four classes and earn a minimum of 3 ½ credits from the courses listed below will be recognized as having a concentration in computer science during high school.

### ½ credit courses:

- Intro to Computer Science
- Intro to Game Design



### 1 credit courses:

- ★ AP Computer Science Principles
- ★ AP Computer Science A
- ★ Data Structures & Algorithms (formerly Advanced Computer Science AB)
- ★ Honors Cybersecurity
- CP Cybersecurity
- Intro to Web Design
- Robotics
- Honor Data Science



### 1 credit courses - teacher recommendation required

- ★ Independent Study in Computer Science
- ★ Teacher's Aide in Computer Science

### Concentration in Computer Science with Honors

- Complete a minimum of 3 ½ credits from the courses list
- At least three of the courses are starred courses.
- Complete a minimum of 3 ½ credits from the courses list.

### Concentration in Computer Science

- Complete a minimum of 3 ½ credits from the courses list

## MARKETING & ENTREPRENEURSHIP PATHWAY

The Marketing & Entrepreneurship Pathway is a 4-credit certificate program that gives students the opportunity to gain Sacred Heart University (SHU) credits while providing them with a thorough understanding of two industries. Through real world project-based instruction, students will build valuable life and industry specific skills that will set them above their competition during post-secondary education and in the competitive world of business. This extremely flexible program allows students to meet the course requirements across all four years of high school. In order to receive a certification in this pathway, students must fulfill the following requirements.

✓ **Required 2 credits (Recommended for Junior or Senior Year):**

- o 2180\_Marketing in the 21<sup>st</sup> Century (1-credit )\*
- o 2081\_Entrepreneurship in the 21<sup>st</sup> Century (1-credit )\*

*\*Students must receive a final grade of B or better to receive college credit*

✓ **Choice of 1 credit from the following courses:**

- o 2390\_Business Concepts (½ credit)
- o 2352\_Sports Entertainment Management & Marketing (1-credit)
- o 2100\_Career Pathways & Success Skills (½ credit)
- o 2370\_Business Law (1-credit)

✓ **Choice of 1 credit from the following courses:**

- o 2115\_Information Technology (½ credit)
- o 2075\_Information Technology & Design (½ credit)
- o 2630\_Web Design (1-credit)
- o 2465\_Technology Skills in the 21<sup>st</sup> Century (½ credit)

Students who earn a pathway in Marketing & Entrepreneurship will complete course work that ensures they develop essential technical, analytical, and communication skills needed to pursue a career in the field of business. Throughout their coursework, students will participate in project-based learning opportunities, take part in local, state, and national competitions, and have the opportunity to earn college credit through Sacred Heart University.

There is no application necessary; all students who complete 4-credits from the approved list of courses above will earn the distinction of completing a business pathway in Marketing & Entrepreneurship.

## CAREER & TECHNICAL EDUCATION FAMILY & CONSUMER SCIENCES

This program includes courses in individual and family development, culinary arts, fashion and interior design, and life skills. The culinary arts provide instruction in planning nutritionally balanced meals. Designing and constructing clothing and home fashions and interior room design are included in this area. Preparing for life after high school is taught in the life skills area. Practical experience in lab situations is also offered.

**(For information on UConn ECE courses, see pg. 9)**

### Course Offerings

Rising Educators I & II (Honors) (0.5 credit) <b>(SHS)</b> Child Development (0.5 credit) <b>(SHS)</b> UConn ECE Individual & Family Development <b>(SHS)</b> UConn ECE If You Love It, Teach It <b>(SHS)</b>	Introduction to Culinary Arts (0.5 credit) Culinary Arts/Pro-Start 1 <b>(SHS)</b> (Grade 9,10,11) Baking & Pastry/Pro-Start 2 (0.5 credit) <b>(SHS)</b>	International Foods (0.5 credit) <b>(SHS)</b> Interior Design 1 & 2 (0.5 credit) <b>(SHS)</b> Fashion & Furnishings 1 & 2 <b>(WHS)</b>
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### *0390 - Honors Rising Educators I (SHS)* *0391 - Honors Rising Educators II (SHS)*

<b>Credit(s) 0.5</b>	This honors-level course is designed for sophomores, juniors and seniors who are interested in exploring a career in teaching in any grade level from early childhood through high school. Class discussion and assignments will focus on the profession of teaching – its history, purposes, issues, ethics, laws, roles, and qualifications. Students will explore different learning styles, learning theories, and methods of instruction. Students will participate in guided observations and participate in internship-field experiences outside of the classroom. Students will have access to unique benefits such as networking with Educators across the Stamford district, membership in the school’s Rising Educators Club, attending national Educators Rising national conferences, and being part of the Educators Rising membership network of peers across the country.
<b>SHS</b>	

### *0392 - Child Development (SHS)*

<b>Credit(s) 0.5</b>	This course provides students with an understanding of the aspects of human growth and development. Positive guidance techniques and child-related issues are studied. Learning activities and lab experiences in working with preschool children are included. Each student has the opportunity to work with a computerized baby.
<b>SHS</b>	

**0393 - UConn ECE Human Development & Family Studies (SHS)**

<b>Credit(s) 1</b>	Human Development & Family Science will provide students with an understanding of individual and family development over the lifespan. The course will focus on the developing individual in the context of the family system and the changes that occur in family systems over time. The course will include an internship component. Students may be eligible for three (3) UCONN credits provided they have completed all the course work and they have completed forty (40) internship hours.
<b>SHS</b>	

**5613 - UConn ECE Education Curriculum and Instruction, *If You Love It, Teach It* (SHS) NEW!**

<b>Credit(s) 1</b>	This is an educational foundations survey course for those who are interested in learning more about the landscape of K-12 education and how to connect their passions to it. <i>If You Love it, Teach It</i> engages students interested in working in K-12 settings in studies about teaching, learning, and schooling in the United States. It explores teaching and learning as processes that can relate to personal passions as well as how those passions are shaped, cultivated, or denied in different educational contexts. Course topics will include introductions to historical, philosophical, and social foundations of education, as well as how those foundations and personal passions relate to teaching as a profession, school organization, educational reform, and the reimagining of educational futures.
<b>SHS</b>	

**0140 - Introduction to Culinary Arts**

<b>Credit(s) 0.5</b>	This course prepares students to identify, use, and care for kitchen tools, understand safety and sanitation in the kitchen, develop level one food preparation terminology, and practice how to use a recipe. Hands-on experiences in food preparations are practiced in a teamwork setting.
<b>Grades 9, 10, 11</b>	
<b>SHS</b>	

**0282 - Culinary Arts / Pro-Start 1 (SHS)**

<b>Credit(s) 1</b>	This course offers students who have completed Introduction to Culinary Arts an opportunity to learn the basics of professional restaurant food production and hospitality through project-based food practicums. The daily living and career benefits of developing culinary skills are emphasized. Students are exposed to advanced culinary techniques, restaurant equipment, and operating procedures of restaurants and institutions. Students are offered the opportunity to compete regionally and nationally. Upon completion of the Pro-Start program, students are able to earn college scholarships and 3 credits at Norwalk Community College.
<b>SHS</b>	
<b>Prerequisite:</b>	Intro to Culinary Arts

**0283 - Baking and Pastry / Pro-Start 2 (SHS)**

<b>Credit(s) 0.5</b>	This course reinforces all of the techniques learned in Introduction to Culinary Arts and Culinary Arts 1 through the art of baking. Quick breads, batters, and yeast products are explored. Pies, tarts, and cake decorating are an integral component of the class. The chemistry of baking is also studied. Students are exposed to career opportunities within this expanding industry. Upon completion of the Pro-Start program, students are able to earn college scholarships and 3 credits at Norwalk Community College.
<b>SHS</b>	
<b>Prerequisite:</b>	Intro to Culinary Arts and Culinary Arts

**0284 - International Foods (SHS)**

<b>Credit(s) 0.5</b>	This course reinforces all of the techniques learned in Introduction to Culinary Arts and Culinary Arts 1 through the art of baking. Quick bread, batters, and yeast products are explored. Pies, tarts, and cake decorating are an integral component of the class. The chemistry of baking is also studied. Students are exposed to career opportunities within this expanding industry. Upon completion of the Pro-Start program, students are able to earn college scholarships and 3 credits at Norwalk Community College.
<b>SHS</b>	
<b>Prerequisite:</b>	Intro to Culinary Arts and Culinary Arts

**021 - Fashion and Furnishings 1 (WHS)**

<b>Credit(s) 1</b>	This course introduces students to the world of fashion and furnishings through project-based learning. Students learn the basics of hand and machine stitching, alterations, and fabric selection and care. An introduction to common silhouettes, styles, and details of clothing design are covered. Students are exposed to career opportunities in design, manufacturing, fashion, illustration, and starting one's own business.
<b>WHS</b>	

**022 - Fashion and Furnishings 2 (WHS)**

<b>Credit(s) 1</b>	Students expand and enhance the skills developed in Fashion and Furnishings 1 and delve further into the field of fashion and furnishing careers. Individual projects incorporate advanced construction techniques while students develop their sketching skills and portfolio development. This course includes the history of fashion and fashion designers, as well as fabric terminology and finishes, and styles and trends.
<b>WHS</b>	

*1265 - Interior Design 1 (SHS)*

**Credit(s) 0.5**

**SHS**

This course enables students to explore their creativity in the field of interior design. Identification and utilization of the elements and principles of design are emphasized. Creating functional and pleasing living environments based on sound financial decisions and design principles is emphasized. Skills in mathematics, technology, and art are reinforced. Other topics included are housing choices, area planning, and careers.

*1266 - Interior Design 2 (SHS)*

**Credit(s) 0.5**

**SHS**

This course reinforces the principles learned in Interior Design 1. Colleges and careers within this expanding field are examined. The elements and principles of design are further utilized through project-based learning. Room design and finishes are discussed. Skills in mathematics, technology, and art are reinforced. Individual projects reinforce research and writing skills.



Maggie Wood – Westhill High School

## WORLD LANGUAGES



Modern technology has made it imperative that we learn to communicate successfully with people of other lands in and through their native language. The World Languages program provides for instruction in three modern languages as well as in the classical language of Latin. The program emphasizes communication and understanding and appreciation of other people’s literature and culture. It also recognizes the need for developing speaking competence and proficiency in the language of the student’s choice as related to possible career goals. World language classes are taught according to the Stamford Board of Education and State of Connecticut curriculum guidelines of communication, cultures, connections, comparisons, and communities.

**(For information on Honors, AP, IB, and UConn ECE courses, see pages 9-10)**

### Graduation Requirement 1 Credit\* - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
French 1 Honors French 2 Italian 1 Honors Italian 3 Spanish 1 Honors Spanish 2	French 2 Honors French 3 Italian 2 Honors Italian 4 Spanish 2 Honors Spanish 3	French 3 Honors French 4 Italian 3  Spanish 3 Honors Spanish 4	French 4H   Spanish 4 Honors Spanish 5

**\*2-3 credits within the same language recommended for college admissions**

### Course Offerings

French 1, 2, 3, 4 Honors French 2, 3, 4, AP French <b>(WHS)</b>	Introduction to American Sign Language American Sign Language 2	AP Spanish Language  UConn ECE Spanish <b>(WHS)</b> AP Spanish Literature <b>(WHS)</b>	IB Spanish 1 <b>(SHS)</b> IB Spanish SL 1&2 <b>(SHS)</b> IB Spanish HL 1&2 <b>(SHS)</b> IB Spanish Ab Initio 1&2 <b>(SHS)</b> IB Italian Ab Initio SL 1 <b>(SHS)</b>
Italian 1, 2, 3 Honors Italian 3, 4	Spanish Native Language Arts 1, 2	Heritage Spanish 1 Honors Heritage Spanish 2	
Spanish 1, 2, 3, 4 Honors Spanish 2, 3, 4, 5			

### 4100 - French 1

Credit(s) 1		This introductory course is designed for students with little or no previous study of French, focusing on all four-language skills: listening, speaking, reading, and writing, while emphasizing oral communication and cultural connections. In addition to traditional methods of assessment, students role-play, make small oral presentations, and engage in guided conversations.
<b>SHS</b>	<b>WHS</b>	



**4200 - French 2**  
**4610 - Honors**

**Credit(s) 1**

**SHS**

**WHS**

This course continues to develop the skills begun in French 1 through listening, speaking, reading, and writing, with a special emphasis on oral communication and cultural connections. In addition to traditional methods of assessment, students role-play, make small presentations, and engage in guided conversations.

**Prerequisite:**

Completion of French 1

**4300 - French 3**  
**4620 - Honors**

**Credit(s) 1**

**SHS**

**WHS**

This course develops language acquisition more in-depth through the four language skills: listening, speaking, reading, and writing, with an increasing emphasis on reading a wider variety of materials. Students achieve a higher degree of comprehension and are able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations, and presenting their own skits.

**Prerequisite:**

Completion of French 2

**4400 - French 4**  
**4640 - Honors**

**Credit(s) 1**

**SHS**

**WHS**

This course focuses on listening, speaking, reading, and writing at the intermediate/pre-advanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Francophone literature, as well as other non-fiction texts. Students demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language.

**Prerequisite:**

Completion of French 3

**4670 - Honors French 5**

**Credit(s) 1**

**SHS**

**WHS**

This course is designed to provide students with continued instruction in French and may enable some to prepare for the AP French Language course. This course will focus on broad themes including society and its problems, education and finance, art, news coverage, television, and various readings in literature. There will also be a film component and an emphasis on contemporary culture. In addition, there will be fine-tuning of grammatical points covered in previous years of study.

**Prerequisite:**

Completion of French 4

**4500 - AP French (WHS)****Credit(s) 1****WHS**

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of French at the college level. Attention is given to reading, analyzing, and producing in-depth critical thinking on contemporary and literary issues in both oral and written forms. Students participate freely and fluently in class discussions in the target language.

**Prerequisite:**

Completion of Honors French 5

**4911 - Introduction to American Sign Language****Credit(s) 0.5****SHS****WHS**

American Sign Language uses hands and faces to communicate with people who are deaf or hard of hearing. Introduction to sign language is for students with little to no ASL experience. Students will learn the alphabet, numbers basic vocabulary, and conversational skills.

**Prerequisite:**

Administrative approval required

**4912 - American Sign Language 2****Credit(s) 0.5****SHS****WHS**

This course is a continuation to American Sign Language. Students will continue to develop their conversational skills and vocabulary.

**Prerequisite:**

Introduction to American Sign Language, Administrative approval required

**4120 - Italian 1****Credit(s) 1****SHS****WHS**

This introductory course is designed for students with little or no previous study of Italian, focusing on all four-language skills: listening, speaking, reading, and writing while, emphasizing oral communication and cultural connections. In addition to traditional methods of assessments, students role-play, make small oral presentations, and engage in guided conversations.

**4220 - Italian 2****Credit(s) 1****SHS****WHS**

This course continues to develop the skills begun in Italian 1 through listening, speaking, reading, and writing, with a special emphasis on oral communication and cultural connections. In addition to traditional methods of assessments, students role-play, make small presentations and engage in guided conversations.

**Prerequisite:**

Completion of Italian 1

**4320 - Italian 3**  
**4321 - Honors**

**Credit(s) 1**

<b>SHS</b>	<b>WHS</b>
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This course develops language acquisition more in-depth through the four language skills: listening, speaking, reading, and writing, with an increasing emphasis on reading a wider variety of materials. Students achieve a higher degree of comprehension and are able to communicate cultural materials in broader terms by making presentations, written compositions, readings, dictations, and presenting their own skits.

**Prerequisite:**

Completion of Italian 2

**4421 - Honors Italian 4**

**Credit(s) 1**

<b>SHS</b>	<b>WHS</b>
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This course requires students to acquire more sophisticated and complex structures in speaking, grammar, and literary forms of the Italian language in an effort to become truly literate or bilingual. Students in this level of Italian have already mastered the fundamentals and move at a rapid pace in their continued acquisition of the language. These students may be offered the opportunity to take the Italian Advanced Placement exam.

**Prerequisite:**

Completion of Italian 3

**4130 - Spanish 1**

**Credit(s) 1**

<b>SHS</b>	<b>WHS</b>
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This introductory course is for students with little or no previous study of Spanish, focusing on all four-language skills: listening, speaking, reading, and writing, while emphasizing oral communication and cultural connections. In addition to traditional methods of assessments, students role-play, make small oral presentations, and engage in guided conversations.

**4230 - Spanish 2**  
**4600 - Honors**

**Credit(s) 1**

<b>SHS</b>	<b>WHS</b>
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This course continues to develop the skills begun in Spanish 1 through listening, speaking, reading, and writing, with a special emphasis on oral communication and cultural connections. In addition to traditional methods of assessments, students role-play, make small presentations, and engage in guided conversations.

**Prerequisite:**

Completion of Spanish 1

**4330 - Spanish 3**  
**4630 - Honors**

**Credit(s) 1**

**SHS**

**WHS**

This course develops language acquisition more in-depth through the four language skills: listening, speaking, reading, and writing, with an increasing emphasis on reading a wider variety of materials. Students achieve a higher degree of comprehension and are able to communicate cultural materials in broader terms by making presentations, written compositions, readings, dictations, and presenting their own skits.

**Prerequisite:**

Completion of Spanish 2

**4430 - Spanish 4**  
**4650 - Honors**

**Credit(s) 1**

**SHS**

**WHS**

This course focuses on listening, speaking, reading, and writing at the intermediate/pre-advanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, literature from Latin America and Spain, as well as other non-fiction texts. Students demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language.

**Prerequisite:**

Completion of Spanish 3

**4680 - Honors Spanish 5**

**Credit(s) 1**

**SHS**

**WHS**

This course is designed to provide students with continued instruction in Spanish prior to the AP Spanish Language course. This course will focus on broad themes including society and its problems, education and finance, art, news coverage, television, and various readings in literature. In addition, there will be fine-tuning of grammatical points covered in previous years of study.

**Prerequisite:**

Completion of Spanish 4

**4530 - AP Spanish Language**

**Credit(s) 1**

**SHS**

**WHS**

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of Spanish at the college level. Attention is given to reading, analyzing, and producing in-depth critical thinking on contemporary and literary issues in both oral and written forms. Students participate freely and fluently in class discussions in the target language.

**Prerequisite:**

Completion of Honors Spanish 5 or Honors Heritage Spanish 2

**4535 - UCONN ECE Spanish (WHS)**

<b>Credit(s) 1</b>	UConn’s Early College Experience (ECE) is an opportunity for students to take UConn’s Spanish courses while still in high school. Every UConn ECE Spanish course is equivalent to the same course at the University of Connecticut. Students earn college credit for a fraction of the cost. The courses offered are Culture and Conversation and Writing and Conversation.
<b>WHS</b>	
<b>Prerequisite:</b>	Must have completed Spanish 1, 2, 3, 4, & be able to understand, speak, read & write Spanish proficiently

**4580 - AP Spanish Literature**

<b>Credit(s) 1</b>	This course is designed as the culminating course for the Spanish sequence. The AP Spanish Literature course is comparable to a third-year college introduction to Hispanic literature course. It is based on a required reading list. The works on the list are of literary significance and represent various historical periods, literary movements, genres, geographic areas, and population groups within the Spanish-speaking world. The objective of the course is to help students interpret and analyze literature in Spanish.
<b>WHS</b>	
<b>Prerequisite:</b>	Completion of Honors Spanish 5 or Honors Heritage Spanish 2

**4131 - Heritage Spanish 1**

<b>Credit(s) 1</b>	This course is designed for students with little or no formal education in the Spanish language, but who were born in Spanish speaking homes. Attention is given to language misconceptions and anglicized expressions that are common to Spanish speakers born in the United States. Grammar and vocabulary are taught in context through age-appropriate readings of short stories, periodicals, thematic essays, and poetry. Upon completion of this course, students are better prepared for advanced-level language courses.
<b>SHS</b>	

**4231 - Honors Heritage Spanish 2**

<b>Credit(s) 1</b>	This course requires students to achieve more sophisticated and complex structures in spelling, grammar, and literary forms of the Spanish language in an effort to become truly literate or bilingual. Through the study of Latin American authors and their literature, students will develop interpretive skills and become fluent in written response to literature. This course will prepare students for the Advanced Placement Spanish Language course. Students are expected to participate in the COLT Annual Poetry Contest and the National Spanish Examination.
<b>SHS</b>	

*3141 - Spanish Native Language Arts 1**3142 - Spanish Native Language Arts 2***Credit(s) .5**

This course is designed for native speakers of Spanish who need to develop literacy skills in their first language. It will start with the basics of language arts skills including phonetics, orthography, reading basics, and writing instruction.

**SHS****WHS****Prerequisite:**

Native speaker of Spanish who does not read or write in language



Jaline White - Stamford High School

## HEALTH AND PHYSICAL EDUCATION

The Health Education Program provides students with a comprehensive study of various aspects of personal health and wellness. Units include decision-making process, emotional health, nutrition, fitness, sexual health, substance use and abuse, violence prevention, First Aid and CPR. Students are required to take one full credit (two semesters) of Health courses, typically taken during 9<sup>th</sup> and 10<sup>th</sup> grades.

The Physical Education Program fosters an environment where all students are physically educated and participate in lifelong physical activity. Students have a variety of options to choose from to develop and enhance their personal fitness and wellness. All students are required to take one full credit (two semesters) of Physical Education, typically taken during 9<sup>th</sup> and 10<sup>th</sup> grades. During their sophomore year, all students will participate in the state-mandated Connecticut Physical Fitness Test within their Physical Education class.

### Graduation Requirement 1 Credit of Health and 1 Credit of Physical Education - Possible Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
Health 1 / Team Sports* Team Sports / Health 1*	Health 2 / Team Sports* Team Sports / Health 2*		
*These courses do not have to be taken in grades 9 and 10 but this is a typical sequence.			

### Electives

Health 1, 2 Human Behavior 1,2 Physical Education 9, 10 Adaptive Physical Education Unified Physical Education (SHS)	Sports Medicine Team Sports Leisure Sports Fitness / Weight Training Cardio Fitness	Power Walking Dance Forms Yoga Beginner Swimming (WHS) UConn ECE Health and Education in Urban Communities (SHS)	Health Science Technology I (WHS) Health Science Technology II (WHS)
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**9900 - Health 1**

**9831 - Sheltered**

**9680 - Administrative approval required**

**Credit(s) 0.5**

<b>SHS</b>	<b>WHS</b>
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This course examines the relationship that exists among physical, emotional, and social health. Students explore the decision-making process and learn how their decisions contribute to their personal health and lifelong wellness. Topics emphasized include, but are not limited to, emotional health, nutrition, fitness, substance use and abuse, sexual health, violence prevention, and responding to emergencies.

**9910 - Health 2**  
**9832 - Sheltered**  
**9820 - Administrative approval required**

<b>Credit(s) 0.5</b>		This course further examines topics covered in Health 1 in detail and depth. Students explore personal decision-making skills while reflecting on knowledge of the material. Content material emphasizes emotional health, nutrition, fitness, substance use and abuse, sexual health, violence prevention, First Aid and CPR.
<b>SHS</b>	<b>WHS</b>	

**9830 - Health Behavior 1**

<b>Credit(s) 0.5</b>		This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive self-image, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.
<b>Grades 11, 12</b>		
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Health 1 and 2

**9840 - Health Behavior 2**

<b>Credit(s) 0.5</b>		This course continues to examine the principles of human behavior through guided group discussions. Major topics emphasize gender roles, dating relationships, marriage, family life, human sexuality, pregnancy, and death. The course also explores life philosophies in relationship to these topics.
<b>Grades 11, 12</b>		
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Health 1 and 2

**9010 - Physical Education 9**

<b>Credit(s) 0.5</b>		This course engages students by encouraging lifelong fitness. Activities offered in this course include, but are not limited to, soccer, touch football, volleyball, softball, floor hockey, basketball, tennis, badminton, cooperative games, and fitness. Students develop the skills and fitness level necessary to participate in the Connecticut Physical Fitness Test in their sophomore year.
<b>Grades 11, 12</b>		
<b>SHS</b>	<b>WHS</b>	

**9160 - Physical Education 10**

<b>Credit(s) 0.5</b>		This course engages students by encouraging lifelong fitness. Students continue to prepare for the Connecticut Physical Fitness Test and will participate in the fitness test during their sophomore year in this class. In addition, students may participate in soccer, touch football, volleyball, softball, floor hockey, basketball, tennis, badminton, cooperative games, and fitness.
<b>SHS</b>	<b>WHS</b>	



**9643 - Unified Physical Education (SHS)**

<b>Credit(s) 0.5</b>	This course engages students by encouraging lifelong fitness. Students continue to prepare for the Connecticut Physical Fitness Test and will participate in the fitness test during their sophomore year in this class. In addition, students may participate in soccer, touch football, volleyball, softball, floor hockey, basketball, tennis, badminton, cooperative games, and fitness.
<b>SHS</b>	
<b>Prerequisite:</b>	Administrative approval required

**9640 - Adaptive Physical Education (WHS)**

<b>Credit(s) 1</b>	This course develops and maintains general physical fitness levels through active participation in selected physical activities. The course provides an introduction of individual and team sports with an emphasis placed on skills acquisition and sportsmanship through competition. Students participate in individual and team competitions.
<b>WHS</b>	
<b>Prerequisite:</b>	Administrative approval required

**9030 - Sports Medicine**

<b>Credit(s) 0.5</b>	This course examines human anatomy and the care and prevention of athletic injuries. Topics emphasize First Aid, CPR, muscular anatomy, skeletal anatomy, injury prevention, sports nutrition, and athletic training. Students explore the field of Sports Medicine by participating in a required fifteen-hour job-shadowing project.
<b>Grades 11, 12</b>	
<b>SHS</b>	
<b>Prerequisite:</b>	Health 1 and 2 and Biology

**9340 - Team Sports**

<b>Credit(s) 0.5</b>	This course engages students who wish to participate in team sport activities. Students develop basic and intermediate skills and guidelines of each sport. Activities may include: touch football, soccer, basketball, volleyball, softball, floor hockey, and a variety of cooperative games.
<b>Grades 11, 12</b>	
<b>SHS</b>	

**9350 - Leisure Sports**

<b>Credit(s) 0.5</b>	This course engages students who wish to participate in a variety of individual or dual sports. Students develop basic and intermediate skills and guidelines of each sport. Activities may include: tennis, badminton, golf, handball, pickle-ball, archery, and table-tennis.
<b>Grades 11, 12</b>	
<b>SHS</b>	

**9360 - Fitness / Weight Training****Credit(s) 0.5****Grades 11, 12****SHS****WHS**

This course engages students who wish to participate in a personal fitness program. The instructor develops personalized fitness programs for students based on individual goals. Fitness routines include resistance training and cardiovascular strength and endurance, utilizing both the weight room and fitness center.

**9390 - Cardio Fitness****Credit(s) 0.5****Grades 11, 12****SHS****WHS**

This course engages students who wish to improve their cardiovascular strength and endurance and participate in a personal fitness program. The instructor develops personalized fitness programs for students based on individual goals, utilizing equipment in the Fitness Center.

**9380 - Power Walking****Credit(s) 0.5****Grades 11, 12****SHS****WHS**

This course engages students to develop an appreciation for lifelong fitness. The students are engaged in walking routines to challenge cardiovascular endurance. This course may include trips to area parks or trails.

**9190 - Dance Forms****Credit(s) 0.5****Grades 11, 12****SHS****WHS**

This course engages students in movement concepts, tempos, and beats. Students develop an appreciation for the many different dance styles. Dance Forms include choreographing varied dance styles.

**9930 - Yoga****Credit(s) 0.5****Grades 11, 12****SHS****WHS**

This course offers an opportunity for physical education students to be physically active in a relaxing, non-competitive environment. Students will learn yoga poses, stretches, and breathing techniques that create a mind and body connection. Yoga will address the fitness components of flexibility and muscular strength while enhancing self-efficacy of students.

**Prerequisite:**

Must have passed 0.5 credit of Physical Education

**9170 - Beginner Swimming (WHS)**

**Credit(s) 0.5**

**Grades 11, 12**

**WHS**

This course introduces students to basic swimming instruction and water safety. Instruction develops and enhances participants' swimming levels.

**9180 - Intermediate Swimming (WHS)**

**Credit(s) 0.5**

**Grades 11, 12**

**WHS**

This course engages students with a basic swimming ability. Participants' ability levels may increase to the intermediate/advanced level. This course includes water safety, swimming instruction, aqua fitness, structured water games, and possibility of American Red Cross Lifeguard Certification training.

**9951 - UConn ECE Health and Education in Urban Communities (SHS)**

**Credit(s) 0.5**

**Grades 11, 12**

**SHS**

UCONN EDLR 1162 explores historical and social forces that shape health and education in urban communities, specifically in Connecticut. Topics of study will include poverty, culture, and identity and how these phenomena affect children's health, nutrition, schooling, and opportunities for success. Through readings, films, discussion, reflection, and service-learning opportunities, class members analyze policies, norms, and beliefs in our society. Students will be challenged to consider how these trends may lead us to a more just society and how these may perpetuate injustice. Students are required to complete a 15-hour community service project.

**9921 - Health Science Technology I (WHS)**

**Credit(s) 1**

**Grades 11, 12**

**WHS**

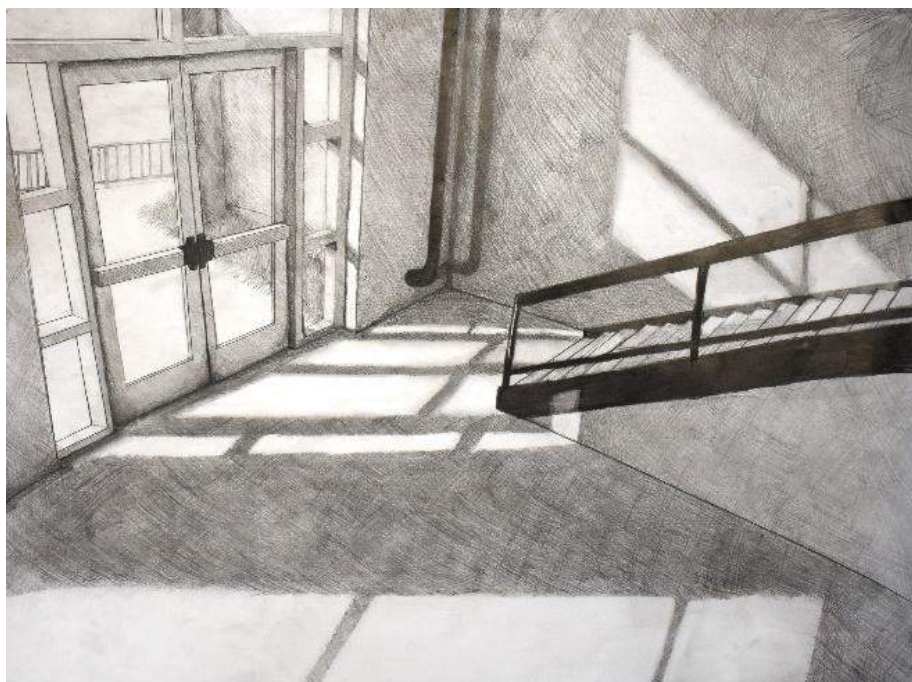
Students will be able to identify and address future goals and aspirations through this introductory program. The course will be geared towards students who have taken and passed Honors Biology with a score of C or better and have aspirations of pursuing a career in the medical professions. Foundations of healthcare will be explored including the legal and ethical aspects of healthcare. Students will research career pathways in health care and develop general knowledge about basic health care management and training including safety, infection control, family dynamics, abuse & neglect as well as therapeutic-communication skills. Clinical assessment competencies will be taught including blood pressure, vital signs, medical terminology, and Red Cross First Aid and CPR training.

**Prerequisite:**

C or better in Honors Biology, Health 1, and Health 2

**9922 - Health Science Technology II (WHS)**

<b>Credit(s) 1</b>	Students would have to receive a passing grade of C or better in Health Science Technology I to take this course. The course would address the etiology and development of disease as it relates to the human body. The basic mechanisms underlying these processes as it relates to bodily functions will be discussed and projects geared toward understanding disease management. Students will be able to develop general assessment skills and practice and proficiency in a facsimile health care setting. Development of skills during disease management, clinical assessment & developing differential diagnoses. Technology in the healthcare setting, ECG monitoring & interpretation. Critical-thinking and systematic problem-solving skills related to assessment, diagnosis, and treatment in healthcare. The psychology of healthcare and patient management including mental health assessment training, domestic violence, and sexual assault awareness, care, and treatment.
<b>Grades 11, 12</b>	
<b>WHS</b>	
<b>Prerequisite:</b>	C or better in Health Science Technology I



Jeison Lopez – Stamford High School

**9208 - First-Year Seminar NEW!**

<b>Credit(s) 0.5</b>		First-Year Seminar is a required course that offers ninth-graders relevant skills, tools, and knowledge to navigate high school effectively and informs decisions for life beyond graduation. This course will introduce 9th graders to the culture of their school, focusing on the traditions, activities, and services available. Students will work on academic planning; career development; and explore related post-secondary education and training options. Topics may include study skills/test preparation, goal setting, career pathways, career planning, course selection, conflict resolution, team building, school climate, advocacy, and others.
<b>SHS</b>	<b>WHS</b>	

**900 - Student Assistant**

<b>Credit(s) 0.5</b>		With principal or designee permission, students work as aides under the direct and continuing supervision of a faculty member to successfully complete the tasks assigned. In addition, students are required to maintain a satisfactory attendance record for the days scheduled. Student Assistants may be engaged by the semester or by the year. Examples of areas in which students may be approved to work include, but are not limited to, Media Center, School Counseling Office, Departmental Offices, or Main Office.
<b>SHS</b>	<b>WHS</b>	

**9706 - Cooperative Work Education NEW!**

<b>Credit(s) 1</b>		The Stamford Public Schools Cooperative Work Education Program is designed to equip Juniors and Seniors (who will be preferred) with real-world occupational skills as well as a business-oriented curriculum to support a successful transition into the workforce. The Cooperative Work Education program is made up of two components: virtual modules with asynchronous and synchronous sessions and work-based learning experiences. Students earn 1 credit for the work-based learning and the virtual class-based learning experiences combined. Students may use their current job and must submit online academic work as well as attend the select synchronous online after school sessions. The CWE program is open to Juniors and Seniors at SHS and WHS who are interested in learning about the world of work. Signature from Administrator and approval from the CWE Coordinator is needed for complete enrollment.
<b>SHS</b>	<b>WHS</b>	
<b>Prerequisite:</b>		Signature from Administrator, approval from the CWE Coordinator and submission of <a href="#">this form</a> are needed for complete enrollment.

## ACADEMY OF FINANCE WESTHILL HIGH SCHOOL

The Academy of Finance is a member program of the National Academy Foundation addressing the needs of the nation's high school students by providing them with the education needed to succeed in the challenging and rapidly changing finance industry. In addition to required high school courses, Academy students take a number of highly specialized courses each semester. The honors curriculum provides high achieving and passionate National Academy Foundation students at Westhill with challenges and opportunities that will allow these students to achieve their intellectual and professional goals.

To fulfill the Academy's requirements, students must complete the following courses:

In Sophomore year

- Honors Accounting 1

In Junior year

- Honors Financial Planning
- Honors Principles of Finance

In Senior year

- Honors Business Economics
- Honors Business in Global Economy

Also to be completed are:

- Information Technology
- Information Technology and Design



Students who participate in this three-year program gain the necessary technical, analytical, and communications skills needed to succeed in the business world. As Academy members, students participate in employment readiness workshops, project-based learning experiences, and paid summer internships in the financial services industry. They have the opportunity to earn college credit in their senior year.

Moreover, Academy students have the on-going opportunity to interact with Academy peers attending other high schools through online services and periodic visitations. All members must agree to conform with mutual expectations outlined in the Academy's "Student's Responsibilities" and maintain attendance standards. Those students who meet the Academy requirements receive a certificate of completion at graduation.

Application to the Academy is made during the student's freshman year. For more information, go to the Westhill High School website.

**2171 - Honors Accounting 1 (WHS)**

<b>Credit(s) 1</b>	This course introduces financial accounting theory and practices for the sole proprietor, partnership, and corporate forms of business organization. Students learn the basics of the accounting cycle and learn how to use accounting information as a basis for decision-making. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.
<b>Grade 10</b>	
<b>WHS</b>	

**2811 - Honors Financial Planning (WHS)**

<b>Credit(s) 0.5</b>	This course introduces students to the financial planning process and the components of a comprehensive financial plan. The students learn how to prepare a financial plan that includes saving, investing, borrowing, risk management (insurance), and retirement and estate planning.
<b>Grade 10</b>	
<b>WHS</b>	

**2801 - Principles of Finance (WHS)**

<b>Credit(s) 0.5</b>	This course presents a survey of the principles and practices of banking and credit in the United States. The students learn about the major functions of banks and other depository institutions, in-house operations and procedures, central banking through the Federal Reserve System, and modern trends in the banking industry. The credit components provide an overview of credit functions and operations including credit risk evaluation, loan creation, and debt collection.
<b>Grade 11</b>	
<b>WHS</b>	

**2821 - Honors Business Economics (WHS)**

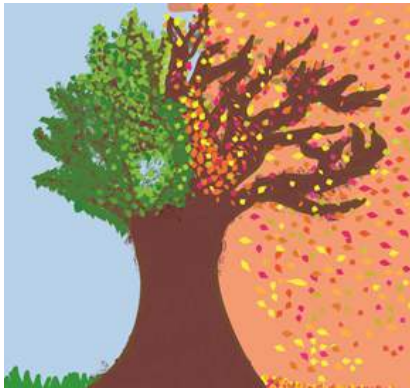
<b>Credit(s) 0.5</b>	This course presents a survey of the principles and practices of banking and credit in the United States. The students learn about the major functions of banks and other depository institutions, in-house operations and procedures, central banking through the Federal Reserve System, and modern trends in the banking industry. The credit components provide an overview of credit functions and operations including credit risk evaluation, loan creation, and debt collection.
<b>Grade 12</b>	
<b>WHS</b>	

**2821 - Honors Business in Global Economy (WHS)**

<b>Credit(s) 0.5</b>	This course explores the major components of the international financial system. It includes the study of foreign trade, the international monetary system, foreign exchange rates, foreign exchange markets, international financial markets, international banking, and multinational corporations.
<b>Grade 12</b>	
<b>WHS</b>	

*See CAREER & TECHNICAL EDUCATION – BUSINESS on page 106 for additional courses helpful in preparation for a career in finance and business.*

## AGRISCIENCE AND TECHNOLOGY WESTHILL HIGH SCHOOL



The Agriscience and Technology Program, located at Westhill High School, offers an opportunity for all in the lower Fairfield County region to explore the nation’s largest commercial business – AGRICULTURE! Over 2000 career areas in the growing agricultural industry from agrimarketing to zoology become available to the students enrolled in the program. Instruction in introductory level information, as well as more advanced technological skills, is provided. Classroom instruction, laboratory/field experience, guest speakers, leadership development through FFA (Future Farmers of America), and career exploration are all areas offered through this broad program.

After getting an overview of agriculture, students choose an area (or areas) of specialty during their last two years. This program follows the three-circle model of agricultural education which includes classroom instruction, FFA, and SAE (Supervised Agricultural Experience). Students are required to participate in all three components of the program.

FFA, the nation’s largest youth leadership organization, allows students to participate in local, district, state, and national career events and leadership activities. SAEs provide students with agricultural experience outside of class time. Freshmen are required to complete 50 hours a year, while sophomores, juniors, and seniors are required to complete 200 hours. Students may choose the type or topic of SAEs based on their interests.

With limited space available, all students interested in the Agriscience and Technology Program must fill out an application and be interviewed. They will receive a letter in the mail informing them of the status of their application.

For further information call the Agriscience & Technology Center at 977-4974.

### Course Offerings

<p>Agriscience and Technology 1                      Biotechnology-Agri-Science                      Agriscience and Technology 2                      Veterinary Science                      Intro to Companion Animals - UConn ECE                      Animal Science and Technology                      Behavior and Training of Domestic Animals                      UConn ECE                      Agribusiness Management and Marketing                      Food Science                      Aquaculture                      Floral Design                      Greenhouse Management</p>	<p>Nursery Production and Landscape Design                      Advanced Placement Environmental Science                      UConn ECE                      Botany 9 <b>(NEW)</b>                      Introduction to Beekeeping <b>(NEW)</b>                      Natural Resources &amp; Wildlife Management  <b>(NEW)</b>                      Introduction to Power, Structural &amp; Technical                      Systems <b>(NEW)</b>                      Zoology &amp; Exotic Animal Science <b>(NEW)</b>                      Food Justice &amp; Law <b>(NEW)</b>                      Applications in BioEngineering <b>(NEW)</b>                      Marine Science &amp; Oceanography <b>(NEW)</b></p>
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**0540 - Agriscience and Technology 1**

<b>Credit(s) 1</b>	This introductory Agriscience and Technology course introduces students to the exciting world of plants, animals, the environment, floral design, aquaculture, marine science, agricultural mechanics, food science and the many educational opportunities and careers that involve these areas of study. Classroom activities are reinforced with technology and basic lab work. Skills in leadership and teamwork through FFA instruction are stressed.
<b>WHS</b>	

**0542/0546 - Biotechnology - Agri-science**

<b>Credit(s) 2</b>	This course explores the scientific, legal, and ethical aspects of Biotechnology including its application in agriculture, health medicine, forensics, and the environment.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1

**0650 - Agriscience and Technology 2**

<b>Credit(s) 2</b>	This course provides students with the opportunity to investigate with more depth the broad field of Agriscience and Technology. Students apply field and laboratory methods to enhance lecture material while expanding on their knowledge of agricultural topics. In addition to covering more Agriscience and Technology 1 topics in depth, biotechnology, parliamentary procedure, and marketing are added.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1

**0683/0686 - Veterinary Science**

<b>Credit(s) 1</b>	This course is designed to prepare you for further education or a career in the field of veterinary science. This is a rigorous course developed to educate you in fields such as animal anatomy and physiology, veterinary terminology and abbreviations, veterinary office management, and focuses on many different species of animals. This course will have many hands-on labs in the veterinary field and we will also be performing dissections to understand and view animal anatomy and body systems. By taking this course, you will be expected to participate in all labs and activities throughout the year.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

**0690 - Intro to Companion Animals**

<b>Credit(s) 1</b>	This course will prepare students looking to pursue education and/or a career in the companion animal industry. Students will be able to describe the nutrition, anatomy, genetics, reproduction and management of various companion animals as well as discuss and evaluate ethical or current issues regarding companion animals.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

**0687/0688 - Animal Science and Technology**

<b>Credit(s) 1</b>	This course is designed for junior and senior Agriscience students interested in pursuing and education and career in the field of animal science. Through hands-on experiences, students will learn and explore the science behind animal nutrition, anatomy and physiology, behavior and training, growth, biology, and more. This course will focus on livestock and production animals.
<b>WHS</b>	
<b>Prerequisite:</b>	

**0691 - Behavior and Training of Domestic Animals UConn ECE**

<b>Credit(s) 1</b>	This course will prepare students for further education and/or a career in the animal behavior industry. Students will understand the basics of normal and abnormal behavior in domestic animals and learn to apply psychological principles to animal management and training. Students will also interpret research results and evaluate their applicability to domestic animal management and understand how to apply the principles of ethology to solve animal welfare problems.
<b>WHS</b>	
<b>Prerequisite:</b>	

**0692 - Agribusiness Management and Marketing**

<b>Credit(s) 1</b>	This course will cover the basics of Agribusiness Management and Marketing. Students will create a mock business to gain hands on experience in management skills, marketing, and financial analysis. Students will also learn about professional etiquette and other valuable skills such as goal setting, how to write a cover letter and resume, job interviews skills, public speaking skills, and more.
<b>WHS</b>	
<b>Prerequisite:</b>	

**0693 - Food Science**

<b>Credit(s) 1</b>	An introductory level course for students interested in the application of science to food. Nutritional and functional attributes of various food constituents are discussed. Issues concerning food processing and food safety are covered.
<b>WHS</b>	
<b>Prerequisite:</b>	

**0560 - Aquaculture**

<b>Credit(s) 1</b>	This course gives students the knowledge and skills needed for producing fish, plants, and other species living in a freshwater aquatic environment. Topics covered may include the selection, propagation, harvesting, and marketing of aquatic species. Instruction may also
<b>WHS</b>	

	address aquatic biology, ecosystems, water quality and management, and business practices.
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

<i>0548/0651 - Floral Design</i>	
<b>Credit(s) 1</b>	The study of flower arrangement as an art form with emphasis on historical background, artistic principles, color harmony, and care of perishable media is covered in this course. Individual expression is encouraged in the creation of floral composition.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

<i>0561 - Greenhouse Management</i>	
<b>Credit(s) 1</b>	This course examines the science and practice of horticultural plant propagation and culture in an indoor, greenhouse setting. The focus of this course will be on greenhouse crops and indoor, tropical plants. Students will get hands-on experience learning in a working greenhouse. The laboratory reinforced learning of the basic concepts of plant structure, growth and function, integrated pest management, impact of new technology, plant identification, and horticulture's impact on the environment will be discussed.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

<i>0562 - Nursery Production and Landscape Design</i>	
<b>Credit(s) 1</b>	This course examines the science and practice of horticultural plant propagation and culture for plants commonly used in landscape design. Students will get hands-on experience working and creating a landscape design project from start to finish. The laboratory reinforced learning of the basic concepts of safe tool use, Plant Identification, Principles of Design, and Grafting/Drawing.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

<i>8742/8743 - UConn ECE/Advanced Placement Environmental Science</i>	
<b>Credit(s) 1</b>	This is a college level accredited course that gains AP status. Students must complete the course with a grade of C or better to receive UConn credit. Cost to the student is \$25 per UConn credit. This course covers the same topics as AP Environmental Science and compares in rigor. Students are expected to take the Advanced Placement examination at the conclusion of the course.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 & 2

**0653 - Botany 9 NEW!**

<b>Credit(s) 1</b>	Botany is the scientific study of plants and their relationship to the environment. In this course, students investigate the growth, reproduction, anatomy, morphology, physiology, biochemistry, taxonomy, genetics, and ecology of plants. This course will be beneficial for college bound students who are interested in a career in scientific research, biotechnology, medicine, and plant science.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

**0654 - Introduction to Beekeeping NEW!**

<b>Credit(s) 1</b>	This is an introductory course to beekeeping and apiary science. It is designed to give students the career skills needed in a beekeeping enterprise, and to emphasize the importance of honey bees in our daily lives and in agricultural production. Topics covered: anatomy/physiology, colony organization, housing and equipment, bee selection, apiary location, hive management, pest control and diseases, and honey production.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

**0655 - Natural Resources & Wildlife Management NEW!**

<b>Credit(s) 1</b>	This course focuses on the conservation of our natural resources and endemic wildlife. Students will understand and appreciate the importance of maintaining the land and ecological systems that enable non-domesticated animals to thrive. We will study how humans and animals may both take advantage of the same land as well as how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

**0656 - Introduction to Power, Structural & Technical Systems NEW!**

<b>Credit(s) 1</b>	This courses will introduce students to the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

***0657 - Zoology & Exotic Animal Science NEW!***

<b>Credit(s) 1</b>	In this course, students will study and gain experience in caring for and handling exotic species of animals, as well as take an in depth look at conservation biology, species distribution and evolutionary history, and health and disease management of exotic species of animals. An exploration of zoological careers is also included. Class activities will include students working hands-on with the exotic species that are housed in our animal labs as well as engaging in group work, lab work, and research-based projects to prepare students for pursuing a career with exotic animals.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

***0658 - Food Justice & Law NEW!***

<b>Credit(s) 1</b>	This course focuses on analyzing food safety regulations and current food laws, as well as studying the general public's varying perspectives of agriculture and food. Class activities will examine and reinforce the general knowledge of the politics behind creating food policies and food availability.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

***0659 - Applications in Bioengineering NEW!***

<b>Credit(s) 1</b>	This course is designed to introduce students to the world of genetics, bio-engineering, and pharmacological biotechnology. In this course, students will study the basis of genetics, the connection between our genetics and health, and examine how our genetic information influences the pharmaceutical industry and medical biotechnology. Students will participate in hands-on labs as well as various class activities that reinforce the connection between genetics, microbiology, pharmacology, and biomedical engineering.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

***0547 - Marine Science & Oceanography NEW!***

<b>Credit(s) 1</b>	This course is designed to give students the introductory skills and knowledge for a career in marine sciences, be it on the ocean or keeping saltwater tanks. Students will maintain various saltwater tanks ranging from production to breeding to reef aquariums. Topics covered may include production and ornamental species, water chemistry, ocean pollution, coral fragging, marine water parameters, ocean currents, and ocean chemistry.
<b>WHS</b>	
<b>Prerequisite:</b>	Agriscience & Technology 1 and concurrent enrollment in Agriscience & Technology 2

## JUNIOR RESERVE OFFICERS' TRAINING CORPS WESTHILL HIGH SCHOOL

The Junior Reserve Officers' Training Corps, or JROTC, located at Westhill High School, is an elective program for women and men. As members of this program, students are exposed to a variety of courses and workshops that prepare them for leadership positions in their future careers. There are four levels of courses, each carrying 5 credits. A student may earn 5 credits a year. The courses cover short segments on a variety of topics, such as leadership, citizenship, human relations, U.S. military history, personal hygiene, staff functions and procedures, first aid, military map reading, techniques of oral communications, orienteering, drill, and ceremony.

Students participating will:

- Receive leadership training and encouragement
- Earn experience and academic credit which may result in advanced standing if they pursue a career in the military
- Interact with career service personnel who serve as the instructors.



There are no special costs associated with this program. Costs for course materials, uniforms, supplies, and equipment are subsidized by the military or the school.

### *925 - Leadership, Education, and Training 1 (LET 1)*

<b>Credit(s) 1</b>	LET 1 is a course of instruction that focuses on the following subjects: The Spirit of American Citizenship and Army JROTC, Techniques of Communications (notetaking, study habits, test-taking, and oral presentation), leadership, physical fitness, first aid, map reading, American military history, your American citizenship, customs and courtesies, contemporary issues, and drill and ceremonies. This is the first course in the four-year sequence of study in JROTC.
<b>WHS</b>	

### *926 - Leadership, Education, and Training 2 (LET 2)*

<b>Credit(s) 1</b>	LET 2 is a continuation of the studies begun in LET 1. In addition, students develop their abilities to live and work cooperatively with others, mental management skills, the roles and accomplishments of the army, and technological advancements.
<b>WHS</b>	

### *927 - Leadership, Education, and Training 3 (LET 3)*

<b>Credit(s) 1</b>	LET 3 is a course of instruction in the following subjects: Practicum of oral communications, written communications in the Army format, leadership, physical fitness, first aid, American military history, and your American citizenship, role of the U.S. Armed Forces, contemporary issues, leadership laboratory, and technology awareness.
<b>WHS</b>	

*928 - Leadership, Education, and Training 4 (LET 4)*

**Credit(s) 1**

**WHS**

LET 4 is the culmination of the previous three years of training. Primary emphasis of the course is the application of the skills learned in LET 1-3, focusing on leadership duties and responsibilities within the cadet battalion. LET 4 Cadets serve as instructors for LET 1-3 cadets. Classroom instruction also includes citizenship, leadership development, physical fitness, communication, history, job searching, and drug prevention/awareness.



Kyllie Hernandez - Westhill

## CARPENTRY - WHS



Stamford Public Schools in partnership with the North Atlantic States Carpenters Training Fund is offering seniors who enroll in the General Construction - Emerging Technologies class the opportunity to earn credentials equating to the first year of a 4 year carpenter apprenticeship. The Pre-Apprenticeship includes the following:

- Host visits to any of the carpenters training centers (Woodshop Fridays for Juniors)
- Provide instruction and training to prepare participants to enter in the Carpenters Registered Apprenticeship Program
- Involve employer and union partners in the assessment of applicants, delivery of training, and placing qualified graduates in industry-related employment and the carpenter union apprenticeship
- Provide feedback on program components to ensure the needs of participants and align with industry standards
- Students will be provided with the necessary tools for the first year, drug test fees, state registration fees and union initiation fees.
- Students who meet eligibility requirements have the opportunity to transition into the work-based (*co-op*) portion of this program. The student will be able to work with one of the partner contractors, as a 1-year apprentice, at a rate of **45%** of the journeymen wage as part of the Apprenticeship Program.
- Upon graduation from High School and this program (both classes), the apprentice will be granted 1000 hours or (1-year credit) towards their 4-year Apprenticeship. This will amount to a participant earning an advancement up to a 2nd-year Apprentice, as specified in the Articulation Agreement, and command a wage of **\$19.56** and fringe benefits valued at **\$14.60** for a total compensation rate of **\$34.16** an hour. *Next Adjustment anticipated for May 1, 2022*

### 1190 - Woodworking

**Credit(s) 0.5**

**WHS**

This course focuses on humans' most widely used construction and manufacturing materials. Through a series of projects and problem-solving activities, the student is exposed to the techniques and processes common to designing and producing a product. This is an activity-oriented lab-based class.



**1220- General Construction - Emerging Technologies NEW!**

<b>Credit(s) 0.5</b>	Students will design, plan, identify and solve problems, and build prototypes. This is an activity-based class in which students use electrical and mechanical equipment to build solutions to technical problems. Students in this class will first study the building of structures. Full size and model buildings will be reviewed. Conventional and modern technologies are discussed and used in the design and production process. Students will then move on to the practical application of mechanical devices, products, or substances, to contribute to the harmony between humans and their environment.
<b>WHS</b>	
<b>Prerequisite</b>	Woodworking



Jose Oritz – Stamford High School

## EARLY COLLEGE STUDIES STAMFORD HIGH SCHOOL



The Early College Studies Program at Stamford High School allows students to earn their high school diploma as well as an Associate’s Degree in either Software Engineering, Mobile Programming, or Web Development from Norwalk Community College. Note: Application to and acceptance into this program occurs in the winter and spring of a students’ eighth-grade year.

Students benefit from mentoring by professionals, extra help through tutoring, and workplace experience through internships in the summer after their junior year for qualified individuals. After completing core requirements for high school and testing ready for college English and Math, students have the opportunity to take courses through Norwalk Community College such as Introduction to Programming, Web Development, Database Development, XML for WWW and others.

In addition to their computer science coursework, students also take Workplace Learning I, II and III. Students engage in a problem-based curriculum that requires them to work individually, in teams and as an organization to create products and solutions for real-world local and global issues.

### COURSE OFFERINGS

Workplace Learning I  
Workplace Learning II  
Workplace Learning III

NCC Web Development and Design I  
NCC Introduction to Programming  
NCC Database Development I  
NCC Two-Dimensional Design  
NCC Graphic Design I: Skills and Principles

Robotics and Automated Systems I  
Robotics and Automated Systems II  
Introduction to Programming (ECS)  
Web Development and Design (ECS)  
UConn Introduction to Computing for Engineers

#### *9702 - Workplace Learning I*

**Credit(s) 0.5**

**SHS**

Typically taken by freshmen, this course is the first in a series of required workplace learning courses for students in the Early College Studies program. In this course, students focus on the essential skills of communication, collaboration, curiosity, and career exploration.

#### *9702 - Workplace Learning II*

**Credit(s) 0.5**

Typically taken by sophomores, this course is the second in a series of required workplace learning courses for students in the Early College Studies program. In this course, students

<b>SHS</b>	focus on the essential skills of motivation, leadership, self-management, and analytical thinking.
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<i>9705 - Workplace Learning III</i>	
<b>Credit(s) 1</b>	Typically taken by juniors, this is the last of the three required Workplace Learning courses. Students now demonstrate their ability to work both independently and in teams. Students will work through a design project from conception to completion. This course satisfies the CT one-credit diploma assessment requirement.
<b>SHS</b>	
<b>Prerequisite:</b>	Workplace Learning I & II

<i>9705 - Workplace Learning III</i>	
<b>Credit(s) 1</b>	Typically taken by juniors, this is the last of the three required Workplace Learning courses. Students now demonstrate their ability to work both independently and in teams. Students will work through a design project from conception to completion. This course satisfies the CT one-credit diploma assessment requirement.
<b>SHS</b>	
<b>Prerequisite:</b>	Workplace Learning I & II

<i>2652 - NCC Web Development and Design I</i>	
<b>Credit(s) 0.5</b>	This course provides entry into the fast moving website development industry. With its heavy hands-on mode of delivery, students will learn XHTML, Cascading Style Sheets, and be exposed to JavaScript. Adhering to standards, specifically from the World Wide Web Consortium (W3C) and the European Computer Manufacturers Association (ECMA), will play a dominant role in the creation of web pages that are both platform and browser independent.  Students earn 3 college credits on their NCC transcript upon successful completion of this course.
<b>SHS</b>	
<b>Prerequisite:</b>	Placement into English 101 via Norwalk Community College Accuplacer.

<i>2650 - NCC Introduction to Programming</i>	
<b>Credit(s) 0.5</b>	This course covers Fundamentals of programming and program development techniques. Topics include data types, functions, storage class, selection, repetition, pointers, arrays, and file processing. Programming laboratory projects in a closed laboratory environment are supervised by the instructor.
<b>SHS</b>	

	Students earn 3 college credits on their NCC transcript upon successful completion of this course.
<b>Prerequisite:</b>	Placement into Math 172 via Norwalk Community College Accuplacer.

### *2651 - NCC Database Development I*

<b>Credit(s) 0.5</b>	Relational database development including data modeling, database design and database implementation. The student learns to create and alter tables, retrieve, insert, update, and delete data using a fourth generation language (ORACLE) in a supervised laboratory setting. Uses of database technology, understanding DBMS and RDBMS concepts, normalizing designs, transforming of logical design into physical databases, embedded SQL, and the role of the DBA are also covered.
<b>SHS</b>	
	Students earn 3 college credits on their NCC transcript upon successful completion of this course.
<b>Prerequisite:</b>	Placement into English 101 via Norwalk Community College Accuplacer.

### *0463 - NCC Two-Dimensional Design*

<b>Credit(s) 0.5</b>	This introductory course focuses on the basic elements and principles of design such as line, texture, space, balance, unity and scale.
<b>SHS</b>	
	Students earn 3 college credits on their NCC transcript upon successful completion of this course.
<b>Prerequisite:</b>	Placement into English 088 via Norwalk Community College Accuplacer.

### *0464 - NCC Graphic Design 1: Skill and Principles*

<b>Credit(s) 0.5</b>	An introductory course focusing on the fundamental nature, skills and principles of graphic design. Students will learn about composition, communication and technology. Classes consist of lectures, demonstrations, applied practice and critiques.
<b>SHS</b>	
	Students earn 3 college credits on their NCC transcript upon successful completion of this course.
<b>Prerequisite:</b>	Placement into Math 136 via Norwalk Community College Accuplacer.

**1703 - Robotics and Automated Systems I**

<b>Credit(s) 0.5</b>	Robotics and Automated Systems I will introduce students to the engineering process before moving into robot assembly and calibration. Students will work with MIT App Inventor in order to program their robots.
<b>SHS</b>	

**1704 - Robotics and Automated Systems II**

<b>Credit(s) 0.5</b>	Robotics and Automated Systems II will continue on the foundation laid by Robotics and Automated Systems I. Advanced topics will include advanced design, 3D modeling, and programming using Arduino.
<b>SHS</b>	
<b>Prerequisite:</b>	Robotics and Automated Systems I

**2654 - Introduction to Programming (ECS)**

<b>Credit(s) 0.5</b>	Introduction to Programming (ECS) is an introductory course to computer programming that focuses on fostering a sense of computational thinking. This includes some mathematical concepts including logic as well as algorithmic concepts including conditional statements, looping, and some elementary data structures such as arrays and strings.
<b>SHS</b>	

**2653 - Web Development and Design (ECS)**

<b>Credit(s) 0.5</b>	Web Development and Design (ECS) is an introductory web design course that focuses on standards for HTML and CSS. This course includes using the newest HTML 5 semantic structures as well as separation of concerns using CSS as the presentation mechanism. Students will be introduced to JavaScript briefly at the end of the course.
<b>SHS</b>	

**1540 - UConn Introduction to Computing for Engineers**

<b>Credit(s) 0.5</b>	Introduction to computing logic, algorithmic thinking, computing processes, a programming language and computing environment. Knowledge obtained in this course enables use of the computer as an instrument to solve computing problems. Representative problems from science, mathematics, and engineering will be solved.
<b>SHS</b>	

## INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME AT STAMFORD HIGH



The International Baccalaureate Diploma Programme (IBDP) is a rigorous, two-year comprehensive program offered at Stamford High School during a student's junior and senior years. The IBDP is designed to prepare students for success in higher education and incorporates the themes of cultural awareness and international mindedness in the curricula across all subject areas. All courses are two years in length and are offered at the Standard Level (SL) and Higher Level (HL). In comparison to SL courses, HL courses cover more subject matter in more depth and require additional assessments.

Students are required to take six subject courses [one each from Groups 1-5 and a sixth course from group 3, 4 or 6 in addition to the Theory of Knowledge course (TOK)]. Students must also successfully complete the Extended Essay (EE) and Creativity, Activity, Service (CAS) requirements in order to complete the IBDP. Students must take a minimum of three and a maximum of four HL courses.

Application to the IBDP is made during the student's sophomore year. For information, go to the Stamford High School website.

Students wishing to pursue Course Candidacy need prior approval from the IB Coordinator to take any IB courses.

### COURSE OFFERINGS

<p><b>Group 1:</b> IB Language and Literature SL 1&amp;2 IB Language and Literature HL 1&amp;2</p> <p><b>Group 2:</b> IB Spanish 1 IB Spanish SL 1&amp;2 IB Spanish HL 1&amp;2 IB Spanish Ab Initio SL 1&amp;2 IB Italian Ab Initio SL 1</p>	<p><b>Group 3:</b> IB Geography SL 1&amp;2 IB Geography HL 1&amp;2 IB History HL 1&amp;2 IB Environmental Science Systems and Societies SL 1&amp;2* IB Business Management HL 1&amp;2 IB Psychology SL 1&amp;2 IB Psychology HL 1&amp;2 IB Economics SL 1&amp;2 (NEW) IB Economics HL 1&amp;2 (NEW)</p>	<p><b>Group 4:</b> IB Chemistry SL 1&amp;2 IB Chemistry HL 1&amp;2 IB Physics SL 1&amp;2 IB Environmental Science Systems and Societies SL 1&amp;2* IB Biology SL 1&amp;2 IB Biology HL 1&amp;2 IB Computer Science SL 1&amp;2(NEW) IB Computer Science HL 1&amp;2(NEW)</p>	<p><b>Group 5:</b> IB Mathematics: Analysis and Approaches HL 1&amp;2 IB Mathematics: Analysis and Approaches SL 1&amp;2 IB Mathematics: Applications and Interpretations: SL 1&amp;2</p> <p><b>Group 6:</b> IB Visual Arts SL 1&amp;2 IB Visual Arts HL 1&amp;2</p> <p><b>IBDP CORE:</b> Research Foundations Theory of Knowledge 1, 2 &amp; 3</p>
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*\*Counts for Group 3, Group 4  
or both*

*3001 - IB Language & Literature SL 1*  
*3003 - IB Language & Literature HL 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB English course is year one of a two-year course. The course focuses primarily on two of the four IB topics: Language in Cultural Context and Literature – Critical Study. At the center of this course is a strong focus on determining the construction of meaning and developing a global perspective. Students will engage in close reading and analysis of a variety of genres including fiction, non-fiction, poetry, media, and visual texts. The SL course requires the reading of a minimum of two works from the IB Prescribed List of Authors, while the HL course requires a minimum of three works.
<b>SHS</b>	

*3002 - IB Language & Literature SL 2*  
*3004 - IB Language & Literature HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB English course is year two of a two-year course. The course focuses primarily on two of the four IB topics: Language and Mass Communication and Literature – Texts and Contexts. At the center of this course is a strong focus on determining the construction of meaning and developing a global perspective. Students will engage in close reading and analysis of a variety of genres including fiction, non-fiction, poetry, media, and visual texts. The SL course requires the reading of a minimum of two works of literature from the Prescribed List of Authors, while the HL course requires a minimum of three works.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Language & Literature 1

*4001 - IB Spanish SL 1*  
*4003 - IB Spanish HL 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Spanish course is year one of a two-year course. The SL course is designed to develop both language skills and an understanding of the cultures of the Spanish-speaking world. The HL course is designed for students who have a foundation in Spanish and wish to explore in greater depth and breadth the Spanish language and cultural themes. In both courses, language is acquired through practice and the study of four IB themes: Social Relationships, Cultural Diversity, Communication and Media, and Science and Technology. In addition, the HL course requires the reading of a literary work (short novel or play). All conversations and discussions will be conducted in Spanish.
<b>SHS</b>	

*4002 - IB Spanish SL 2*  
*4004 - IB Spanish HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB Spanish course is year two of a two-year course. The course continues to explore the Spanish language and cultures of the Spanish-speaking world and will focus
<b>SHS</b>	

	on the following themes: Global Issues, Health, Customs and Traditions, and Leisure. Classes will be conducted entirely in Spanish. Students will read various text types such as articles, blogs, and short literary pieces, and listen to and watch authentic audio and visual productions. Students will be required to write in various text types (e.g. articles, letters, reports) and speak in presentations and interviews. In the HL course, students will read a short novel or play and demonstrate an understanding of the work in writing.
<b>Prerequisite:</b>	Completion of IB Spanish 1

### *4005 - IB Spanish 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Spanish course is year one of a two-year course. It is designed for students with experience in Spanish. All conversations and discussions will be conducted in Spanish. The course of study is designed to develop language skills and an understanding of the cultures of the Spanish-speaking world. Language is acquired through practice and the study of four IB themes: Social Relationships, Cultural Diversity, Communication and Media, and Science and Technology. The instructor will assess student progress and recommend an HL or SL year two continuation of this course the following year.
<b>SHS</b>	

### *4007 - IB Spanish Ab Initio SL 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Spanish course is year one of a two-year course and is taught at the standard level. This course is a language acquisition course for students with little or no experience in Spanish. The course is organized into three themes: Individual and Society, Leisure and Work, and Urban and Rural Environment. Each theme comprises a list of topics that provide students with opportunities to practice and explore the language and to develop intercultural understanding. Through the development of receptive, productive, and interactive skills, students develop the ability to respond and interact appropriately in a defined range of everyday situations. Students are assessed in the areas of listening, speaking, and writing.
<b>SHS</b>	

### *4008 - IB Spanish Ab Initio SL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB Spanish course is year two of a two-year course and is taught at the standard level. This course is a language acquisition course for students with little or no experience in Spanish. The course is organized into three themes: Individual and Society, Leisure and Work, and Urban and Rural Environment. Each theme comprises a list of topics that provide students with opportunities to practice and explore the language and to develop intercultural understanding. Through the development of receptive, productive, and interactive skills, students develop the ability to respond and interact appropriately in a defined range of everyday situations. Students are assessed in the areas of listening, speaking, and writing.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Spanish Ab Initio SL 1



**0201 - IB Italian AB Initio SL 1 NEW!**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Italian course is year one of a two-year course and is taught at the standard level. This course is a language acquisition course for students with little or no experience in Italian. The course is organized into three themes: Individual and Society, Leisure and Work, and Urban and Rural Environment. Each theme comprises a list of topics that provide students with opportunities to practice and explore the language and to develop intercultural understanding. Through the development of receptive, productive, and interactive skills, students develop the ability to respond and interact appropriately in a defined range of everyday situations. Students are assessed in the areas of listening, speaking, and writing.
<b>SHS</b>	

**5001 - IB Geography SL 1**  
**5003 - IB Geography HL 1**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade course is year one of a two-year course. The SL course focuses primarily on three IB topics: Urban Environments, Global Climate – Vulnerability and Resilience, and Changing Population. In addition to these topics, the HL course focuses on Power, Places and Networks, and Human Development and Diversity. Students will investigate different aspects of physical and human geography through case studies and research.
<b>SHS</b>	

**5002 - IB Geography SL 2**  
**5004 - IB Geography HL 2**

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade course is year two of a two-year course. The SL course focuses primarily on two IB topics: Global Resource Consumption and Security, and Food and Health. In addition to these topics, the HL course focuses on Global Risk and Resilience, and Leisure, Tourism, and Sport. At the center of this course is a strong focus on critical thinking and analysis. Students will investigate different aspects of physical and human geography through case studies and research.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Geography 1

**5005 - IB History HL 1**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade course is year one of a two-year course. History is an exploratory subject that fosters a sense of inquiry. It is also an interpretive discipline, allowing opportunity for engagement with multiple perspectives and opinions. Studying history develops an understanding of the past, which leads to a deeper understanding of the nature of humans and of the world today. In this year one course, the focus is on American history based on a comparative, multi-perspective approach and focused around key historical concepts such as change, causation, and significance. It involves the study of a variety of types of
<b>SHS</b>	

	history, including political, economic, social, and cultural, encouraging students to think historically and to develop historical skills.
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### *5006 - IB History HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade course is year two of a two-year course. This course continues to explore world history in a way that fosters a sense of inquiry. It requires students to study and compare examples from different regions of the world, helping to foster international-mindedness. Teachers choose relevant examples to explore with their students, helping to ensure that the course meets their students' needs and interests regardless of their location or context. This course continues on with a comparative, multi-perspective approach and focused around key historical concepts such as change, causation, and significance. It involves the study of a variety of types of history, including political, economic, social, and cultural, encouraging students to think historically and to develop historical skills. Students in this course participate in historical investigation.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB History HL 1

### *2992 - IB Business Management HL 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade course is year one of a two-year course. Students learn to analyze, discuss, and evaluate business activities at local, national, and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. The course covers the key characteristics of business organization and environment and the business functions of human resource management, finance and accounts, marketing, and operations management. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation, and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment.
<b>SHS</b>	

### *2993 - IB Business Management HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade course is year two of a two-year course. Students continue to analyze, discuss, and evaluate business activities at local, national, and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. The course covers the key characteristics of business organization and environment and the business functions of human resource management, finance and accounts, marketing, and operations management. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation, and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. In year two, students engage in the study of real-world business organizations.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Business Management HL 1

**5009 - IB Psychology SL 1**  
**5007 - IB Psychology HL 1**

<b>Credit(s) 1</b>	<p>This 11 grade course is year one of a two-year course. This course serves as an introduction to three different approaches to understanding behavior: the biological, cognitive, and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories, and research that have developed the understanding in these fields. This course aims to expose students to diverse methods of inquiry and develop an understanding and observance of ethical practice in psychology research. Students explore such areas as: abnormal psychology, developmental psychology, health psychology, and/or the psychology of human relationships. In the HL course, students also analyze qualitative and quantitative research in psychology and evaluate research scenarios from a methodological and ethical perspective.</p>
<b>SHS</b>	

**5011 - IB Psychology SL 2**  
**5008 - IB Psychology HL 2**

<b>Credit(s) 1</b>	<p>This 12-grade course is year two of a two-year course. This course continues to discuss three different approaches to understanding behavior: the biological, cognitive, and sociocultural approaches. Students continue to study and critically evaluate the knowledge, concepts, theories, and research that have developed the understanding in these fields. This course aims to expose students to diverse methods of inquiry and develop an understanding and observance of ethical practice in psychology research. Students explore such areas as: abnormal psychology, developmental psychology, health psychology, and/or the psychology of human relationships. In the HL course, students also analyze qualitative and quantitative research in psychology and evaluate research scenarios from a methodological and ethical perspective.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Psychology 1

**5331 - IB Economics SL 1 NEW!**  
**5332 - IB Economics HL 1 NEW!**

<b>Credit(s) 1</b>	<p>This 11th grade course is year one of a two-year course. Economics is a dynamic subject that allows students to develop an understanding of the complexities and interdependence of economic activities in a rapidly changing world. Students will explore theories and key concepts and apply those using empirical data through six real-world issues. In both HL and SL, the focus is on introducing economics and exploring microeconomics; HL continues to cover topics with additional attention to market failures and inequities.</p>
<b>SHS</b>	

**5332 - IB Economics SL 2 NEW!****5342 - IB Economics HL 2 NEW!**

<b>Credit(s) 1</b>	This 12th grade course is year two of a two-year course. This course continues to explore a critical understanding of a range of economic theories, models, ideas, and tools. Students also develop a conceptual understanding of individuals' and societies economic choices, interactions, challenges, and consequences of economic decision-making. The focus in year two is on macroeconomics and global economics. Students in this course create a portfolio of analytical commentaries of published works on economic issues. HL students also engage in policy paper writing.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Economics 1

**8211 - IB Chemistry SL 1****8213 - IB Chemistry HL 1**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade course is year one of a two-year course. The chemistry course allows students to develop a wide range of practical skills and to increase facility in the use of mathematics. It provides students with opportunities to develop manipulative skills, design investigations, collect data, analyze results, and evaluate and communicate their findings. The course focuses on the following IB Chemistry topics: measurements and data processing, stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics, and chemical kinetics. In the SL course, students will undergo 20 hours of practical work related to the syllabus. Students in the HL course will undergo 30 hours of practical work related to the syllabus.
<b>SHS</b>	

**8212 - IB Chemistry SL 2****8214 - IB Chemistry HL 2**

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade course is year two of a two-year course. This course allows students to develop a wide range of practical skills and to increase facility in the use of mathematics. It provides students with opportunities to develop manipulative skills, design investigations, collect data, analyze results, and evaluate and communicate their findings. The course focuses on the following IB Chemistry topics: equilibrium, acids bases, redox, organic chemistry, and biochemistry. Students in SL will undergo 20 hours of practical work related to the syllabus and 10 hours of independent investigation. Students in the HL course will undergo 30 hours of practical work related to the syllabus and 10 hours of independent investigation.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Chemistry 1

**8311 - IB Physics SL 1**

<b>Credit(s) 1</b>	<p>This 11<sup>th</sup> grade course is year one of a two-year course and is taught at the standard level. In IB Physics, students become aware of how scientists work and communicate. There is an emphasis on a practical approach through experimentation as this is at the core of this course. IB physics aims to explain the universe itself, from the very smallest particles to the vast distances between galaxies. Students will develop models to try to understand observations, and it is explained that these themselves can become theories that attempt to explain the observations. The IB Physics course also raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists. In year one, students focus on the topics of mechanics, circular motion and gravitation, thermal physics, waves, and electricity and magnetism.</p>
<b>SHS</b>	

**8311 - IB Physics SL 2**

<b>Credit(s) 1</b>	<p>This 12<sup>th</sup> grade course is year two of a two-year course and is taught at the standard level. In year two of IB Physics, students focus on the topics of atomic, nuclear and particle physics, energy production, and a choice between relativity and engineering physics.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	<p>Completion of IB Physics SL 1</p>

**8315 - IB Environmental Science Systems and Societies SL 1**

<b>Credit(s) 1</b>	<p>This 11<sup>th</sup> grade course is year one of a two-year course. This interdisciplinary course focuses on the evaluation of the scientific, ethical, and socio-political aspects of issues. This course aims to foster an international perspective, awareness of local and global environmental concerns, and an understanding of the scientific methods. An important aspect of this course is hands-on work in the laboratory and/or out in the field.</p>
<b>SHS</b>	

**8316 - IB Environmental Science Systems and Societies SL 2**

<b>Credit(s) 1</b>	<p>This 12<sup>th</sup> grade course is year two of a two-year course. This course continues to focus on the evaluation of the scientific, ethical, and socio-political aspects of issues. This course aims to foster an international perspective, awareness of local and global environmental concerns, and an understanding of the scientific methods. An important aspect of this course is hands-on work in the laboratory and/or out in the field. Students in year two will complete assessments that require the application, use, synthesis, analysis, and evaluation of environmental issues, information, concepts, methods, techniques, and explanations. In addition, they will complete an individual investigation of a research question.</p>
<b>SHS</b>	
<b>Prerequisite:</b>	<p>Completion of IB Environmental Science Systems and Societies SL 1</p>

**8364 - IB Biology SL 1**  
**8366 - IB Biology HL 1**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Biology 1 Course is year one of a two-year course. Students in this advanced course will learn how to design biological investigation, collect data, analyze results, collaborate with peers and evaluate and communicate their findings. This course focuses on cell biology, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology, amongst other topics. Students in HL will also study nucleic acids, metabolism, plant biology, and animal physiology. Students in IB Biology will carry out an interdisciplinary and cooperative project focusing on the scientific process.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of Biology and Chemistry

**8365 - IB Biology SL 2**  
**8367 - IB Biology HL 2**

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB Biology 2 course is year two of a two-year course. Students in this advanced course continue to learn how to design biological investigation, collect data, analyze results, collaborate with peers and evaluate and communicate their findings. This course focuses on cell biology, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology, amongst other topics. Students in HL will also study animal physiology. Students in year two also complete assessments that require the demonstration of the knowledge and understanding of, applications of, and evaluation of methodologies and techniques. They also must demonstrate the skills necessary to carry out insightful and ethical investigations. Students will engage in both internal and external IB assessments.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Biology 1

**6651 - IB Computer Science SL 1 NEW!**  
**6653 - IB Computer Science HL 1 NEW!**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade course is year one of a two-year course. Students in this course will learn about how computer scientists work and communicate in the successful development of IT solutions. They will explore a variety of methods and techniques that characterize computer science and use critical thinking skills to identify and resolve complex problems and to identify moral, ethical, social, economic and environmental implications of using science and technology. In this year one SL course, the focus is on system fundamentals, computer organization. The HL course also explores networks and programming.
<b>SHS</b>	

**6652 - IB Computer Science SL 2 NEW!**  
**6654 - IB Computer Science HL 2 NEW!**

<b>Credit(s) 1</b>	This 12th grade course is year two of a two-year course. This course continues to explore a variety of methods and techniques that characterize computer science and use critical thinking skills to identify and resolve complex problems and to identify moral, ethical, social, economic and environmental implications of using science and technology. The focus in year two of this SL course is on networks and computational thinking, problem-solving, and programming. The HL course focuses on abstract data structures, resource management, and control, as well as a study extension. Students also participate in practical application of skills and collaborative projects.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Computer Science 1

**6195 - IB Mathematics: Applications and Interpretations SL 1**

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Mathematics: Applications and Interpretations SL 1 course is year one of a two-year course. Students in this course will develop mathematics skills to describe our world and solve practical problems. There is a focus on viewing mathematics from a practical context and on using technology alongside exploring mathematical models. This course emphasizes the application of mathematics and the importance of interpreting results in context.
<b>SHS</b>	
<b>Prerequisite:</b>	Algebra 2

**6196 - IB Mathematics: Applications and Interpretations SL 2**

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB Mathematics: Applications and Interpretations SL 2 course is year two of a two-year course. Students in this course will develop mathematics skills to describe our world and solve practical problems. There is a focus on viewing mathematics from a practical context and harnessing the power of technology alongside exploring mathematical models. This course emphasizes the applied nature of mathematics and the importance of interpreting results in context. Students will engage in both internal and external IB assessments.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Mathematics: Applications and Interpretations SL 1

*6185 - IB Mathematics: Analysis and Approaches SL 1*  
*6197 - IB Mathematics: Analysis and Approaches HL 1*

<b>Credit(s) 1</b>	This 11 <sup>th</sup> grade IB Mathematics: Analysis and Approaches HL 1 course is year one of a two-year course. Students in this advanced course will become fluent in the construction of mathematical arguments and will develop strong skills in mathematical thinking. They will explore real and abstract applications with and without the use of technology. There is initially a strong emphasis on algebraic, graphical, and numerical approaches, with later emphasis on calculus. The SL course covers fewer concepts than the HL version.
<b>SHS</b>	
<b>Prerequisite:</b>	Honors Algebra 2

*6186 - IB Mathematics: Analysis and Approaches SL 2*  
*6198 - IB Mathematics: Analysis and Approaches HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade IB Mathematics: Analysis and Approaches 2 course is year two of a two-year course. Students in this advanced course will become fluent in the construction of mathematical arguments and will develop strong skills in mathematical thinking. They will explore real and abstract applications with and without the use of technology. There is a strong emphasis on calculus and on algebraic, graphical, and numerical approaches. Students will engage in both internal and external IB assessments. The SL course covers fewer concepts than the HL version.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Mathematics: Analysis and Approaches 1

*0201 - IB Visual Arts SL 1*  
*0203 - IB Visual Arts HL 1*

<b>Credit(s) 1</b>	This 11th-grade course is year one of a two-year course that focuses on three IB topics: Visual Arts in Context, Visual Arts Methods, and Communicating Visual Arts. Students in the SL course must engage in at least two art-making forms in addition to the Comparative Studies, a Process Portfolio, and exhibition. The HL course requires students to produce a larger body of resolved works and to demonstrate a deeper consideration of how their resolved works communicate with the potential viewer. Students in HL must engage in at least three art-making forms. In addition to a larger body of work for their process portfolio and exhibition, the HL version of this course requires an additional section of reflection in their Comparative Study.
<b>SHS</b>	



*0202 - IB Visual Arts SL 2*  
*0204 - IB Visual Arts HL 2*

<b>Credit(s) 1</b>	This 12 <sup>th</sup> grade course is year two of a two-year course. In year two, SL students focus on their own independent study of their chosen theme, focus, and art concepts in greater depth. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with, and critically reflect upon a wide range of contemporary practices and media to develop their own personal artistic voice. Students in SL must engage in at least two art-making forms. Students will engage in assessments such as comparative studies, a process portfolio, and an exhibition. HL students are encouraged to produce a larger body of resolved works and to demonstrate a deeper consideration of how their resolved works communicate with the potential viewer. Students in HL must engage in at least three art-making forms.
<b>SHS</b>	
<b>Prerequisite:</b>	Completion of IB Visual Arts 1

*3005 - Research Foundations*

<b>Credit(s) 0.5</b>	This semester course is designed to provide IBDP students with experience with research skills. This course will feature topics such as developing research questions, navigating online research databases, critical reading, organizing and evaluating research results, and responsible citation of information. The learning will prepare IBDP students to engage in the various stages of the Extended Essay planning and writing process.
<b>SHS</b>	

*5101 - Theory of Knowledge 1*  
*5102 - Theory of Knowledge 2*

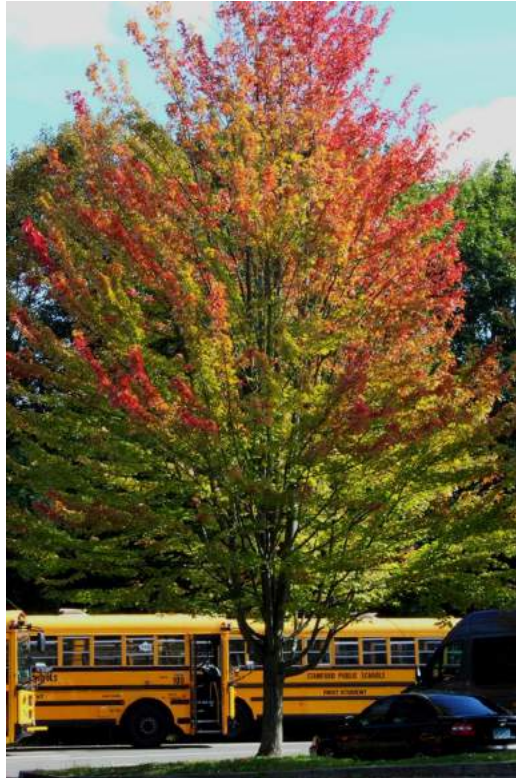
<b>Credit(s) 0.5</b>	This is a two-semester requirement of the IB Diploma Programme. Theory of Knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. At the center of this section of the course is an introduction to both the ways of knowing (imagination, intuition, emotion, reason, faith, sense perception, memory, and language) and the areas of knowledge (ethics, history, mathematics, the arts, natural sciences, human sciences, religious knowledge systems, and indigenous knowledge systems). The course will delve into the concepts of personal knowledge versus shared knowledge and the differences between knowledge claims and knowledge question. The overall aim of TOK is to encourage students to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. TOK 1 is second semester in 11 <sup>th</sup> grade. TOK 2 is first semester in 12 <sup>th</sup> grade.
<b>SHS</b>	
<b>Prerequisite:</b>	Admission into Full Diploma Programme

**5103 - Theory of Knowledge 3****Credit(s) 0.5**

This 12<sup>th</sup> grade second semester elective course is designed for IB students who want to continue their study of inquiring into the process of knowing and a variety of areas of knowledge. Students will further consider knowledge concepts and explore knowledge questions that will allow for a deeper contextual understanding.

**SHS****Prerequisite:**

Completion of Theory of Knowledge 1 and 2



Emmanuel Pariente Trejo – Westhill High School

## INTERNATIONAL BACCALAUREATE MIDDLE YEARS PROGRAMME AT STAMFORD HIGH SCHOOL

The International Baccalaureate Middle Years Programme (MYP) is a rigorous, two-year comprehensive program offered at Stamford High School during a student's freshman and sophomore years. The MYP is designed to prepare students for success in high school and higher education and incorporates the themes of cultural awareness and international mindedness in the curricula across all subject areas. Global contexts for teaching and learning drive the interdisciplinary approach in this program.

Students are required to take courses in seven subject groups. They must also successfully complete a yearly interdisciplinary project and a personal project during their second year.

Application to the MYP is made during the student's eighth grade year. For information, go to the Stamford High School website.

### COURSE OFFERINGS (NEW)

<b>Language and Literature</b> IBMYP English Language & Literature 9 H	<b>Individuals and Societies</b> IBMYP Human Geography H	<b>Physical and Health Education</b> IBMYP Health 1 IBMYP Physical Education 1
<b>Language Acquisition</b> IBMYP Spanish 9 H	<b>Sciences</b> IBMYP Biology H	<b>MYP Core</b> IBMYP Design 1
	<b>Mathematics</b> IBMYP Geometry H IBMYP Algebra 2 H	

### 3006 - IBMYP English Language and Literature 9 H

**Credit(s) 1**

**SHS**

This course focused on developing all of the language arts (reading, writing, listening, speaking, viewing, and enacting). The goal of the writing program is the development of fluency, focus, and structure in a variety of genres, including persuasive, narrative, and expository essays, response to literature, and other modes of writing. This course instruction encourages thoughtful interpretation of various genres including novels, short stories, poetry, informational texts and other non-literary visual and spoken texts. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.

**4009 - IBMYP Spanish 9 H**

**Credit(s) 1**

**SHS**

This course focuses on all four-language skills: listening, speaking, reading, and writing, while emphasizing oral communication and cultural connections. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.

**5691 - IBMYP Human Geography H**

**Credit(s) 1**

**SHS**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth’s surface. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.

**8368 - IBMYP Biology H**

**Credit(s) 1**

**SHS**

This course explores biological principles in a comprehensive approach. The course examines topics: cell biology, genetics, evolution, ecology, and classification. Students’ understanding of biology is fostered through laboratory investigations, problem solving and critical thinking. As a result of this course, students explore and explain concepts of biology and its related applications. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.

**8368 - IBMYP Geometry H**

**Credit(s) 1**

**SHS**

This course examines the geometric aspects of plane and solid figures such as properties of lines and angles, triangles, quadrilaterals, circles, including length, area, surface area, and volume of solids as well as inductive reasoning and proof. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of various forms of technology. Students focus on problem solving and real-life applications. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course can be taken as part of the MYP.

**Prerequisite:**

Algebra 1



Sanora Smith - Stamford High School

**6213 - IBMYP Algebra 2 H**

<b>Credit(s) 1</b>	This course examines the properties of real numbers, linear equations and functions, inequalities, linear systems of equations, quadratic and polynomial functions, radical exponents and functions, and exponential and logarithmic functions. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of various forms of technology. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course can be taken as part of the MYP.
<b>SHS</b>	
<b>Prerequisite:</b>	Algebra 1

**9906 - IBMYP Health 1**

<b>Credit(s) 0.5</b>	This course examines the relationship that exists among physical, emotional, and social health. Students explore the decision-making process and learn how their decisions contribute to their personal health and lifelong wellness. Topics include emotional health, nutrition, fitness, substance use and abuse, sexual health, violence prevention, and responding to emergencies. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.
<b>SHS</b>	

**9320 - IBMYP Physical Education 1**

<b>Credit(s) 0.5</b>	This course engages students by encouraging lifelong fitness. Activities in this course include a wide array of sports and fitness activities. Students develop the skills and fitness level necessary to participate in the Connecticut Physical Fitness Test in their sophomore year. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.
<b>SHS</b>	

**9320 - IBMYP Design 1**

<b>Credit(s) 0.5</b>	MYP design challenges students to apply practical and creative-thinking skills to solve design problems; encourages students to explore the role of design in historical and contemporary contexts; and raises students' awareness of their responsibilities when making design decisions and taking action. This inquiry-based course helps students develop conceptual understanding in global contexts and provides opportunities for interdisciplinary learning. This course is a 9th grade MYP requirement.
<b>SHS</b>	