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## HIGH SCHOOL AND YOUR FUTURE

This booklet has been designed to assist you and your parents in preparing for your high school years and for your future. The high schools in Stamford offer many opportunities to all students.

During your high school years you will make decisions that will enable you to work toward longrange goals in a planned, sequential manner. Consulting with school counselors will enable you to identify personal strengths and to consider a program of study that will be challenging and fulfilling.

## DEVELOPING YOUR PLAN OF STUDIES

With the help of your school counselor, as an entering high school student you should begin to develop a four-year plan of courses. Your plan may change as you consider new information, but it should illustrate what you want to accomplish and the level of skill you want to achieve by the time you graduate. In general, students select courses to meet the requirements of their high school, college, and career goals.

You will benefit from taking advantage of the guidance services available in the high schools. In addition to conferences with your counselor, the Guidance Office provides a number of services.

## CAREER AND COLLEGE PLANNING

Each high school has a fully equipped Career Center. There is easily accessible information on all career fields. Information on careers, planning for the future, and learning more about oneself is available in a variety of print and non-print formats. There are computers, recent college catalogs and videos, handbooks, applications, directories, and trade and vocational school guides. Specific job briefs describing the level of education needed to enter and progress within a career field are also featured.

All students have access to Naviance, a webbased tool for guiding students and their parents through the entire college planning process. See page 70 for information about Naviance.

Students are encouraged to browse, begin a career search, or follow up on interests in the Career Center. This is a means by which individuals become aware of the relationship between school courses and possible career options. The Center is open to students at all times. Career Counselors specializing in career planning are at each high school center to provide additional assistance. Students can use the computers in the Career Center to explore occupations, colleges, the armed services, and financial aid.

## CAREER AND TECHNICAL ACADEMIES

Career awareness and planning are integrated throughout the curriculum in all the subject areas and across all grade levels. In addition, there are a number of career and technical academies and programs that link overall learning to the real global marketplace.

Opportunities for you to learn more about your interests and abilities are made possible through a variety of tests and assessments in various formats. You and your counselor will use this information, along with other factors, to discuss possible careers and their educational requirements.

For more information about activities and programs to help you plan your future, see CAREER AND TECHNICAL EDUCATION on page 70.

## TESTS FOR COLLEGE ENTRANCE

## PSAT/NMSQT

The Preliminary Scholastic Aptitude Test (PSAT) provides critical reading, math problem solving, and writing skill practice. The test does not have an essay. All sophomores are required to take the test. The test provides practice for the SAT. It is given in October at the student's high school. In December, students will receive their test booklet and scores in the form of a comprehensive Score Report. In addition to the results, the Score Report provides information related to college and Advanced Placement course readiness.

The National Merit Scholarship Qualifying Test (NMSQT) is for juniors who wish to apply for the National Merit Scholarship Program, the National Achievement Scholarship Program for Black American Students, or the National Hispanic Recognition Program. In October of their junior year, students retake the PSAT which acts as the qualifying test for these scholarship programs. Only the junior year administration results are used.

When students take the PSAT/NMSQT in October, they will be asked if they want to be part of the College Board Search Service. With the student's permission, his/her name, address, sex, birth date, school, grade level, ethnic group, email address, and intended college major will be sent to colleges that use the service. Scores are not sent as part of this process. Colleges do not receive or use PSAT/NMSQT scores for admissions decisions.

Students are encouraged to take advantage of free, personalized online SAT practice with Khan Academy. The practice test is closely aligned with the PSAT/NMSQT. (www.collegeboard.org/psatpractice)

Students with special accommodations for extended time on national testing must fill out a Services for Students with Disability (SSD) form and have prior approval by the College Board in order to take the PSAT or SAT test with special accommodation.

## Scholastic Aptitude Test (SAT)

Beginning spring 2016, the SAT has been redesigned to focus closely on the knowledge and skills that matter most for postsecondary education and career success. There is a greater emphasis on the meaning of words in extended contexts and on how word choice shapes meaning, tone, and impact. The SAT is aligned to current Stamford Public Schools curriculum and instructional practices.

The SAT counts as the state assessment for Connecticut as well as for college entry. For the state assessment, the SAT is given to all juniors in the spring at their high school. This test includes Evidence-Based Reading and Writing and Math. The Evidence-Based Reading and Writing portion of the test includes (a) reading, (b) writing and language arts. The Math portion of the test includes a calculator portion and a noncalculator portion.

For college entry, the SAT includes the tests listed above and may also include the 50 minute Essay. Students should check the specific college requirements to determine if the Essay is required for admittance.

## SAT Subject Tests

The SAT Subject Tests are a battery of onehour, mostly multiple-choice tests that measure how much students know about a particular academic subject and how well they can apply that knowledge. SAT Subject

Tests are not a requirement but students may choose to take tests in subject areas of interest and in which they excel to demonstrate academic qualification for college admission. SAT scores become part of a student's record.

The SAT tests are offered several times during the year. Registration should take place online at www.collegeboard.com. There are some registration forms in the Career Center. There is a registration fee, but fee waivers are available to financially eligible students. The school codes for registration are: 070750 - Stamford High School 070751 - Westhill High School 070707 - AITE

2017-2018 SAT Test Dates (Anticipated)
SAT Subject
Tests Available
Oct. 7, 2017
Nov. 4, 2017
Yes
Dec. 2, 2017
March 10, 2018
May 5, 2018
Yes

June 2, 2018 Yes
Yes

Contact www.collegeboard.com or your school guidance counselor for registration deadlines.

## American College Test (ACT)

The ACT assessment is designed to measure high school students’ college readiness and is made up of multiple choice tests that cover four skill areas: English, Mathematics, Reading, and Science. The Writing Test, which is optional, measures skills in planning and writing a short essay.

## 2017-2018 ACT National Test Dates

September 9, $2017 \quad$ February 10, 2018
October 28, $2017 \quad$ April 14, 2018
December 9, $2017 \quad$ June 9, 2018

Contact www.actstudent.org or your school guidance counselor for testing information.

## Test of English as a Foreign Language (TOEFL)

The TOEFL is a requirement for admission into Colleges and Universities where instruction is in English. In addition, many government, licensing, and certification agencies, and exchange and scholarship programs use TOEFL scores to evaluate the English proficiency of people for whom English is not their native language.

The TOEFL test is offered in different formats depending on your location. The Internet-based test (iBT) is currently available in the United States. The TOEFL measures the ability of non-native speakers to understand North American English as it is used in college. Scores on the TOEFL are required by almost all two- and four-year colleges and universities in both the United States and Canada. TOEFL is also used by institutions in other countries in which English is the language of instruction. The institutions want to make sure that entering students can understand the instructors and can do college level work. The test is recommended for students who have been in the United States for three years or less.

## Advanced Placement (AP) Tests

AP courses are designed to meet the objectives of rigorous first year courses at the college level as prescribed by the College Entrance Examination Board Advanced Placement Program. AP courses provide students with the opportunity to earn college credit, advanced placement, or both. Each AP course concludes with a collegelevel test which is an essential part of the AP experience enabling students to demonstrate their mastery of college-level course work.

More than 90 percent of 4-year colleges grant credit and placement on the basis of successful AP exam scores. AP courses are offered in the following subject areas to prepare students for taking the AP examination: Art, English, Math, Music, Social Studies, World Languages, and the Sciences. The examinations are given in May.

Students who wish to receive the weighted credit of .07 for rank and grade point average (GPA) in those subjects are required to take the AP examination. To earn college credit a student must receive a passing score of 3 or higher on the AP exam. There are additional course requirements for AP classes, particularly during the summer. Students are expected to consult their AP teachers for those requirements. For more information, visit www.collegeboard.org.

## Armed Services Vocational Aptitude Battery (ASVAB)

The ASVAB is a series of tests related to the skills needed in performing jobs in the Armed Services. Students considering a military career should see their counselors to make an appointment with the service representative for the test. It is given in January. Students participating will have their results interpreted by a representative of the armed services.

University of Connecticut Early College Experience (UConn ECE)
The UConn ECE program provides academically motivated students with the opportunity to take university courses while in high school. Students may earn college credit for each UConn ECE course taken. Successful completion of a UConn ECE course adds .07 weighted credit to a student's rank and GPA. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree and other postsecondary opportunities. College credit is earned for a fraction of the cost it would be if the course were taken on a UConn campus.

UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity, and critical thinking - all important for success in college and careers. UConn ECE courses are offered in Art, English, Math, Music, Social Studies, World Languages, and the Sciences. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to many colleges and universities. Students are charged a program fee of $\$ 35$ per credit plus a resource fee of $\$ 20$. Thus, a 2 -credit course will cost $\$ 90$ and a 3 -credit course will cost $\$ 125$. For additional information, visit www.ece.uconn.edu.

## REQUIREMENTS FOR A HIGH SCHOOL DIPLOMA

The high school graduation requirements for students in the Stamford Public Schools contained in Board of Education Policy 5135.2 continue to be in a process of revision. It is expected that the state legislature will postpone the implementation of the new High School Graduation Requirements (Connecticut General Statutes Section 10-221a) for the graduating class of 2021. The District is awaiting this decision. Nevertheless, all students in the Stamford Public Schools shall pass all district required courses for graduation, as posted in the district Program of Studies. Students who fail to meet these high school graduation requirements shall not graduate from high school, except as may be specifically provided in the regulations.

In order to obtain a high school diploma from the Stamford Public Schools, students are expected to demonstrate proficiency in Reading, Writing, Mathematics, and Science, which are part of the 20 credits of required coursework. Guidance counselors are responsible for monitoring student progress in reaching graduation requirements. Guidance counselors will inform parents of student progress and will work with department heads and teachers to help students reach proficiency in all academic areas.

## District Required Courses and Credits for Graduation:

Students are required to accumulate 20 or more course credits, distributed as follows:

| Course | Credits | Years |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| English | 4 | 4 yrs. |  |  |  |  |
| Math | 3 | 3 yrs. |  |  |  |  |
| Science | 2 | 2 yrs. |  |  |  |  |
| Social Studies | 3 | 3 yrs. |  |  |  |  |
|  <br> Technical Education | 1 | 1 yr. |  |  |  |  |
| Health | 1 | 1 yr. |  |  |  |  |
| Physical Education | 5 | 1 yr. |  |  |  |  |
| Electives | Total |  |  |  | $\mathbf{2 0}$ |  |

## District Required High School Connection Time for Graduation:

Connection Time is a period for teachers and students to develop connections that positively impact students. Teachers facilitate discussions on relevant topics, such as time management, internet safety, bullying, and college planning, and provide a safe, non-judgmental environment for students to discuss and possibly resolve immediate concerns.

High School Connection Time is a graduation requirement for all students. Students must pass 3 out of 4 quarters of Connection Time (i.e., 3 PAs for Participation, not more than 1 NPA for Non-participation) per year to meet the graduation requirement. The rubric for participation or non-participation in Connection Time will be shared with all incoming $9^{\text {th }}$ grade students and their parents or guardians. Participation or non-participation in Connection Time will be reported to parents quarterly via report cards. Students who do not meet this graduation requirement will need to complete alternatives in order to graduate, including Connection Time make up work and/or community service as authorized by the building principal.

## CREDITS

Each student entering grade 9 is required to earn a minimum of 20 credits for graduation. As a general rule, the maximum total credits a student may earn each year is 7 . Of these 7 credits, no more than 2 credits may be transferred from approved programs outside the school. In addition, a student may make up as many as 2 credits in an approved remedial summer program. A student must earn the following number of credits to be promoted: to Sophomore class - 4.5; to Junior class - 7.6; to Senior class - 13.

## HONORS COURSES

Honors courses explore the subject matter in depth and in a comprehensive and accelerated approach. Courses are available in the following academic subjects: English, Mathematics, Science, Social Studies, and World Languages. These courses are intended for students who have demonstrated motivation, interest, and achievement in previous courses taken in this content area. Students are required to meet specific criteria for all honors courses. Successful completion of an honors course adds . 05 weighted credit to a student's rank and GPA. For further information, contact the guidance counselor or department head.

## ONLINE COURSES

Students may choose to enroll in online courses and earn high school credit upon their successful completion. These courses offer students opportunities to participate in online discussions and group projects while learning rigorous course content with teachers not physically located in their own school. Credit will only be given for courses that are offered by an accredited educational institution and approved by the Stamford Public Schools. Credit for these courses is not counted in the student's GPA or class rank. For further information, contact the guidance counselor or department head.

## INDEPENDENT STUDY

(Grade 12 or permission of principal)
Independent study is available in most areas. Students electing this course will conduct an in-depth study of a specific topic in consultation with an advisory teacher. This course of study must be approved by the department head. Credit for these courses is not counted in the GPA.

## SENIOR INTERNSHIP EXPERIENCE

Stamford Public Schools has recently implemented a Senior Internship Experience (SIE) program. The program takes place from mid-May through the end of June for approximately five weeks. The SIE provides various internship opportunities at different locations within the City of Stamford: city departments, schools, non-profits, and approved self-designed sites across the city. This program gives students the opportunity to pursue their unique interests, passions and talents with hands on job experience.

In order to participate, seniors must meet the following prerequisites:

- Have a minimum cumulative GPA of 2.0
- Provide teacher recommendation
- Successfully meet grade, behavior, and attendance requirements for both semesters 1 and 2 of senior year
- Passing and not in danger of failing any senior year course
- Meeting all graduation requirements
- Have health insurance coverage (and auto insurance if driving to, during, and from the internship site)
- Have settled all accountabilities prior to the start of the internship
- Endorsement from their parent or guardian
- Review and approval from the Guidance Counselor, Principal, and SIE Program Coordinator

Students who are approved to participate in the Senior Internship Experience end their regular classes (after AP testing) and have their grades finalized and classwork requirements ended as they transition to their internship sites full-time ( 30 hours per week). The internships effectively take the place of attending classes for the last five weeks of school. All internships are unpaid. Students will have a mentor on the job and a school faculty member who will monitor their progress throughout the internship.

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

## CLASS RANK AND GPA

Each student will receive two class ranks: unweighted and weighted. The unweighted rank is computed by using the grade point average (GPA) of the final marks earned by each student in grades 9-12 in all subjects except those on Pass/Fail (P/F), Physical Education, Online Courses, and Independent Study. The weighted rank is calculated by adding the following values to the unweighted GPA: . 05 weight for each Honors class taken and .07 weight for each

Advanced Placement and UConn ECE course taken. Only students who have attended Stamford Public schools for four semesters are included in the class rank.

While the rules and regulations outlined in the Program of Studies apply to all students, the school principal may make exceptions in the best educational interest of individual students.

## CHOOSING YOUR GOALS

## THE FOUR YEAR COLLEGE

Although requirements differ from college to college, it is generally suggested that students choose their elective sequences from the areas of individual interest and aptitude. The colleges' recommended length of preparation for each subject area is English, 4 years; mathematics, 3-4 years; world language(s), 2-5 years with a minimum of 2 years in any one language; social studies, 3 years; science, 1-3 years. It is helpful to frequently talk with your school counselor to keep track of the tests that should be taken, deadlines to be met, courses to be completed, and opportunities for you to work toward your goals.

The Career Center, the school's website, and counselors also have information about scholarships and financial aid procedures for students and their parents.

In selecting applicants for admission, fouryear colleges consider class rank, grades earned, level of difficulty of subjects studied, as well as scores on standardized aptitude and achievement tests. Also considered are letters of recommendation that include comments on a student's character and his/her academic and extracurricular activities.

## OTHER COLLEGES \& SPECIALIZED SCHOOLS

Students should review websites, catalogs, or brochures from specialized schools to learn their admissions requirements. This should be done early in order to select the high school courses that will best equip the student to be accepted. Some specialized schools, such as art, nursing, or dental hygiene, require aptitude tests. Other schools may require their own admissions or placement tests. Most schools take into account scholastic standing, special aptitudes, and personal qualities of the candidate. Students are urged to consult with their counselor early in their high school career to plan their courses to meet these requirements. Opportunities for financial aid, work-study, and scholarships can also be explored.

## CHOOSING YOUR COURSES

Each school staff member (counselor, teacher, department head, administrator) is available to parents and students to assist them in choosing a program of studies. Individual student conferences with a school counselor are necessary for proper course selection. They will help to ensure that courses meet the individual student's needs, abilities, and interests, as well as his/her goals upon high school graduation.

Regardless of individual interests, there are certain subjects that have been established as Requirements to be taken by all students. There are other subjects, called Electives, designed to meet individual student interests. Because of the sequential nature of certain courses and the necessity for
establishing a firm foundation for more advanced levels of study, many courses have "prerequisites." Under exceptional circumstances, prerequisites may be waived with the approval of appropriate school personnel if the student can show sufficient background and interest. Electives are similar at each high school. However, each school does offer some additional courses based upon the particular needs and interests of the students or the special talents of the faculty. There are also opportunities to take online courses, with prior consultation with the Guidance Office and approval from school officials. To ensure that elected courses have a relationship to their educational goals, students should consider a sequence of courses within a subject area. A sequence is a series of courses within a subject area studied for two or three years.

Selecting a course represents a commitment to remain in that course for its full term. Any course change after the first marking period will be noted on transcripts with a "W" = Withdrawn.

Students will be assigned to supervised study halls during those periods not assigned to elected courses. Attendance is required and monitored in all courses including study hall.

NOTE: All courses are offered subject to sufficient enrollment, staffing, and funding. Courses with chronically low enrollment may be discontinued or offered on an alternating year basis to allow interested students the opportunity to take the course at some point during their high school career.

## STUDENT SUPPORT SERVICES

The Department of Student Support Services oversees Guidance, Psychology, Social Work, and Parent Facilitators. Programs and services described in the following paragraphs have one common goal: to provide a continuum of developmental, preventative, remedial, and supportive services that enhance opportunities for all students to achieve academic success and personal well-being. Students are encouraged to visit with the staff of each department to learn how they can receive appropriate help.

## GUIDANCE SERVICES

Each high school has a staff of school counselors to assist students in selecting options related to educational needs, career planning, and matters of personal and social concern. Upon admission to the high school program, all students are assigned a school counselor. Throughout their high school years, students meet with their counselors to obtain information on matters that will require decisions to be made and action to be taken. Counselors assist students in selecting courses that will meet their educational objectives. Counselors encourage students to take advantage of computer programs such as Naviance (see page 70) for college planning and occupational information, and to participate in the regularly scheduled visits of college and career representatives.

From the Guidance Office, information of general interest to students is widely circulated within the school. Counselors conduct evening programs for parents on topics of special interest relating to financial aid, college admissions, and career orientations. Parents may make appointments to see teachers through the counselor. Students may see their counselor at any time by appointment.

## PSYCHOLOGICAL SERVICES

School psychologists are available to facilitate learning and to promote the cognitive, social, and emotional development of all students.

Each school has an assigned school psychologist whose main activity is to enhance the academic achievement of students. This objective is facilitated through the assessment of student needs, implementation of school-wide programming at the primary prevention level, development of positive individual student outcomes, administration of diagnostic evaluations, progress monitoring of student performance, and the offering of therapeutic counseling and crisis counseling supports. School psychologists also offer consultative resources to parents, faculty, and administration in an effort to further promote student learning and social development. The Psychology Department strives to assist in the harboring of a positive school climate that fosters academic and social competence for all learners.

## SOCIAL WORK SERVICES

School social workers are available to all students needing individual or group counseling in order to alleviate personal crises and problems of adjustment within the school, the home, or the community. The confidential nature of these communications
is understood and respected by each of the social workers and the school community. School social workers are available to parents, faculty, and administration to facilitate and support appropriate education-al plans and services for students. Likewise, school social workers maintain close collaborative ties to community providers and serve to connect families to appropriate communal supports available. School social workers who speak a variety of languages are available to each school to meet the needs of all students and families. The department's goal is to enhance student functioning so as to enable the student to take full advantage of his/her educational resources.

## PARENT FACILITATORS

Parent facilitators provide parents and caregivers of Stamford Public School children with information and support in accessing available resources in the schools. They promote respect for parents and caregivers as partners in education. Facilitators help parents access information about the policies and procedures of the Stamford Public Schools, assist them with issues and concerns they have, and aid them in understanding the protocol when addressing those issues to effectively voice their concerns.

Parent facilitators work with the school community to promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.


## LIBRARY MEDIA CENTERS

The Library Media Centers serve as the focal point for all information literacy and problem solving instruction in the school. Their mission is to ensure that all students become independent, skillful, and discriminating users and communicators of ideas and information.

## RESOURCES

The staff works cooperatively and collaboratively with all teachers, administrators, and parents to guide students in their research and to assist them in their academic and recreational reading needs. A wide range of resources in a variety of formats is available from within and outside the school. Collections include reference books, nonfiction and fiction books, e-books, databases, newspapers and magazines, DVDs, CDs, and audio books.

## COMPUTER TECHNOLOGY

Each library has in excess of 60 networked computers that provide access to the Internet, an online library catalog, and a wide variety of subscription databases appropriate for research. Links are found on the library webpages on the school website. These computers are available before, during, and after school for students to use independently or with a class. The library catalogs and subscription databases are also accessible from home to students with Internet capability.

## MEDIA

Recording, laminating, interlibrary loan, and copy and fax machine services are available for school-related projects.

## AFTER SCHOOL

Services are offered to students after school on designated days with teachers and peer tutors assisting students with homework assignments and test preparation.


## STAFF SUPPORT

The staff members of the library media centers are committed to working with the entire school community for all its information needs. The facilities function as information centers for the schools and offer to all students and staff an environment conducive to academic study and active teaching and learning.

## BILINGUAL / SHELTERED / ESOL PROGRAMS

Students identified as English Learners (EL) at the high school level may be placed in Bilingual, Sheltered, and/or English to Speakers of Other Languages (ESOL) courses which assist them in acquiring listening, speaking, reading, and writing skills while learning content area material.

## BILINGUAL PROGRAM

Bilingual courses are offered to Hispanic and Haitian-Creole 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. All other students who arrive after October 1 of $10^{\text {th }}$ grade are eligible to enroll in Sheltered content classes with intensive ESOL programming.

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 Spanish and English or in Haitian-Creole and English.

## SHELTERED PROGRAM

Sheltered courses are offered at both Stamford High School and Westhill High School to English Learners 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.

## ESOL PROGRAM

ESOL courses are offered to all English Learners at the high school level. The ESOL Program utilizes national TESOL (Teachers of English to Speakers of Other Languages) standards in the development of English language skills with 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.

## PROGRAMAS BILINGÜES/DE INMERSIÓN ESTRUCTURADA/ESOL

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

## PROGRAMA BILINGÜE

Se brindan las asignaturas bilingües a alumnos hispanos y criollos haitianos que llenan los requisitos estatales y federales para la admisión en el Programa Bilingüe. De conformidad con la Sección 10-17a-j de las Leyes Generales de Connecticut, solo reúnen los requisitos para asistir al Programa Bilingüe los estudiantes a quienes les faltan más de 30 meses para poder graduarse. 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 criollo haitiano con tal que los alumnos se inscriban antes del $1^{\circ}$ de octubre de su segundo año. Todos los demás estudiantes que llegan al grado 10 después del $1^{\circ}$ 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 criollo haitiano e inglés.

## 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 criollo haitiano 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.

## PROGRAMA DE ESOL

Se brindan todas las asignaturas de ESOL (Inglés para Hablantes de Otros Idiomas) a todos los del Idioma Inglés al nivel de escuela secundaria (escuela superior). El programa ESOL 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 intense en el uso significativo y auténtico del inglés, el idioma de enfoque, con maestros de TESOL certificados.

## PROGRAMAS BILINGÜES/DE INMERSIÓN ESTRUCTURADA/ESOL

## COURSE OFFERINGS

Salud 1
Salud y Desarrollo Social 2
Matemáticas Fundacionales
Algebra 1
Geometría
Algebra 2
Física de Ciencias Físicas Physics ( $1 / 2$ año)
Química de Ciencias Físicas ( $1 / 2$ año)

Biología
Ciencias Sociales 9
Historia Mundial Moderna
Cívica
Introducción Al Procesamiento De Textos
Habilidades Tecnológicas Para El Siglo XXI
Matemáticas Del Consumido
Artes del Lenguaje del Idioma Nativo Español

## PROGRAMA BILINGÜE EN ESPANOL

## 9890_SALUD 1

$1 / 2$ crédito
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 substancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.

## 9880_SALUD Y DESARROLLO SOCIAL 2 $1 / 2$ crédito

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 substancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.

## 6182_MATEMATICAS FUNDACIONALES <br> 1 crédito

Está diseñada esta materia específicamente para estudiantes hispanoparlantes recién llegados a quienes les faltan las habilidades fundacionales para el éxito en una materia de matemáticas de escuela secundaria (escuela superior) bilingüe. Tiene el propósito de ayudar a los estudiantes a desarrollar habilidades de prerrequisito fundamentales y los ocho estándares de las prácticas de las matemáticas básicas esenciales.

## 6104_ ALGEBRA 1 <br> 1 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.

## 6106_ GEOMETRÍA

1 crédito
Prerrequisito: Algebra 1
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.


## 6212_ ALGEBRA 2

Prerrequisito: Geometría
1 crédito
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 logoritmo. 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 aplicaciones auténticas de la vida real, así como otras destrezas que se requieren para el exámen de S.A.T. durante el año para entrar en la universidad.

## 8451_FÍSICA DE CIENCIAS FÍSICAS 1/2 crédito

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.

## 8452_QUÍMICA DE CIENCIAS FÍSICAS 1/2 crédito

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.

## 809_BIOLOGÍA

## 1 crédito

Este curso explora principios biológicos. El curso examina la ecología, biología de células, genética, evolución, micro-organismos, plantas, 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.

## 584_CIENCIAS SOCIALES 9 1 crédito

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.

## 518_HISTORIA MUNDIAL MODERNA $1 / 2$ crédito

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.

## 574_CÍVICA <br> $1 / 2$ crédito

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.

## 2453_INTRODUCCIÓN AL PROCESAMIENTO DE TEXTOS <br> $1 / 2$ crédito

Esta materia se enfoca en el dominio del sistema de teclado. Se cubre el formateo de cartas comerciales personales, cartas de negocios, informes de MLA y curriculum vitae (resumes).

## 2467_HABILIDADES TECNOLÓGICAS PARA EL SIGLO XXI <br> $1 / 2$ crédito

Esta materia está diseñada para alumnos que ya tienen dominio del sistema de teclado. Se estimula a los estudiantes a mejorar sus habilidades de comunicación escrita mediante su participación en varios simulacros de oficinas, y creando cartas comerciales, memorandos y sus curriculum vitae personales. Los alumnos aprenden la etiqueta adecuada de e-mails y las estrategias para desarrollar habilidades de presentaciones eficaces. Colaboran entre ellos en varios proyectos que usan la aplicación Cloud y Google Docs.

## 2401_MATEMÁTICAS DEL CONSUMIDOR

## 1 crédito

Esta materia introduce a los alumnos a principios de matemáticas prácticos, dando énfasis a descuentos, interés, cuentas, fracciones, decimales, porcentajes, ganancias y pérdidas, presupuestos, seguros, cuentas corrientes y récords sencillos. Las Matemáticas del Consumidor, una materia básica para alumnos que se están preparando para entrar en el mundo de los negocios inmediatamente después de su graduación, puede ser usada para completar un año del requisito de matemáticas para graduarse.

## 3141_ARTES DEL LENGUAJE DEL IDIOMA NATIVO ESPAÑOL 1 crédito

Esta asignatura está diseñada para hablantes nativos del español que necesitan desarrollar destrezas de alfabetización en su idioma natal. Comenzará con las destrezas básicas de las artes del lenguaje, incluso fonética, ortografía, lo básico en la lectura e instrucción en escritura.

## PWOGRAM BILENG-KREYOL AYISIEN

## 3496_BILENG-KREYOL AYISIEN

 1 créditKou sa-a konsantre sou devlòpman vokabilè yo itilize anpil nan plizyè matyè, tèl 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.

## SHELTERED PROGRAM

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

## ESOL PROGRAM

See content area for English for descriptions of ESOL courses.

## 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.

## COURSE OFFERINGS

Introduction to Word Processing ( $1 / 2$ year)(WHS)
Technology Skills for the $21^{\text {st }}$ Century ( $1 / 2$ year)(WHS) Information Technology ( $1 / 2$ year)
Information Technology and Design ( $1 / 2$ year)
Accounting 1, 2
Advanced Principles of Accounting
Business Concepts ( $1 / 2$ year)
Business Exploration (SHS)
Business Law
Career Pathways and Success Skills ( $1 / 2$ year)
Business Math
Entrepreneurship

International Business ( $1 / 2$ year)(SHS)
Introduction to Investments and the Stock
Market (1/2 year)
Managerial Accounting ( $1 / 2$ year)(SHS)
Marketing in the $21^{\text {st }}$ Century
Marketing Education 2 (SHS)
Personal Finance ( $1 / 2$ year)
Sports and Entertainment Management and Marketing
Web Design
Introduction to Game Design ( $1 / 2$ year)

## 2450_INTRODUCTION TO WORD PROCESSING (WHS)

2454_Sheltered
$1 / 2$ credit
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 $21^{\text {ST }}{ }^{-}$CENTURY <br> 2466_Sheltered <br> $1 / 2$ credit

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 $1 / 2$ credit

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 <br> $1 / 2$ credit

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 web site. In the database application, students create a database, query a database, and prepare reports and forms.

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit

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 decisionmaking. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.

## 2270_ACCOUNTING 2

Grade: 11, 12
Prerequisite: Accounting 1
1 credit
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 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.

## 2275_ADVANCED PRINCIPLES OF ACCOUNTING (WHS)

## 1 credit

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.

NOTE: 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).


## 2390_BUSINESS CONCEPTS

Grade: 9, 10
$1 / 2$ credit

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.

## 2120_BUSINESS EXPLORATION (SHS)

Grade: 12
1 credit
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.

## 2370_BUSINESS LAW

Grade: 10, 11, 12
1 credit
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.

## 2100_CAREER PATHWAYS AND SUCCESS SKILLS <br> ½ credit

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.


## 2400_BUSINESS MATH <br> 2401_Sheltered

Grade: $10,11,12$
1 credit
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.

## 2080_ENTREPRENEURSHIP 1 credit

Designed for students interested in an entrepreneurial career, this course is offered in conjunction with the Network for Teaching Entrepreneurship (NFTE) www.nfte.com. 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.

## 209_INTERNATIONAL BUSINESS (SHS) $1 / 2$ credit

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.

## 2830_INTRODUCTION TO INVESTMENTS AND THE STOCK MARKET <br> $1 / 2$ credit

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.

## 2274_MANAGERIAL ACCOUNTING (SHS)

Prerequisite: Accounting 1
$1 / 2$ credit
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 efficiently; and how performance evaluations are used. These topics will be investigated using case studies.

## 2180_MARKETING IN THE 21 ${ }^{\text {ST }}$ CENTURY

Grade: 10, 11, 12

## 1 credit

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.

NOTE: Sacred Heart University credit (3 semester hours) will be offered to students who achieve a grade of $B$ or higher.

## 2280_MARKETING EDUCATION 2 (SHS)

Grade: 11, 12
Prerequisite: Marketing in the $21^{\text {st }}$ Century 1 credit

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.

## 2361_PERSONAL FINANCE

Grade: 10, 11, 12
$1 / 2$ credit
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.

## 2352_SPORTS AND ENTERTAINMENT MANAGEMENT AND MARKETING 1 credit

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

## 2630_WEB DESIGN

Grade: $10,11,12$
1 credit
This course helps students plan and develop well-designed web sites 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.

## 2473_INTRODUCTION TO GAME DESIGN <br> $1 / 2$ credit

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.


## 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 HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Child Development ( $1 / 2$ year) (SHS)
UConn ECE Individual \& Family Development (SHS)
Introduction to Culinary Arts ( $1 / 2$ year)
Culinary Arts/Pro-Start 1 (SHS)
Baking \& Pastry/Pro-Start 2 ( $1 / 2$ year) (SHS)
International Foods/Pro-Start 2 ( $1 / 2$ year) (SHS)
Interior Design 1 ( $1 / 2$ year) (SHS)
Interior Design 2 ( $1 / 2$ year) (SHS)

Fashion \& Furnishings 1 (WHS)
Fashion \& Furnishings 2 (WHS)
Fashion Merchandising \& Construction 1 (SHS)
Fashion Merchandising \& Construction 2 ( $1 / 2$ year) (SHS)
Fashion Merchandising \& Construction 3 ( $1 / 2$ year) (SHS)

## 0392_CHILD DEVELOPMENT (SHS)

$1 / 2$ credit
This semester 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.

## 0393_UCONN ECE INDIVIDUAL AND FAMILY DEVELOPMENT (SHS) <br> 1 credit

This course provides students with an understanding of individual and family development over the life span. It focuses on the developing individual in the context of the family system and the changes that occur in family systems over time. The course includes an internship component. Students entering this program will be interviewed prior to acceptance and must carry school accident insurance as well as provide their own transportation to internship sites.


## 0140_INTRODUCTION TO CULINARY ARTS <br> 1/2 credit

This semester 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.

## 0282_CULINARY ARTS/PRO-START 1 (SHS) <br> 1 credit

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.


## 0283_BAKING AND PASTRY/PRO-START 2 (SHS) <br> $1 / 2$ credit

This semester 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.

## 0284 INTERNATIONAL FOODS (SHS) <br> $1 / 2$ credit

This semester course reinforces all of the techniques learned in Introduction to Culinary Arts and Culinary Arts 1 through exploration of international foods. The study of regional, ethnic, and foreign foods is used to increase cultural awareness and appreciation of diversity. Upon completion of the Pro-Start program students are able to earn college scholarships and 3 credits at Norwalk Community College.

## 021_FASHION AND FURNISHINGS 1 (WHS) <br> 1 credit

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.

## 022_FASHION AND FURNISHINGS 2 <br> (WHS)

1 credit
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.

## 0221_FASHION MERCHANDISING AND CONSTRUCTION 1 (SHS)

1 credit
This course introduces students to the world of fashion through project-based learning. Students learn the basics of hand and machine stitching, alterations, and fabric selection and care. Students are introduced to silhouettes and the elements and principles of design. The vast career choices within the fashion industry are also explored.


## 0222_FASHION MERCHANDISING AND CONSTRUCTION 2 (SHS) <br> $1 / 2$ credit

This course reinforces techniques learned in Fashion 1 through expanded project-based learning. Advanced sewing techniques are taught. Textile selection and design are studied, and the elements and principles of design are further explored. Fashion-based colleges and careers are discussed. Fashion merchandising is an integral part of this class through virtual selection, purchasing, and resaling of student designed product.

## 0223_FASHION MERCHANDISING AND CONSTRUCTION 3 (SHS)

1/2 credit

This course reinforces techniques learned in Fashion 1 through expanded project-based learning. Individual projects incorporate advanced construction techniques. Students develop their sketching skills and create a portfolio. This course includes the history of fashion and fashion designers, as well as textile terminology. Current styles and trends are reviewed through the use of WWD.

## 1265_INTERIOR DESIGN 1 (SHS) $1 / 2$ credit

This semester 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) <br> 1/2 credit

This semester 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 projectbased learning. Room design and finishes are discussed. Skills in mathematics, technology, and art are reinforced. Individual projects reinforce research and writing skills.

## 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

Automotive Technology ( $1 / 2$ year) (WHS)

## 1210_AUTOMOTIVE TECHNOLOGY (WHS) <br> $1 / 2$ credit

This course focuses on how an automobile works with a major emphasis on the study of electrical ignition and timing, carburetion, and compression. Included is a study of the engine and the drive train in motion.


Video Technology ( $1 / 2$ year) (WHS)
Wood Technology (1⁄2 year) (SHS)

## 1190_WOOD TECHNOLOGY (WHS)

$1 / 2$ credit
This is an introductory course in the use of woodworking machines and portable power tools. Students have hands-on experiences in elementary woodworking, planning, design, and wood finishing.

## 1560_VIDEO TECHNOLOGY (SHS)

$1 / 2$ credit
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.

## CO-CURRICULAR ELECTIVES

## COURSE OFFERINGS

AVID
SAT Review 11 \& 12 (SHS)
Communications
Journalism

Yearbook: Design and Publications (SHS)
Publication Design and Development (WHS)
Publication Editing and Evaluation (WHS)
UConn Prep (SHS)

## 920_AVID (Advancement Via Individual Determination) 1 credit

This program is designed to increase schoolwide learning and performance by ensuring that all students will succeed in a rigorous curriculum, enter mainstream activities of the school, increase their enrollment in four-year colleges, and become educated and responsible participants in a democratic society. Students who participate in the AVID program enroll in an AVID Elective Class that includes: AVID Tutorials (i.e., collaborative study groups, writing groups, and Socratic seminars) and AVID curriculum that includes writing, college and career preparation, and strategies for success.


6450_SAT REVIEW 11 (SHS) 3600_SAT REVIEW 12 (SHS) $1 / 2$ credit

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

## 3250_COMMUNICATIONS

Prerequisite: English 10
Grade: 11, 12
1 credit
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.

## 3270_JOURNALISM

Prerequisite: Communications and consultation with department head
Grade: 11, 12
1 credit
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.

## 0300_YEARBOOK DESIGN AND PUBLICATION (SHS) <br> 1 credit

Design and Publication offers an interdisciplinary 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.

## 3650_PUBLICATION DESIGN AND DEVELOPMENT (WHS) <br> ½ credit - First Semester Only

This course offers an interdisciplinary approach to the production of the school yearbook. Students study contemporary print design and use their knowledge to learn layout development, use of graphics and photo journalism, business management, and marketing. Publication Design and Development requires additional hours after school.


## 3660_PUBLICATION EDITING AND <br> EVALUATION (WHS) <br> ½ credit - Second Semester Only

Students edit yearbook proofs and prepare the yearbook for final production. They use contemporary print design critical theory to evaluate the yearbook during the editing or proofing process and following the book's distribution that will be used to design and develop the following year's book

## 9590_UCONN PREP (SHS) 1 credit

The UConn Pre-College Readiness and Enrichment Program (PREP), a cooperative endeavor with the University of Connecticut, is designed to provide academic support, leadership training, and career exploration for disadvantaged and minority students who are motivated and want to go to college. Students are selected after careful screening and recommendation from the middle school faculty and staff.


## 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Requirements:

English 9
Honors English 9
English 10
Honors English 10
English 11
Honors English 11
AP English Language and
Composition 11
UConn ECE English Language
and Composition 11

English 12
Honors English 12
AP English Literature and Composition 12
UConn ECE English Literature and Composition 12

## Electives:

Creative Writing 1
Creative Writing 2
Diverse Perspectives in Literature
English Lab 9
Literacy Lab

Language Studies
Bridges English
People in Literature
Reading
Science Fiction and Fantasy Speech
Sports Literature
Writing Center (WHS)
Writing Workshop (SHS)
English Learner Program:
ESOL (English to Speakers of Other Languages) A, B, C EL Lab

## 3010_ENGLISH 9

3000_Honors
3140_Sheltered
337_/965_Administrative approval required 1 credit

This course focuses 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 the persuasive, narrative, and expository essays, response to literature, and other modes. Literature instruction encourages thoughtful interpretation of various genres including adolescent fiction and mythology, as well as novels, short stories, informational texts, and poetry. Students also participate in thematic Literature Studies units.

## 3110_ENGLISH 10

3100_Honors
3240_Sheltered
339_/956_Administrative approval required 1 credit

This course examines the interpretation of literature through the mediums of the short story, the novel, and expository articles. Instruction focuses on written and oral expression including the persuasive essay and literary response with attention to research, editing, and oral expression skills. Students develop interpretive skills and become fluent in written response to literature. Students also participate in thematic Literature Studies units.

3210_ENGLISH 11
3200_Honors
3231_Sheltered
957_Administrative approval required 1 credit

This course develops an understanding of the American experience through the study of the novel, biography, drama, essay, and poetry. Attention is given to developing fluent, wellstructured, and well-edited written expression, as well as formal and informal oral expression. In addition, students gain a deepened appreciation of the many cultures that make up and contribute to the American experience. Students also participate in thematic Literature Studies units.

## 3260_AP ENGLISH LANGUAGE AND COMPOSITION 11

## 3261_UConn ECE

1 credit
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 1 credit

This course focuses on a selection of literature that examines the human condition from multiple perspectives. Students continue to develop analytical skills in a variety of written and oral formats. Students also participate in thematic literature studies units.

## 3300_AP ENGLISH LITERATURE AND COMPOSITION 12 3301_UConn ECE 1 credit

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.

## ELECTIVES

## 3361_CREATIVE WRITING 1 <br> $1 / 2$ credit

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) $1 / 2$ credit

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.

## 383_DIVERSE PERSPECTIVES IN LITERATURE

Grade: 10, 11, 12
$1 / 2$ credit
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, LatinAmerican, female, or other diverse communities.

## 3791_ENGLISH LAB 9

Grade 9
$1 / 2$ credit
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.

## 3792_LITERACY LAB

Grade: 10, 11, 12
$1 / 2$ credit
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.

## 399_LANGUAGE STUDIES <br> $1 / 2$ credit

This course is designed for Grade 9 and 10 students to provide additional support in reading and writing. Students work in small groups practicing skills. The overall outcome of this course is threefold: to improve the standardized test scores of the selected students, to address the achievement gap between low and higher achieving groups through innovative curriculum and instruction, and to raise the overall test performance of the school.

## 3576_BRIDGES ENGLISH

Grade 12
1 credit
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.

## 357_PEOPLE IN LITERATURE

Grade 12
1 credit
This course is a humanities course that examines the areas of philosophy, literature, drama, and religion. Using a wide range of literary traditions, in addition to film, lectures, guest speakers, class discussion, and collaborative groups, the course explores past and present social issues, cultural and historical developments, psychological concepts, and the theme of men and women's responses to the human condition. While students engage in the above activities, they examine humankind's attempts to struggle against and to live with the forces that surround the world.


## 8650_READING

1 credit
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. Administrative approval required.

## 3820_SCIENCE FICTION AND FANTASY $1 / 2$ credit

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

Grade: 10, 11, 12
$1 / 2$ credit

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

Grade: $10,11,12$
$1 / 2$ credit

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)

Grade: 12
$1 / 2$ credit

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_WRITING WORKSHOP (SHS) $1 / 2$ credit

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.


## ENGLISH LEARNERS PROGRAM

## 3381/3382_ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL-A) <br> 1 credit per semester

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.

## 3450_ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL-B)

Prerequisite: ESOL-A or skill proficiency 1 credit

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.

3460 ENGLISH TO SPEAKERS OF OTHER LANGUAGES ADVANCED LEVEL (ESOL-C)
Prerequisite: ESOL-B or skill proficiency 1 credit

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.

## 3470_EL LAB <br> Non-credit

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


## FINE 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 HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Choral:

Concert Choir
Advanced Choir:
Chamber Singers (WHS)
Madrigal Singers (SHS)
Gospel Choir (WHS)
Voice Class ( $1 / 2$ year)

Instrumental:
Concert/Marching Band
Jazz Ensemble
Orchestra
Piano Instruction 1, 2 ( $1 / 2$ year)
Guitar Instruction 1, 2 ( $1 / 2$ year) (SHS)
Non-Performance:
AP Music Theory
UConn ECE Fundamentals/Ear Training (SHS)
Introduction to the Music Business ( $1 / 2$ year)

## CHORAL

## 7210_CONCERT CHOIR

1 credit
7211_CONCERT CHOIR (SHS)
$1 / 2$ credit
This course explores opportunities in ensemble singing of a varied repertoire of traditional, contemporary, sacred, and secular music. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette is developed through the daily study and performance of a varied repertoire. 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.

## ADVANCED CHOIR:

 7230_CHAMBER SINGERS (WHS) 7231_MADRIGAL SINGERS (SHS) 1 credit
## 7232_MADRIGAL SINGERS (SHS)

$1 / 2$ credit
Prerequisite: Vocal audition and director approval

This course involves advanced studies in choral literature. 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.

## 7000_GOSPEL CHOIR (WHS) 1 credit

This ensemble concentrates on the performance and appreciation of traditional and contemporary Spiritual repertoire. Ear training, harmony, diction, and techniques in breathing are emphasized. 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.

## 7470_VOICE CLASS <br> $1 / 2$ credit

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.

## INSTRUMENTAL

## 7220_CONCERT/MARCHING BAND

 1 credit7225_CONCERT/MARCHING BAND $1 / 2$ credit

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.

## 7510_JAZZ ENSEMBLE

## 1 credit

7515_JAZZ ENSEMBLE
$1 / 2$ credit
Prerequisite: By audition
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.

## 7120_ORCHESTRA <br> 1 credit <br> 7125_ORCHESTRA <br> $1 / 2$ credit

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.

## 7700_PIANO INSTRUCTION 1 <br> 1/2 credit

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.

## 7710_PIANO INSTRUCTION 2 ½ credit

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.

## 7720_GUITAR INSTRUCTION 1 (SHS) $1 / 2$ credit

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 must own or rent their own guitar. An acoustic guitar is recommended; no amplifiers will be allowed.)

## 7730_GUITAR INSTRUCTION 2 (SHS) $1 / 2$ credit

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.)


## NON-PERFORMANCE

## 752_AP MUSIC THEORY

Prerequisite: Instructor approval 1 credit

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.

## 7750_UCONN ECE FUNDAMENTALS/ EAR TRAINING (SHS) <br> 1 credit

The course is designed for motivated students, offering instruction in fundamental music skills and the Western musical notation system. Music experience is not required. First semester will focus on basic music theory, music literacy, ear training (aural skills), and rudimentary keyboard skills. Second semester will build on these skills, examining major and minor keys, intervals, and basic diatonic harmony. Composition and notation skills will be developed on MuseScore.

## 7740_INTRODUCTION TO THE MUSIC BUSINESS <br> 1/2 credit

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, researchbased and practical projects, and written tests.

## FINE ARTS - THEATRE ARTS

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 theatre. In conjunction with Drama Club activities, students are able to explore all fields of theatre work.

## COURSE OFFERINGS

Dramatic Arts

## 0360_DRAMATIC ARTS

1 credit
This course is an introduction to the study of theatre. Students read and perform scenes and monologues, 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

Prerequisite: Dramatic Arts or extensive stage experience

## 1 credit

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.

Acting Workshop


## FINE ARTS - 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 AP and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Drawing and Painting 1, 2, 3
Color and Design ( $1 / 2$ year)
Studio Art
AP Studio Art
AP Art History
Ceramics 1, 2
Potter's Wheel 1, 2 ( $1 / 2$ year) Crafts

Jewelry and Metalsmithing 1, 2
Photography 1, 2
Sculpture 1, 2 ( $1 / 2$ year)
Computer Graphic Art and Design
Drawing with Adobe Illustrator (1/2 year) (SHS)
Working with Adobe Photoshop ( $1 / 2$ year) (SHS)
UConn ECE Digital Foundations (SHS)

## 0150_DRAWING AND PAINTING 1 <br> 1 credit

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.

## 0250_DRAWING AND PAINTING 2 1 credit

This course is designed to help students develop an ability to interpret and represent still life, nature, and portraiture through an indepth 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.

## 0350_DRAWING AND PAINTING 3 1 credit

This course explores complex drawing and painting problems. Students select and work toward an area of portfolio concentration using a variety of media. Students paint on a variety of prepared surfaces, stretched canvas, masonite, and illustration board. The accent is on creative application of fundamentals and techniques helping students develop their own styles in portfolio development. Students develop an objective view of their work through self-evaluation, critique, and continued study of art history.

## 0850_COLOR AND DESIGN <br> $1 / 2$ credit

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.


## 0400_STUDIO ART

1 credit
This course is designed for the advanced student wishing to engage in higher levels of study in 2-D, 3-D, drawing, ceramics, photography, computer graphics, crafts, sculpture, jewelry, and metalsmithing. The goals and levels of achievement are demonstrated through the student's portfolio at the midterm and conclusion of each marking period. It is recognized that students need to work outside the classroom and beyond the scheduled class periods.

## 0460_AP STUDIO ART

1 credit
This course is designed for the highly motivated student committed to serious study in art. This course reflects three major concerns in art education: quality, concentration, and breadth. Students develop an
individual portfolio in 2-D design, 3-D, or drawing as prescribed by the College Board. Current trends in art history are discussed to support students in their concentration themes as they demonstrate growth over time. Class sessions include individual and group critiques. It is recognized that students need to work outside the classroom and beyond the scheduled class periods in preparation for the Advanced Placement examination.

## 0480_AP ART HISTORY <br> 1 credit

This course is designed to offer the same instruction as provided in an introductory college survey of art history. It covers the history of art in Western and non-European cultures from prehistoric to present times, giving students an understanding of art forms in their historical and cultural contexts. Artists, schools, movements, period and style, non-Western traditions, patronage function and ethnicity are among the topics included in discussion, reading and research. Unit tests prepare students for the Advanced Placement examination.


## 0240_CERAMICS 1 <br> 1 credit

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 nonfunctional pieces. Surface decoration, underglazing, and glazing techniques are included in the production of ceramic art.

## 0310_CERAMICS 2 <br> 1 credit

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.

## 0730_POTTER'S WHEEL 1 <br> $1 / 2$ credit

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.

## 0731_POTTER'S WHEEL 2 $1 / 2$ credit

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.

## 0260 CRAFTS <br> 1 credit <br> 0262_CRAFTS <br> 1/2 credit

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.

## 0230_JEWELRY AND METALSMITHNG 1 1 credit

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.

## 0370_JEWELRY AND METALSMITHING 2 1 credit

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.


## 0190_PHOTOGRAPHY 1 <br> 1 credit

Students explore black and white photography using a manual 35 mm SLR camera and a digital camera. They learn chemistry, darkroom 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. Ownership of a 35 mm SLR camera and a digital camera is recommended. A limited number of loaner cameras are available from the department.

## 0200_PHOTOGRAPHY 2 <br> 1 credit

Students refine and master photography techniques including color, black and white, and digital imagery. Students may create "C" prints from color negatives. While mastering manual camera functions, electronic imaging, computer manipulation, digital cameras, and scanners, students produce a series of advanced photographic images.

## 0340_SCULTPURE 1

$1 / 2$ credit
This course explores three dimensional form and anatomy in sculpture while working with various media that may include clay, plasticene, plaster, soft stone, papier-mâché, found objects, and wood. Casting and armature support techniques are explored in the production of various three-dimensional forms.

0388_SCULPTURE 2
$1 / 2$ credit

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.

## 0440_COMPUTER GRAPHIC ART AND DESIGN <br> 1 credit

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.

## 0720_DRAWING WITH ADOBE ILLUSTRATOR (SHS) <br> 1/2 credit

Students produce art using basic and intermediate Adobe Illustrator techniques. Editing, saving images, merging features, scanning, and other methods are used to produce finished products. Techniques for creating dramatic backgrounds, distortions, and edit features are included in the preparation for printable images. Critiques and portfolio development are emphasized.


## 0740_WORKING WITH ADOBE PHOTOSHOP (SHS)

$1 / 2$ credit

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.

## 1151_UCONN ECE DIGITAL FOUNDATIONS (SHS)

## 1 credit

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.


## 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 $9^{\text {th }}$ and $10^{\text {th }}$ 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 $9^{\text {th }}$ and $10^{\text {th }}$ grades. During their sophomore year all students will participate in the state mandated Connecticut Physical Fitness Test within their Physical Education class.

## COURSE OFFERINGS

Health 1, 2
Human Behavior 1, 2
Physical Education 1, 2
Adaptive Physical Education
Unified Physical Education (SHS)
Health Skills
Sports Medicine
Team Sports
Leisure Sports

Fitness/Weight Training
Cardio Fitness
Power Walking
Dance Forms
Yoga
Fitness with Technology (WHS)
Sports Officiating (WHS)
Beginner Swimming (WHS)
Intermediate Swimming (WHS)

## 9900_HEALTH 1

9831_Sheltered
9680_Administrative approval required $1 / 2$ credit

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 $1 / 2$ credit

This course further examines topics covered in Health 1 in greater 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.

## 9830_HUMAN BEHAVIOR 1

Prerequisite: Health 1 and 2
Grade: 11, 12
$1 / 2$ credit
This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive selfimage, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.

## 9840_HUMAN BEHAVIOR 2

Prerequisite: Health 1 and 2
Grade: 11, 12
$1 / 2$ credit
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.

## 9010_PHYSICAL EDUCATION 1

## $1 / 2$ credit

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.

## 9160_PHYSICAL EDUCATION 2 $1 / 2$ credit

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.

## 9643_UNIFIED PHYSICAL EDUCATION (SHS) <br> $1 / 2$ credit

This course offers students, with and without special needs, the opportunity to participate together in sports, cooperative games, and team building activities. Skills acquisition and sportsmanship are fostered through competition and partner activities. Students must meet specific criteria to be selected for this course.

## Administrative approval required

## 9640_ADAPTIVE PHYSICAL EDUCATION (WHS) <br> 1 credit

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 competition. Administrative approval required.

## 9902_HEALTH SKILLS

1/2 credit
The course is offered to students who wish to learn better skills to manage social and emotional challenges. Students learn coping skills to manage these challenges and explore ways to improve academic, social and emotional functioning.
Administrative approval required.

## 9030_SPORTS MEDICINE

Prerequisite: Health 1 and 2 and Biology
Grade: 11, 12
$1 / 2$ credit
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 jobshadowing project.

## 9340_TEAM SPORTS

Grade: 11, 12
$1 / 2$ credit

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.

## 9350_LEISURE SPORTS

Grade: 11, 12
$1 / 2$ credit
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 tabletennis.

## 9360_FITNESS/WEIGHT TRAINING

Grade: 11, 12
$1 / 2$ credit

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

Grade: 11, 12
$1 / 2$ credit
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

Grade: 11, 12
$1 / 2$ credit

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

Grade: 11, 12
$1 / 2$ credit
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

Grade: 11, 12
$1 / 2$ credit

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.

9110_FITNESS WITH TECHNOLOGY (WHS)
Grade: 11,12
$1 / 2$ credit
This course engages students in physical activities through the use of technology and gaming systems that help improve all components of physical fitness (cardiovascular endurance, muscular strength and endurance, and flexibility). Fitness with technology creates a unique learning environment in which students can develop physical skills, create self-imposed goals, encourage healthy competition, and promote accountability.

## 9111_SPORTS OFFICIATING (WHS)

Grade: 11, 12

## $1 / 2$ credit

This course provides students with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of a variety of sports.
This course is designed so that students will be able to demonstrate knowledge of the official rules, and demonstrate correct officiating techniques and mechanics of selected team sports.


## 9170_BEGINNER SWIMMING (WHS)

Grade: 11, 12
$1 / 2$ credit
This course introduces students to basic swimming instruction and water safety. Instruction develops and enhances participants' swimming levels.

## 9180_INTERMEDIATE SWIMMING (WHS)

Grade: 11, 12
$1 / 2$ credit
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.

## MATHEMATICS



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 $21^{\text {st }}$ century world economy.

Instruction is varied and includes teacher-centered, group work, inquirybased, 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

| Math $9 / 10$ | Pre-Calculus | Advanced Computer Science (WHS) |
| :--- | :--- | :--- |
| Algebra 1 | Honors Pre-Calculus | Computer Based Investigative |
| Geometry | Calculus | Mathematics |
| Honors Geometry | AP Calculus AB | Mathematical Logic and Inquiry |
| Algebra 2 | UConn ECE Calculus AB | Engineering Fundamentals |
| Honors Algebra 2 | AP Calculus BC | Math Center |
|  | Multivariable Calculus | Math Tutorial 9 |
| Electives: | AP Statistics | Math Lab |
| Algebra 3 and | UConn ECE Statistics | Math Independent Study |
| Trigonometry $(1 / 2$ year) | Introduction to Computer Science | Bridges Math |
| Statistics and | $1 / 2$ year) |  |
| Probability $(1 / 2$ year) | AP Computer Science (WHS) |  |
|  | AP Computer Science Principles |  |
|  |  |  |

## 637_/961_MATH 9/10 <br> 1 credit

This course is an activity-based mathematics course focusing on pre-algebra and pregeometry 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.
Administrative approval required.

## 6100_ALGEBRA 1 <br> 6500_Sheltered <br> 1 credit

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.

## 6250_GEOMETRY

6241_Honors
Prerequisite: Algebra 1 with a minimum grade of B
6660_Sheltered
Prerequisite: Algebra 1
1 credit
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.

## 6200_ALGEBRA 2

Prerequisite: Algebra 1 and Geometry 6210_Honors
Prerequisite: Algebra 1 and Honors Geometry or Geometry with a minimum grade of B 1 credit

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 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.


## ELECTIVES

## 6850_ALGEBRA 3 AND TRIGONOMETRY

Prerequisite: Algebra 2
$1 / 2$ credit

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.

## 6860_STATISTICS AND PROBABILITY

Prerequisite: Algebra 2
$1 / 2$ credit
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.

## 6320_PRE-CALCULUS <br> Prerequisite: Algebra 2 <br> 6330_Honors

Prerequisite: Honors Algebra 2 or Algebra 2 with a minimum grade of B
1 credit
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.

## 6340_CALCULUS

Prerequisite: Pre-Calculus
1 credit

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.

## 6290_AP CALCULUS AB 6341_UConn ECE (WHS)

Prerequisite: Honors Pre-Calculus or PreCalculus with a minimum grade of B 1 credit

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

## 6291_AP CALCULUS BC

Prerequisite: Honors Pre-Calculus

## 1 credit

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity. Techniques of differential and integral calculus and concepts of sequences and series will be developed and applied to algebraic, trigonometric, exponential parametric and polar 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 graphing calculator technology.

## 6342_MUTLIVARIABLE CALCULUS <br> Prerequisite: AP Calculus BC <br> 1 credit

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.

## 6360_AP STATISTICS <br> 6361_UConn ECE (WHS) <br> Prerequisite: Algebra 2 <br> 1 credit

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 on problem solving and real life applications through critical thinking activities as well as the use of computers and graphic calculator technology.

## 6630_INTRODUCTION TO COMPUTER SCIENCE

Prerequisite: Algebra 1
$1 / 2$ credit
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.

6640_AP COMPUTER SCIENCE (WHS)
Prerequisite: Algebra 2 with a minimum grade of B
1 credit
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 on problem solving and real life applications through critical thinking activities including the social and ethical implications of computer use.

## 6644_AP COMPUTER SCIENCE PRINCIPLES <br> 1 credit

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.

## 6643_ADVANCED COMPUTER SCIENCE (WHS)

Prerequisite: AP Computer Science
1 credit
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.

## 6600_COMPUTER BASED INVESTIGATIVE MATHEMATICS <br> 1 credit

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 package including the internet. Students focus on problem solving and real life applications through critical thinking activities.

## 6111_MATHEMATICAL LOGIC AND INQUIRY <br> ½ credit

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.

## 6121_ENGINEERING FUNDAMENTALS $1 / 2$ credit

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.


## 695_MATH CENTER <br> 1 credit

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. Administrative approval required.

## 690_MATH TUTORIAL 9

Grade: 9
1 credit

This course is for freshman in Algebra I and provides additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6901_MATH LAB

Grade: 9
$1 / 2$ credit
This course is for freshman who need additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6902_MATH LAB

Grade: 10, 11, 12
$1 / 2$ credit
This course is for students who need additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6510_MATH INDEPENDENT STUDY 1 credit

This course is designed for high performing juniors and seniors who have a possible interest in teaching (especially math) or working in social services. They will work with the most at-risk students (under the guidance of the classroom teacher) in Algebra 1, Geometry, and Algebra 2 classrooms (including Bilingual, Academic, and Sheltered classes) using and assessing alternative ways to create significantly improved student achievement.
Administrative approval required.

## 640 BRIDGES MATH

Grade: 12
1 credit
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.


## 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.

## COURSE OFFERINGS

Physical Science Physics
( $1 / 2$ year)
Physical Science Chemistry ( $1 / 2$ year)
Biology
Honors Biology
Chemistry
Honors Chemistry
Physics
Honors Physics

AP and UConn ECE:
AP Biology
UConn ECE Biology (SHS)
AP Chemistry
UConn ECE Chemistry (SHS)
AP Physics 1
UConn ECE Physics 1 (WHS)
AP Physics 2
AP Physics C
UConn ECE Physics C (SHS)
UConn ECE Physics 1201Q
UConn ECE Physics 1202Q
AP Environmental Science
UConn ECE Environmental
Science
UConn ECE Applied Mechanics

## Electives:

Environmental Science ( $1 / 2$ year) Earth Systems (1/2 year)
Space Systems ( $1 / 2$ year)
Human Physiology
Marine Biology ( $1 / 2$ year)
Biobotics ( $1 / 2$ year)
Bioethics ( $1 / 2$ year)
Biotechnology ( $1 / 2$ year)
Forensic Science
Forensic Science ( $1 / 2$ year

## 8373_PHYSICAL SCIENCE PHYSICS

8375_Sheltered
8377_Administrative approval required $1 / 2$ credit

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.

## 8374_PHYSICAL SCIENCE CHEMISTRY 8376_Sheltered <br> 8369_Administrative approval required $1 / 2$ credit

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.

8110_BIOLOGY
8060_Sheltered
861_/987_Administrative approval required Prerequisite: One year of high school science 8121_Honors
Prerequisite: B average in science
8362_AP
8361_UConn ECE (SHS)
Prerequisite: Biology, Chemistry, and two years of mathematics with a minimum grade of B 1 credit

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.

## 8210_CHEMISTRY

Prerequisite: Algebra 1 or Geometry and one year of high school science. Concurrent enrollment in Algebra 2 recommended
8221_Sheltered 8280_Honors
Prerequisite: B Average in science and mathematics (Geometry or Algebra1). Concurrent enrollment in Algebra 2 recommended

## 8422_AP

Prerequisite: Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics

## 8424_UConn ECE (SHS)

Prerequisite: Successful completion of two years of laboratory science including Chemistry (Honors Chemistry is recommended) and successful completion of Algebra 2
1 credit

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, electrochemistry, 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.

## 8310_PHYSICS <br> 8400_Honors

Prerequisite: Algebra 2 (or concurrent enrollment) and two years of high school science 1 credit

This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermodynamics, 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.


## 8384_ AP PHYSICS 1 <br> 8375_UConn ECE (WHS)

Prerequisite: Geometry and concurrent enrollment in Algebra 2
1 credit

This course is the equivalent to 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.

## 8385_ AP PHYSICS 2

Prerequisite: AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

## 1 credit

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. Inquirybased 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.

## 8388_AP PHYSICS C <br> 8383_ UConn ECE (SHS)

Prerequisite: Two years of laboratory science including Physics and concurrent enrollment in Calculus
1 credit
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 and may extend to electricity and magnetism. Laboratory investigations are an integral part of this course.


## 8390_UCONN ECE PHYSICS 1201Q (SHS)

Grade: 11, 12
Prerequisite: Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year
1 credit
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 thermodynamics, 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.

## 8391_UCONN ECE PHYSICS 1202Q (SHS) <br> Grade: 11, 12 <br> Prerequisites: Completion of UCONN 1201Q with a C or better and a summer assignment prior to the start of the academic year 1 credit

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.

## 8740_AP ENVIRONMENTAL SCIENCE 8741_UConn ECE

Prerequisite: Biology and Chemistry 1 credit

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.

## 8379_UCONN ECE APPLIED MECHANICS 1 (SHS)

Prerequisite: Calculus or concurrent enrollment in Calculus
1 credit
This is a college level course focusing on 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.

## ELECTIVES

## 8750_ENVIRONMENTAL SCIENCE

Prerequisite: Two years of science
$1 / 2$ credit

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 nonrenewable 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.

## 8930_EARTH SYSTEMS

Prerequisite: One year of high school science $1 / 2$ credit

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 activeties. 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.

## 8940_SPACE SYSTEMS

Prerequisite: One year of high school science 1/2 credit

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.

## 8200_HUMAN PHYSIOLOGY <br> Prerequisite: Biology and Chemistry 1 credit

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.


## 8760_MARINE BIOLOGY

Prerequisite: Two years of science, one being Biology
$1 / 2$ credit
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.

## 1700_BIOBOTICS

Prerequisite: Two years of science and mathematics
$1 / 2$ credit
This course explores the emerging interdisciplinary field of robotics. The course includes: robotics, artificial intelligence, engineering, and technology. Programming and construction of the robot are explored on every level from conception to completion. Laboratory investigations are an integral part of this course. As a result of this course students are expected to create an autonomous robot that can function in a limited domain and in various situations.

## 8470_BIOETHICS

$1 / 2$ credit
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 morality of choices. Finally, bioethical practices of different cultures will be examined.

## 8800_BIOTECHNOLOGY

Prerequisite: Two years of science. Concurrent enrollment in Chemistry is recommended.
$1 / 2$ credit
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.

## 8510_FORENSIC SCIENCE

Prerequisite: Biology and Chemistry 1 credit

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.

## 8511_FORENSIC SCIENCE

Prerequisite: Biology and Chemistry
$1 / 2$ credit
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.

## 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.

## SERVICE LEARNING

## 900_STUDENT ASSISTANT

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, Guidance Office, Departmental Offices, or Main Office.


## SOCIAL STUDIES

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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.

## COURSE OFFERINGS

## Requirements:

Social Studies 9
Honors Social Studies 9
Modern World History ( $1 / 2$ year)
Honors Modern World History
AP World History
Civics ( $1 / 2$ year)
Honors Civics
United States History
Honors United States History
AP United States History
UConn ECE United States
History
Electives:
AP European History
UConn ECE European History (WHS)
AP United States Government and Politics
Honors Seminar in Philosophy
AP Psychology
Economics
UConn ECE Essentials of Economics (WHS)
AP Microeconomics
UConn ECE Microeconomics (WHS)
AP Macroeconomics
Applied Economics ( $1 / 2$ year)

African American History 1 (1⁄2 year)
African American History 2 ( $1 / 2$ year)
Contemporary Issues ( $1 / 2$ year)
Introduction to Psychology (1/2 year)
Law and Justice ( $1 / 2$ year)
American History through Pop Culture ( $1 / 2$ year)
Latin American Studies ( $1 / 2$ year)
World Geography and Cultures ( $1 / 2$ year)
AP Human Geography

## 5110_MODERN WORLD HISTORY <br> 5160_Sheltered <br> 5100_Honors <br> $1 / 2$ credit

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.

## 5050_AP WORLD HISTORY

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

5710_CIVICS
5760_Sheltered
5700_Honors
977_ Administrative approval required $1 / 2$ credit

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 regard 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.


5210_UNITED STATES HISTORY
5260_Sheltered
5240_Honors
5200_AP United States History
5230_UConn ECE
976_ Administrative approval required 1 credit

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.

## ELECTIVES

## 5410_AP EUROPEAN HISTORY 5411_UConn ECE (WHS) <br> 1 credit

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 firstyear college course in European history.

## 5950_AP UNITED STATES GOVERNMENT AND POLITICS

 1 creditThe 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.

## 5360_HONORS SEMINAR IN PHILOSOPHY

Grade 12
1 credit

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.

## 5970_AP PSYCHOLOGY 1 credit

This course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals through the study of psychological theory, principles, and phenomena. They also learn about methods psychologists use in their science and practice and study topics including the biological bases of behavior, states of consciousness, learning, and abnormal psychology.

## 5320_ECONOMICS <br> 1 credit

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.

## 5981_UCONN ECE ESSENTIALS OF ECONOMICS (WHS) <br> 1 credit

This course is a general introduction to microand 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.

## 5960_ AP MICROECONOMICS 5961_UConn ECE (WHS) 1 credit

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.

## 5983_AP MACROECONOMICS <br> 1 credit

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.

## 5420_APPLIED ECONOMICS <br> $1 / 2$ credit

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.


## 5392_AFRICAN AMERICAN HISTORY 1 $1 / 2$ credit

This course emphasizes a poly-centric approach to understanding the human experience, enabling students to appreciate diverse world views by focusing on the cultural, economic, and political aspects of African American life from 1619 until the turn of the $20^{\text {th }}$ century.

## 5393 AFRICAN AMERICAN HISTORY 2 $1 / 2$ credit

This course emphasizes a poly-centric approach to understanding the human experience, enabling students to appreciate diverse world views by focusing on the cultural, economic, and political aspects of African American life from the turn of the $20^{\text {th }}$ century to the present.

## 5310_CONTEMPORARY ISSUES

Prerequisite: U.S. History
$1 / 2$ credit
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.

## 5610_INTRODUCTION TO PSYCHOLOGY <br> ½ credit

This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.

## 5550_LAW AND JUSTICE

Prerequisite: Civics
$1 / 2$ credit
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 cornerstone document.

## 5681_AMERICAN HISTORY THROUGH POP CULTURE

Prerequisite: U.S. History
$1 / 2$ credit
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 handson 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.

## 5560_LATIN AMERICAN STUDIES $1 / 2$ credit

This course examines Latin American History from the Pre-Columbian Period. Students explore the struggles of the Latin American peoples as they struggled for independence and with democracy. A focus of the course is the involvement of the United States in Latin America.

## 5810_WORLD GEOGRAPHY AND CULTURES <br> 1/2 credit

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.

## 5690_AP HUMAN GEOGRAPHY 1 credit

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.

## 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 and AP courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

French 1, 2, 3, 4
Honors French 2, 3, 4, 5
AP French

Italian 1, 2, 3
Honors Italian 3, 4
Latin 1, 2, 3
Honors Latin 3, 4

Spanish 1, 2, 3, 4
Honors Spanish 2, 3, 4, 5
Heritage Spanish 1
Honors Heritage Spanish 2
AP Spanish Language
AP Spanish Literature

A final grade of "C" or better is recommended to proceed to the next level.

## 4100_FRENCH 1

1 credit
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.

## 4200_FRENCH 2 <br> 4610_Honors

Prerequisite: Completion of French 1
1 credit
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.

## 4300_FRENCH 3 <br> 4620_Honors <br> Prerequisite: Completion of French 2 <br> 1 credit

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.

## 4400_FRENCH 4

4640_Honors
Prerequisite: Completion of French 3 1 credit

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

## 4670_HONORS FRENCH 5

Prerequisite: Completion of French 4 1 credit

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.

## 4500_AP FRENCH

Prerequisite: Completion of Honors French 5 1 credit

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.

## 4120_ITALIAN 1 <br> 1 credit

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

## Prerequisite: Completion of Italian 1

1 credit
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.


## 4320_ITALIAN 3 <br> 4321_Honors <br> Prerequisite: Completion of Italian 2 <br> 1 credit

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.

## 4421_HONORS ITALIAN 4

## Prerequisite: Completion of Italian 3 <br> 1 credit

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.

## 4150_LATIN 1 <br> 1 credit

This course is the beginning course in Latin. Grammar, vocabulary, translations, Roman civilization and culture, and the practical use of Latin are the essential elements of the course. Students make connections between the ancient world and the modern world.

## 4250_LATIN 2

Prerequisite: Completion of Latin 1
1 credit
This course is an expansion of the work of Latin I. Continued study of vocabulary, grammar, English derivatives, and cultural topics, and the reading of adapted Latin passages are included in the course. Students expand their understanding of the language and of Roman culture and history, and make connections between Latin and English.

## 4350_LATIN 3

4351_Honors
Prerequisite: Completion of Latin 2
1 credit
This course emphasizes advanced work in Latin vocabulary, grammar, English derivatives and cultural topics. It also includes the
continued reading of adapted Latin passages and introduction to authentic Latin literature. Students continue to make connections between Latin and English, enhance their preparation for the SAT verbal section, and make connections across the curricula.

## 4450_LATIN 4 <br> 4451_Honors <br> Prerequisite: Completion of Latin 3 <br> 1 credit

This course emphasizes advanced work in Latin grammar, vocabulary, and English derivatives. Selected readings of prose and poetry by various Latin authors are included in the course. Students discover how the elements of classical literature influence modern works.

## 4130_SPANISH 1 <br> 1 credit

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 <br> 4600_Honors

Prerequisite: Completion of Spanish 1
1 credit
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.

## 4330_SPANISH 3

4630_Honors
Prerequisite: Completion of Spanish 2 1 credit

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.

## 4430_SPANISH 4

4650_Honors
Prerequisite: Completion of Spanish 3 1 credit

This course focuses on listening, speaking, reading, and writing at the intermediate/preadvanced 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.

## 4680_HONORS SPANISH 5

Prerequisite: Completion of Spanish 4 1 credit

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.


## 4131_HERITAGE SPANISH 1 1 credit

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.

## 4231_HONORS HERITAGE SPANISH 2 1 credit

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.

## 4530_AP SPANISH LANGUAGE

Prerequisite: Completion of Honors Spanish 5 or Honors Heritage Spanish 2
1 credit
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.

## 4580_AP SPANISH LITERATURE

Prerequisite: Completion of Honors Spanish 5 or Honors Heritage Spanish 2
1 credit
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.


## OTHER 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.

## COURSE OFFERINGS

Literacy/Math Skills Centers
Vocational Communications
Functional Academics
Daily Living Skills

Vocational Skills
Leisure Skills
Travel Time
Communication Skills

## 399_LITERACY SKILLS CENTER 1 credit <br> 695_MATH SKILLS CENTER 1 credit

These courses provide direct assistance to students in grades 9-12, focusing on continuous development of academic excellence in literacy and math practices. Individual instruction is provided in the areas of executive functioning, study skill preparation, self-advocacy, self-management, independence, and preparation for post-secondary experience. While earning credits toward a high school diploma, students apply all skills and strategies learned to everyday classroom settings, vocational experiences, and life situations. Administrative approval required.

## 9950_VOCATIONAL COMMUNICATIONS 1 credit

This course develops entry-level job skills such as: resume writing, job applications, interviewing and interpersonal relationships as well as components of a good work ethic. Each student is required to have a part-time job utilizing the skills taught in this course. Administrative approval required.

## 9500_FUNCTIONAL ACADEMICS <br> 1 credit

This course develops, maintains, and enhances basic skills in reading, math, science, and writing, utilizing approaches adapted to meet individual student needs. The program includes speech and language development, development of social/emotional skills, and fine and gross motor development. Students apply basic functional skills to everyday activities. Administrative approval required.

## 9620_DAILY LIVING SKILLS 1 credit

This course provides students with opportunities to develop and enhance independent self-help skills at home, in the community, and at the workplace. Activities emphasize personal development through health and nutrition, personal hygiene, laundry skills, community awareness, money management, food preparation, safety, household management, and basic living skills. Students apply basic self-help skills to everyday living as well as "real-life" experiences in the community to promote generalization. Administrative approval required.

## 9600_VOCATIONAL SKILLS <br> 1 credit

This course provides the opportunity for students to develop pre-vocational skills necessary for employment. The course includes an introduction to career opportunities, training requirements, work ethics, and structured supervised work experience based on individual needs and interests. Students acquire the skills necessary for positive job exploration and apply these skills in supervised on-the-job experiences. Administrative approval required.

## 9670_LEISURE SKILLS <br> 1 credit

This course provides exposure to a variety of recreational/leisure activities. The course includes guidance to students in their decisionmaking 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. Administrative approval required.

## 9690_TRAVEL TIME 1 credit

This course develops community navigation skills and ability to read maps and schedules. The course emphasizes learning to make transportation arrangements. Students make travel arrangements throughout the community and travel independently. Administrative approval required.

## 9700_COMMUNICATION SKILLS

## 1 credit

This course provides opportunity to learn the basic communication skills necessary for selfadvocacy. This course includes role-playing and real life experiences. Students selfadvocate in everyday life situations and express their wants and needs. Administrative approval required.


## CAREER AND TECHNICAL EDUCATION

## STUDENT ACTIVITIES \& OPPORTUNITIES

WHAT ARE YOU DOING TO PREPARE FOR THE FUTURE?
Get involved in Career and Technical Education (CTE) activities that help you learn about various careers, plan your coursework, and make good career decisions! These activities are designed to support Student Success Planning to develop competence, confidence, and understanding that ensure successful careers and citizenship in young people. In addition, these activities give students a view of the range of post-secondary options available to them. Although CTE concepts are integrated in all curriculum areas, the following programs and activities are designed to prepare students to be lifelong learners and workers.

## CAREER ACADEMIES

You can choose to apply to an academy. These curricula areas help you explore future career opportunities:

- Academy of Finance
- Agriscience \& Technology
- Junior Reserve Officers' Training Corps (JROTC)
- Academy of Information Technology \& Engineering (AITE)


## MENTORING PROGRAM

- ACE (Architecture, Construction, Management \& Engineering) - Students interested in design and construction industries can become part of this after school mentoring program and work with professionals on authentic projects and activities designed to expose students to related careers and educational opportunities.


## WORK-BASED EXPERIENCES

- Job Shadowing - High School and Middle School students can spend a full day in a business environment shadowing an adult who is in a job they are interested in learning more about. This exposure allows a student to see first hand what it's like to work in a variety of different environments.
- Internships - Students who are part of a career academy or preparation program can participate in an internship in and around the city of Stamford. Several different internship programs (paid and non-paid) are available including: part-time after school; volunteer/ community service positions; and full-time summer internships in the business industry or in an educational environment.


## CAREER PLANNING \& DEVELOPMENT

A career center and career counselors are available at each of the high schools.

- Naviance Family Connection - Students can manage their college and career planning with Naviance Family Connection, a webbased tool for students, parents, and counselors. The website guides individual students through the entire college planning, application, and decision making process. Students can search for scholarships, explore careers, take interest inventories, investigate their learning style, and participate in ACT and SAT tutorials and test practice using PrepMe. They can review academic and admission data for colleges across the United States and also gauge their chances of acceptance by comparing their own grade point average and SAT/ACT scores with statistics of recent successful applicants. Students and parents can access further information, including log-on credentials, for Naviance Family Connection from their school's Guidance Office.
- Career Expo - This day-long event, jointly sponsored by the Stamford Chamber of Commerce, includes presentations from professionals representing eight career fields who engage, motivate, and captivate students with many real-life experiences related to their particular industry. Students choose break-out sessions based on career interests and academy programs.


## ACADEMY OF FINANCE

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.

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

- Accounting 1

In Junior year

- Principles of Finance
- Financial Planning

In Senior year

- Business Economics
- 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. All applications are reviewed and interviews are conducted by Stamford administrators, teachers, and Academy students.

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit
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 decisionmaking. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.

## 2810_FINANCIAL PLANNING

Grade: 11
$1 / 2$ credit
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.

## 2800_PRINCIPLES OF FINANCE

Grade: 11
$1 / 2$ credit

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.

## 2820_BUSINESS ECONOMICS

Grade: 12
$1 / 2$ credit

This course in macro and micro-economics provides an understanding of how our market economy functions in a global setting. It provides the students with a survey of economic concepts including all of the twentytwo basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play on our overall economic framework.

## 2840_BUSINESS IN GLOBAL ECONOMY

Grade: 12
$1 / 2$ credit
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 the multinational corporation.

See CAREER \& TECHNICAL EDUCATION - BUSINESS for additional courses helpful in preparation for a career in finance and business.

## AGRISCIENCE AND TECHNOLOGY



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

Agriscience and Technology 1
Agriscience and Technology 2

Agriscience and Technology 3
Agriscience and Technology 4

## 0540_AGRISCIENCE AND TECHNOLOGY 1 <br> 1 credit

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.

## 0650_AGRISCIENCE AND TECHNOLOGY 2

Prerequisite: Agriscience \& Technology 1
2 credits
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.

## 066_AGRISCIENCE AND <br> TECHNOLOGY 3

10 Points
Prerequisite: Agriscience \& Technology 2
Students in the third and fourth year of Agriscience and Technology explore in greater depth the fields of animal science, aquaculture, plant science, environmental science, and agriculture mechanization. Individual and classroom projects are emphasized so that students can pursue their own specialized Agriscience and Technology interests. Areas of emphasis include equine and companion animals, advanced floral design, greenhouse management and landscaping, food science, watershed management and recycling, aqua culture, and small gas engine repair/maintenance. FFA participation and SAE (Supervised Agriculture Experience) are required of all students.

## 067_AGRISCIENCE AND <br> TECHNOLOGY 4

10 Points

This course continues Agriscience \& Technology 3.


## JUNIOR RESERVE OFFICERS’ TRAINING CORPS



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) <br> 1 credit

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.

## 926_LEADERSHIP, EDUCATION, AND TRAINING 2 (LET 2) <br> 1 credit

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.

## 927_LEADERSHIP, EDUCATION, AND TRAINING 3 (LET 3) <br> 1 credit

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, your American citizenship, role of the U.S. Armed Forces, contemporary issues, leadership laboratory, and technology awareness.

## 928_LEADERSHIP, EDUCATION, AND TRAINING 4 (LET 4) <br> 1 credit

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.

## ACADEMY OF INFORMATION TECHNOLOGY \& ENGINEERING



The Academy of Information Technology \& Engineering (AITE) is an inter-district, collegepreparatory high school. AITE combines traditional high school courses, cutting edge technology training, industry certification, college credit, and paid corporate work-based experiences. AITE accepts students from Stamford and neighboring communities through an application and lottery system. All classes take place in the state-of-the-art AITE school building on High Ridge Road. Bus transportation is provided.

The school is designed to give students in grades 9-12 a decided edge upon graduation from high school, whether they are looking to secure high-paying jobs or gain admittance to competitive colleges.

Students can choose electives from five areas of concentration, dual credit college courses, and Virtual High School courses, in addition to college preparatory academics requirements.

## Information Technologies Concentration

This concentration consists of courses that enable students to develop advanced computer skills to use in an IT related field or to use technology as a tool in a broad variety of other fields. In addition to regular academic courses, students following this area of concentration will take required courses to expose them to the basics of computer systems and programs, and then follow with a series of professional level courses in their own areas of interest, such as:

Cisco Networking Academy - This four year program provides students with the skills needed to succeed in networking-related degree programs and helps them prepare for CCNA certification. (http://cisco.netacad.net)

Digital Applications - For the student interested in a career in graphic arts, marketing, web design, music, or business, we provide the opportunity to explore a multitude of courses. Additionally, the student will be able to spend the time preparing a portfolio of his/her work for submission to prestigious colleges throughout the United States.

## Architectural \& Engineering Concentration

This is a pre-engineering interest based program for students providing them with the knowledge needed to succeed in the challenging and rapidly changing world of design, manufacturing, and technology for careers where job descriptions are being rewritten almost daily. Students take specialized courses offered by Project Lead the Way (PLTW) each semester and use cutting edge technologies including Computer-Aided Design (CAD) and other advanced application programs. PLTW (www.pltw.org) is a four year course sequence which offers an opportunity for college credit.

## Business Concentration

This is a four-year curriculum introducing students to skills and knowledge associated with business activities both nationally and globally. Students learn practical and valuable applications using Microsoft Office, accounting, digital publications, business law, financial analysis, and management tools in preparation for college and careers. Field trips to corporate environments, round table discussions with business leaders, and potential internships at local businesses are part of this concentration.

## Fine Arts - Music and Visual Concentration

This is a fine arts interest based program for students providing the integration of music and art skills through traditional and digital applications. Students learn and enhance skills through practical hands-on work, digital applications utilizing current music and graphic arts software, and video-conferencing and interactive mentoring. Performance and portfolio activities are incorporated.

## Biomedical Sciences Concentration

This concentration consists of a sequence of four full-year courses and additional science electives: Principles of the Biomedical Sciences; Human Body Systems; Medical Interventions; and a capstone course entitled Biomedical Innovations. Students should also take Biochemistry in their freshman year and PLTW Physics in their junior year. The courses have been designed and developed through Project Lead the Way. These courses are weighted at the "Honors" level.

## VIRTUAL HIGH SCHOOL

This program is recommended for students who can work independently in a project-based, team-oriented, and distance-learning environment. An interest survey is given prior to sign-up to verify that the student is self-directed and will be successful in such a program. Parents and students are required to sign a contract of acknowledgement. For more information, and for the complete catalogue of courses offered by VHS, please visit www.govhs.org.

## COLLEGE CREDIT

Students may take college-level courses offered by the University of Connecticut, the University of New Haven, and Norwalk Community College. These courses, offered on-site at AITE, UConn Stamford, or at the Norwalk campus, offer additional challenges, make a college application more competitive, provide dual credit (high school and college), and enable students to save money on college tuition. Students may also take advantage of a five and one-half year high school Associate's Degree Program offered through a partnership between the Stamford Public Schools and Norwalk Community College.

## Norwalk Community College/AITE College Credit Partnership

AITE and Norwalk Community College collaborate on several programs that benefit AITE students. For freshmen and sophomores, ConnCAP (Connecticut Collegiate Awareness and Preparation) provides a six-week academic summer program plus after-school tutoring throughout the academic year for incomeeligible students or those who aspire to be the first in their families to complete a college degree. ConnCAP students take college prep classes and meet young role models in different jobs and professions as they begin to plan their futures.

For juniors and seniors, NCC offers College Pathway Initiative (CPI). CPI students pursue a sequence of summer and after-school academic courses at NCC in English, Math, and Science. They also explore career and college options through weekly meetings with college counselors, employers, and young professionals in a wide variety of careers. CPI students may earn up to 12 college-level credits before beginning college full-time. This program is offered through the high school partnership program at NCC.

All costs of ConnCAP and CPI, including tuition, books, and transportation, are covered through NCC. Interested students should contact their guidance counselor.

Any AITE junior or senior with a "B" average may be eligible to take an NCC course in any field during the fall or spring semesters through the High School Partnership Program. Students must be recommended by their guidance counselor and take the Accuplacer test in the preceding semester to determine eligibility. Students who are eligible for HSP pay no NCC tuition. Interested students should contact Mr. Bill Chagnon at NCC at 203-857-7090.

## University of Connecticut Early College Experience (UConn ECE)

The UConn ECE program provides academically motivated students with the opportunity to take university courses while in high school. Students may earn college credit for each UConn ECE course taken. Successful completion of a UConn ECE course adds .07 weighted credit to a student's rank and GPA. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree and other post-secondary opportunities. College credit is earned for a fraction of the cost it would be if the course were taken on a UConn campus.

UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity, and critical thinking - all important for success in college and careers. UConn ECE courses are offered in Art, English, Math, Music, Social Studies, World Languages, and the Sciences. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to many colleges and universities. Students are charged a program fee of $\$ 35$ per credit plus a resource fee of $\$ 20$. Thus, a 2 -credit course will cost $\$ 90$ and a 3 -credit course will cost $\$ 125$. For additional information, visit www.ece.uconn.edu.

## The Special Features of AITE:

- College Preparatory courses with high academic standards and rigorous graduation requirements
- State-of-the-art technology access through a one-to-one laptop program and computer laboratories
- Highly qualified and trained staff, many with business and other professional experiences
- Career and Technical Education emphasis, including Work Based Learning, Employment Skills Training, Career Counseling
- A wide variety of languages including Arabic, Mandarin Chinese, French, Latin, Russian, and Spanish
- Partnerships with the University of Connecticut, the University of New Haven, and Norwalk Community College provide college credit-bearing courses
- Clubs, leadership opportunities, and a variety of activities including intramural sports
- Option to participate in one's respective comprehensive high school for sports or other extra-curricular programs
- Involvement of Business Advisory Committee as guest speakers, curriculum advisors, and student mentors


## CAREER AND TECHNICAL EDUCATION

As we look to compete in the national and increasingly global economy of the $21^{\text {st }}$ century, we must be able to prepare all students for the technical, high-skill jobs of the future. The workplace of the $21^{\text {st }}$ century requires a new kind of worker - one who excels at solving problems, thinking critically, working in teams, using technology, and constantly learning on the job.
When students can see the connection between schoolwork and the world of work, they become motivated to learn. That is the premise behind the Career and Technical Education philosophy in the Stamford Public Schools.

Career and Technical Education is a collaboration of educators, employers, parents, and community agencies working together to provide young people with the skills and practical knowledge necessary to make a successful transition to advanced education and the workplace. This combination of school-based and work-based learning enables students to explore numerous career options and to tap into resources that will enable them to chart a challenging and rewarding career path.

Career and Technical Education activities are designed to develop in young people the competence, confidence, and understanding that will ensure successful careers and citizenship. In addition, these activities will give students a view of the range of post-secondary options available to them. These options include four-year colleges, community or technical colleges, technical training opportunities, and structured entry-level work along a charted career path.

Career and Technical Education concepts are integrated into all curriculum areas. The following programs and activities are designed to prepare students to be life-long learners and workers:

> Academy of Information Technology \& Engineering (AITE)
> Cisco Networking Academy
> Junior Achievement Programs
> Annual Career Fair \& Exploration Expo
> FIRST Robotics Club \& Competitions

Architecture and Engineering College Fair - Every spring the guidance office conducts a special college fair designed to bring representatives of colleges with architecture and engineering programs for students interested in pursuing careers in these areas.

## Work-based experiences include:

- Job Shadowing
- Career Focused Work-Based Experiences
- Academy Internships


## ACADEMY OF INFORMATION TECHNOLOGY \& ENGINEERING RECOMMENDED REQUIREMENTS FOR AN AITE DIPLOMA

All students are encouraged to meet and exceed the graduation requirements as established by the State of Connecticut and the Stamford Board of Education. As a college preparatory high school, AITE believes that it is in the best interest of every student to pursue a rigorous high school education. We recommend and encourage all students to exceed the required 20 credits to include successful completion of four-year sequences in English, Social Studies, Mathematics, Science, a World Language, as well as those additional courses required by the State of Connecticut and the Stamford Board of Education.

| English | 4 Years | Social Studies | 4 Years |
| :--- | :--- | :--- | :--- |
| Mathematics | 4 Years | Science | 4 Years |
| World Language | 4 Years | Health | 2 Semesters |
| Fine/Unified Arts | 6 Classes | Physical Ed | 2 Semesters |

## Unique and significant areas recommended for graduation from AITE include the completion of a SENIOR CAPSTONE PROJECT and COMMUNITY SERVICE.

SENIOR CAPSTONE PROJECT: AITE students are encouraged to complete a year-long exit activity, known as the Senior Capstone project. The Senior Capstone project is designed to imitate real-world processes and to give students the opportunity to demonstrate the research, writing, and communication skills that they have honed during their high school years. Students will determine their own curriculum with the assistance of an adult mentor. Students must submit a formal proposal, a research paper, and a technology based presentation to successfully complete the Senior Capstone project.

COMMUNITY SERVICE: AITE students are encouraged to complete 12.5 hours of community service per year. Community service gives students an opportunity to serve the local or global community in a positive way. It also fosters responsibility, understanding, and leadership in our students. Students are encouraged to volunteer at local non-profit organizations in and around the lower Fairfield County area. Students can volunteer through our after school community service club, Interact. Students can also consult their guidance counselors for help finding community service opportunities. Proof of volunteer hours is required. Forms can be found on the school's website under the "Student Resources" tab.

NOTE: All courses are offered subject to sufficient enrollment, staffing, and funding. Courses with chronically low enrollment may be discontinued or offered on an alternating year basis to allow interested students the opportunity to take the course at some point during their high school career.

## ARCHITECTURE AND ENGINEERING

The Architecture and Engineering Concentration provides project-based activities that integrate technology applications with historical perspectives and engineering principles. Students will be given opportunities to analyze design problems and utilize computer technology to create solutions.

The Architecture and Engineering courses listed in this section are part of an innovative preengineering and technology education partnership program called PROJECT LEAD THE WAY (PLTW). This specially developed high school program seeks to create dynamic partnerships with students to introduce them to and create successful pathways into the fields of architecture, engineering, and technology. The courses are designed to allow students to earn college credit upon successful completion of the classes and the college portion of the final exam in each class. The PLTW classes offered at AITE are supervised and accredited by the University of New Haven.

## COURSE OFFERINGS

Introduction to Engineering Design
Digital Electronics
Principles of Engineering

Civil Engineering and Architecture Engineering Design and Development

## 1500_INTRODUCTION TO ENGINEERING DESIGN (PLTW) 1 credit

Introduction to Engineering Design is an introductory course which develops student problem solving skills with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by modern, state-of-the-art computer hardware and software, Inventor. This modern computer-based process supplements the traditional hand drawing methods. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed and evaluated, using parametric design principles. Various design applications will be explored along with discussion of possible career opportunities.

## 1510_DIGITAL ELECTRONICS (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit
This course is based on the principles and laws of traditional electronics and electrical theory. Digital Electronics and embedded microcomputers (a direct application of Digital) are in every product that is either plugged into a wall or operated by batteries, and is therefore a technology that all people are exposed to in their daily lives. Students will begin with a study of basic electrical theory then move on to learn the basic principles and theories of digital circuits. The curricula used in this course were created by Project Lead the Way, Inc. It uses project-based learning through circuit design and testing.

## 1520_PRINCIPLES OF ENGINEERING (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit
Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering, engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. The main purpose of this course is to experience through theory and hands-on problem solving activities what engineering is all about and to answer the question, "Is a career in engineering or engineering technology for me?"

## 1440_CIVIL ENGINEERING AND ARCHITECTURE (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit

Students will explore aspects of civil engineering and architecture through project development. Topics will include site selection and project planning, surveying, project plan layout, permits and licenses, building design and codes, building systems, and cost analysis. Students will work with cutting-edge technology applications, make site visits, and work with professionals from the field.

## 1530_ENGINEERING DESIGN AND DEVELOPMENT (PLTW)

Prerequisites: Introduction to Engineering Design; Principles of Engineering 1 credit

In this course, students will work in teams of two to four to design and construct the solution, to an engineering problem, applying the principles developed in the preceding four courses. The problem may be selected from a database of engineering problems, be a recognized national challenge, or be an original engineering problem identified by the team and approved by the teacher. The problems will involve a wide range of engineering applications (e.g. a school robo-mascot, automated solar water heater, remote control hover craft). Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project for an outside review panel. The completed portfolio will be invaluable as students apply to college.


## 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.

## COURSE OFFERINGS

Accounting 1
Accounting 2
Business Law
Business Publications
Entrepreneurship

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit
This course is designed to present the introductory phases of accounting for a single proprietorship, partnership, and corporation. Preparation and interpretation of the accounting cycle is stressed. In addition, a unit on the federal income tax will be included. Each student is expected to complete at least one double-entry practice set of books. This course introduces students to vocational bookkeeping and accounting. It is also valuable for collegebound students who are interested in pursuing careers in business.

## 2270_ACCOUNTING 2

Prerequisite: Accounting 1
Grade: 11, 12
1 credit

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. The students will use standard accounting practices

Finance
Introduction to Business
Marketing in the $21^{\text {st }}$ Century
Sports and Entertainment Management
Virtual High School
Yearbook
and business procedures with an emphasis on the various managerial aspects of a business operation. Computers will be used to perform the various accounting applications such as spreadsheet. Students will also gain a deeper understanding of financial literacy. After completing this course, students may earn 3 college credits by passing the CLEP exam in Financial Accounting. Students participating in this course may also have an opportunity to participate in an internship through a community partnership with First County Bank.

## 2370_BUSINESS LAW <br> Prerequisite: Foundations of Information <br> Technology; Introduction to Business <br> 1 credit

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 courts structure, the laws of business, contracts, sales, bailments, negotiable paper, agency insurance, and business organization. Students will 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.

## 2991_BUSINESS PUBLICATIONS

Prerequisite: Foundations of Information
Technology
$1 / 2$ credit
Students produce real-world documents such as newsletters, brochures, greeting cards, flyers, logos, signs, and much more. Students work independently using word processing, desktop publishing, and presentation software. Students will also create an integrated Microsoft Office Project for a company.

## 2080_ENTREPRENEURSHIP 1 credit

This course is offered in conjunction with the Network for Teaching Entrepreneurship. Students study the basics of marketing, financing, and managing a business. The focus is on preparing students to start a "real business" as well as developing an understanding of opportunity recognition, marshaling resources, risk analysis, and other pending business issues.

## 2363_FINANCE

Grade: 11, 12
1 credit
In this course, students will study finance from at least three points of view: personal, corporate and international. Students will learn how to keep and balance a checkbook, prepare tax returns, develop a budget, and understand the social security and tax withholding systems. The focus will be on learning how to make wise financial decisions including investing and insurance, as well as establishing and maintaining credit. Students will study the global economy and how the United States fits into the worldwide financial world. The focus will be on identifying the social, cultural, political, and economic differences that form the unique identity of countries with which the United States trades. International finance is designed to help students develop the appreciation, knowledge, skills, and abilities needed to live and work in a global
marketplace. Business structure and management, trade, global entrepreneurship, marketing, financial literacy, and career planning will be studied.

## 2350_INTRODUCTION TO BUSINESS <br> Prerequisite: Foundations of Information Technology <br> 1 credit

Students will be introduced to business concepts and skills needed in today's competitive environment. Major business concepts, such as Finance, Marketing, operations, and Management will be covered. Students will gain valuable information and skills for the workplace, as well as preparation for success in competitive events.

## 2180_MARKETING IN THE 21 ${ }^{\text {ST }}$ CENTURY

Grade: $10,11,12$
1 credit
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.

NOTE: Sacred Heart University credit (3 semester hours) will be offered to students who achieve a grade of $B$ or better.


## 2351_SPORTS AND ENTERTAINMENT MANAGEMENT

Prerequisite: Introduction to Business $1 / 2$ credit

Sports and Entertainment Management serves as a one-semester course for marketing and business management students. Using topics in the sports and entertainment industries, the text and multimedia supplements cover the basic functions of management as outlined in national and state standards.

## 1990_VIRTUAL HIGH SCHOOL

Prerequisite: Permission of VHS Coordinator 1 credit $/ 2$ credits

Virtual High School classes take place entirely over the Internet. The VHS classes are offered in a scheduled asynchronous mode following a college semester schedule; assignments are due at specified weekly intervals. Students may choose up to two semester courses (Fall and Spring) or one full year course. All VHS courses are monitored regularly and adhere to the National Education Association's recommended course guidelines. For more information, and for the complete catalogue of courses offered by VHS, please visit www.govhs.org.

## 0690_YEARBOOK

Grade: 11, 12
1 credit
Students will work on the AITE yearbook using the assigned software and learn projectplanning techniques for a complex multi-task project. Responsibilities will include photography, writing and editing, interviewing, using computer software to work with images, and written copy to produce the yearbook draft for submission to the production company and to produce the CD yearbook. Class members will be expected to sell yearbook ads, attend afterschool meetings, and attend selected school evening events.

## CAREER \& TECHNICAL EDUCATION - TECHNOLOGY

The Technology program provides students with an opportunity to participate in many wellorganized 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 have the opportunity to obtain 16 college credits at Norwalk Community College if they successfully complete Cisco Networking Academy courses. These NCC credits may be used toward satisfaction of the graduation requirements for an Associate Degree at Norwalk Community College or will be eligible toward completion of a 4 year Bachelor of Science Degree at Western Connecticut State University under the terms of the NCC/WCSU articulation agreement.

## COURSE OFFERINGS

Cisco Networking Academy - CCNA Routing and Switching:

Introduction to Networks
Routing and Switching Essentials
Scaling Networks
Connecting Networks
Foundations of Information Technology
Introduction to Game Design
Game Design and Development
Advanced Game Design
Geographic Information Systems

AP Computer Science Principles (PLTW)
Introduction to Programming Concepts
Computer Programming (NCC Partnership)
Studio Production 1
Studio Production 2
Introduction to Networking
Smart Apps
Web Design

## 2721_CCNA ROUTING AND SWITCHING: INTRODUCTION TO NETWORKS

Grade: 11
1 credit
This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

## 2731_CCNA ROUTING AND SWITCHING: ROUTING AND SWITCHING ESSENTIALS

1 credit
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, singlearea and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

## 2751_CCNA ROUTING AND SWITCHING: SCALING NETWORKS <br> 1 credit

This course describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

## 2791_CCNA ROUTING AND SWITCHING: CONNECTING NETWORKS <br> 1 credit

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network.

## 2222_FOUNDATIONS OF INFORMATION TECHNOLOGY <br> Required course for all AITE students $1 / 2$ credit

Students in this course will learn about their laptops and the hardware, software, and applications they will be using on a daily basis at AITE. In addition to improving their keyboarding skills, student will also learn how to use the Microsoft Office Suite: Word, PowerPoint, Access, Excel, and Publisher.

## 2473_INTRODUCTION TO GAME DESIGN

(1/2 Year Course - Fall)
Grade: 10, 11
$1 / 2$ credit

The 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.


## 2472_GAME DESIGN AND DEVELOPMENT

(1/2 Year Course - Spring)
Grade: 10, 11
Prerequisites: Algebra, Animation, Introduction to Game Design, Foundations of Information Technology $1 / 2$ credit

This course takes the students on a creative journey that starts at a conceptual beginning and arrives at a polished end - the "game prototype". Students will work individually or with a partner/group to produce storyboards, categorize interfaces, control schemes, manage game assets and script interactive elements to produce a "game prototype."

## 2474_ADVANCED GAME DESIGN

Grade: 11, 12
Prerequisites: Introduction to Game Design, Game Design and Development
1 credit
The purpose of this course is to give the students who have taken Introduction to Game Design and Game Design and Development, an opportunity to create real world type applications. Students will use the latest technology and software to create smart phone apps and games for the Microsoft Xbox.

## 1330_GEOGRAPHIC INFORMATION SYSTEMS

Prerequisite: Recommended for students taking AP Human Geography
1 credit
Students will learn the theory of Geographic Information Systems using mapping techniques known as GIS. GIS technology is one of the hottest new tools in business, education and research, and is one of the fastest growing high-tech careers for students today. This course provides students an opportunity to gain a basic, practical understanding of GIS concepts, techniques, and real world applications, and develop computer literacy, analytical approaches to problem solving, communication and presentation skills.

## 6645_AP COMPUTER SCIENCE PRINCIPLES (PLTW) <br> 1 credit

This course helps students to develop computer programming expertise and explore the workings of the Internet. Projects include APP development, visualization of data, cybersecurity, and simulation.

## 2688_INTRODUCTION TO PROGRAMMING CONCEPTS

Grade: 10, 11, 12
Prerequisite: Foundations of Information
Technology
1 credit
This course will introduce students to advanced Excel, Visual C\# and Java Programming. Students learn the basics of programming logic, understand relational database, and learn how to create a simple archival database.

## 6630_COMPUTER PROGRAMMING (NCC PARTNERSHIP) <br> 1 credit

Students in this course will be provided with an introduction to the world of programming utilizing VisualBasic.NET, a high-level event driven programming language. Students will learn and apply the basic concepts of VisualBasic to solve problems. More advanced programming concepts, including database programming and object-oriented programing, will also be explored. Students who meet the criteria are eligible to earn dual credit for college.


## 2217_STUDIO PRODUCTION 1

Grade: 11, 12
1 credit
Topics in this course include production in the media arts and editing, as well as applications in the field of videography. Extensive training in audio, lighting, set design, camerawork, production, and postproduction are emphasized.

## 2218_STUDIO PRODUCTION 2

1 credit
Grade: 12

This is a Master's Course in all aspects of photography and cinema. Students will be exposed to advanced topics in film production and commercial/editorial photography. Careers and opportunities in the industry will be discussed. Admission by teacher approval only.

## 2430_INTRODUCTION TO NETWORKING

Grade: 10, 11, 12
Prerequisite: Foundations of Information Technology, Algebra 1
1 credit
This course is designed to introduce students to a more advanced understanding of information technology and data communications. Students will develop the necessary skills to enter this field by building a computer system, installing the operating systems, adding peripherals, connecting the computer to a local area network, and to the Internet. Characteristics of the Linux, Windows 2000, NT and XP Network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access. This is a hands-on, laboriented course that stresses lab safety and working effectively in a group environment. This course will help prepare students for CompTIA's A+ certification.

## 2512_SMART APPS

Prerequisite: Introduction to Programming Concepts
$1 / 2$ credit
The course will introduce students to the various platforms in use on small and mobile devices. Platforms will include Apple iPhone, Google Android OS, and Microsoft Windows Phone 7. Students will create applications for each platform using specialized development environments. Norwalk Community College credit is available upon the successful completion of this course.


## 2342_WEB DESIGN

Prerequisite: Foundations of Information Technology
$1 / 2$ credit

This course will introduce students to the design, creation, and maintenance of web pages and websites. Students will learn how to critically evaluate website quality, how to create and maintain quality web pages, how to create and manipulate images, and the importance of web design standards.

## ENGLISH

The four-year English program is designed to provide students with reading, writing and oral skills, to encourage responsible social interaction, enhance the learning process, and generate enthusiasm for the power of language particularly imaginative language. All students are required to take four years of English. 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Requirements:

English 9
English 9 Honors
English 10
English 10 Honors
English 11
English 11 Honors
AP English Language \& Composition 11

English 12
English 12 Honors
UConn ECE/AP English Literature \& Composition 12

## Electives:

Web Newspaper
Creative Writing $1 \& 2$

## 3010_ENGLISH 9

3000_ENGLISH 9 HONORS
1 credit
This course is devoted to 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 the persuasive, narrative, and expository essays, response to literature, and other modes. Appropriate attention is paid to editing skills. Literature instruction encourages thoughtful interpretation of various genres including adolescent fiction and mythology, as well as novels, short stories, information, and poetry. Students also participate in thematic Literature Studies units.

## 3110_ENGLISH 10 3100_ENGLISH 10 HONORS 1 credit

This course examines the interpretation of literature through the mediums of the short story, the novel, and expository articles. Instruction focuses on written and oral expression including the persuasive essay and literary response with attention to research, editing, and oral expression skills. Students develop interpretive skills and become fluent in written response to literature. Students also participate in thematic literature studies units.

## 3210_ENGLISH 11 <br> 3200_ENGLISH 11 HONORS <br> 1 credit

This course develops an understanding of the American experience through the study of the novel, biography, drama, essay, and poetry. Attention is given to developing fluent, wellstructured, and well-edited written expression as well as formal and informal oral expression. In addition, students gain deepened appreciation of the many cultures that make up and contribute to the American experience. Students also participate in thematic literature studies units.

## 3260_AP ENGLISH LANGUAGE AND COMPOSITION 11 <br> 1 credit

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.

## 3730_ENGLISH 12

3900_ENGLISH 12 HONORS

## 1 credit

This course focuses on a selection of world literature, nonfiction, and film that examines the human condition from multiple perspectives. Students continue to develop analytical skills in a variety of written and oral formats. Students also participate in thematic literature studies units.

## 3301_UCONN ECE/AP ENGLISH LITERATURE AND COMPOSITION 12 1 credit

This course offers students the opportunity to participate in an intensive program intended to prepare students both for the Advanced Placement test and for the rigors of college English. Critical analysis of literature, advanced levels of academic writing, intensive group discussion, projects, occasional creative
writing, the personal narrative essay, and critical reading form the core of the course. Successful scores of 4 or 5 on the Advanced Placement test often excuse the student from a semester of freshman level English at participating colleges.

## 3920_WEB NEWSPAPER 1 3921_WEB NEWSPAPER 2 1 credit

Students will learn different formats of journalistic writing including, but not limited to, news, features, columns, editorials, and sports. Students will plan, draft, and complete written assignments on a regular basis and under deadline constraints, using the correct conventions and mechanics of written English. Students will participate in the publication of the online school newspaper.

## 3361_CREATIVE WRITING 1 <br> 1/2 credit

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, novellas, plays, and poetry. Group reading of works in progress is expected and revision based on peer critique is required.

## 3590_CREATIVE WRITING 2 <br> 1/2 credit

Students in this course will continue to write in a variety of literary formats to include the short story, drama, and poetry. Group reading of works in progress is expected and revision based on peer critique is required. Students will analyze the writing of established writers to demonstrate their understanding of the creative process and learn to discover their own creative voices. The goal of the advanced student is to strive for publication.

## FINE 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.

## COURSE OFFERINGS

Band
Piano Instruction 1
Piano Instruction 2
Concert Choir 1
Concert Choir 2
Advanced Choir: Chamber Singers

## 7220_BAND

Prerequisite: Previous study in instrumental music
1 credit
The purpose of this course is to continue studies in instrumental music. Participating in various concerts during the school year is required. This is a performance-based class requiring participation, performance, and attendance in class and at rehearsals as an integral part of the student's grade.

## 7700_PIANO INSTRUCTION 1

(1/2 Year Course - Fall)
Prerequisite: None
$1 / 2$ credit
This class 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

Digital Music Production
Digital Music Theory and Composition
Guitar Instruction 1
Guitar Instruction 2
from various cultures and styles. This is a performance-based class where students will also use computers to aid instruction and evaluation

## 7710_PIANO INSTRUCTION 2

(1/2 Year Course - Spring)
Prerequisite: Piano Instruction 1 or permission of instructor.
$1 / 2$ credit
This class 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.

## 7210_CONCERT CHOIR 1

1 credit
This course explores opportunities in ensemble singing of sacred and secular music. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette will be developed through the daily study and performance of a varied repertoire.

## 7212_CONCERT CHOIR 2

1 credit

This course is for students who have successfully completed Concert Choir 1 and would like to continue developing their vocal techniques and performance skills.

## 7430 ADVANCED CHOIR: CHAMBER SINGERS

Prerequisite: Vocal audition
1 credit

This course involves advanced studies in choral literature. 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.

## 1961_DIGITAL MUSIC PRODUCTION

Prerequisite: None
1 credit
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.

## 7630_DIGITAL MUSIC THEORY AND COMPOSITION

Prerequisite: Digital Music, Piano Instruction
1, Guitar 1, or permission of instructor.
1 credit
This is a project-based class that will focus on computer aided music theory and composition. Students will learn a variety of recording and production software that they will use to create and produce their own compositions. Students will also continue with piano instruction.

## 7720_GUITAR INSTRUCTION 1

(1/2-Year Course - Fall)
Prerequisite: Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.)
$1 / 2$ credit
This class 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.

## 7730_GUITAR INSTRUCTION 2 (1/2 Year Course - Spring) <br> Prerequisite: Successful completion of Guitar Instruction 1 or permission of instructor. <br> $1 / 2$ credit

Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.) This class 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.

## FINE ARTS - VISUAL ARTS

In Visual Arts, a wide range of coursework is designed to develop an understanding of art, art production, art history, creative problem solving, and technical applications. Art courses may be used for personal satisfaction as well as for acceptance to advanced schools, college, or computer arts careers. (For information on UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Drawing 1
Painting 1
Drawing and Painting 2
Design 1
Advertising Design
Animation
Advanced Animation

Adobe Illustrator
Adobe Photoshop
Multimedia Presentation
Studio Art
Architectural Drafting/CAD Technology
Interactive Art Robotics
UConn ECE Digital Foundations

## 0153_DRAWING 1

(1/2-Year Course - Fall)
$1 / 2$ credit
This course introduces the students to the basic aspects of drawing. It is recommended as a foundation course for all fine art classes. Students draw with a variety of media, such as a pencil, charcoal, and ink in black and white as well as color. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

## 0154_PAINTING 1

(1/2-Year Course - Spring)
$1 / 2$ credit
This course introduces the students to the basic aspects of painting. It is recommended that the student has taken Drawing 1. Students paint with a variety of media, such as tempura, watercolors, and acrylics. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate
art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

## 0250_DRAWING AND PAINTING 2

Prerequisite: Drawing 1 or Painting 1 or Art
Department approval
1 credit
Students develop an ability to interpret and produce three-dimensional objects through use of elements of art such as line, form, and color. Still life structural representation, nature study, rendering, and portraiture will be investigated. Students study color in depth through the use of pencil, chalk, watercolor and paint. Students study the history of art in detail, as well as contemporary movements. Critiques and the objective development of student work are emphasized.

## 0860_DESIGN 1

$1 / 2$ credit
This is a half year course exploring design concepts in two and three dimensional work. Students will apply the elements and principles of design in projects utilizing cut paper, paint, clay, stick and wire construction, and computer graphics. This introductory course will provide the techniques and skills necessary to understand and create projects based on the components of formal design.

## 0420_ADVERTISING DESIGN 1 credit

This course introduces the elements of design and the techniques used to produce posters, CD and book covers, movie ads, and box designs. An emphasis is placed on the fundamentals of hand lettering using pencil, markers, and pens. Some computer graphics are also explored.

## 0820_ ANIMATION <br> 1 credit

This course will explore the illusion of movement and the development of animation through time. Students will brainstorm, write, storyboard, and create animations using a traditional approach, computer-generated and stop motion. FLASH is the predominant software used in this class. Students must be willing to draw on paper and write.

## 0830_ADVANCED ANIMATION

Prerequisite: Full year of Animation or teacher permission.
1 credit

Students will continue exploring the illusion of movement through detailed hand drawings, stop motion and digital creations. Software explored may include FLASH \& Final Cut Express.

## 0720_ADOBE ILLUSTRATOR <br> (1/2-Year Course - Fall) <br> $1 / 2$ credit

This course is intended for the beginner digital arts student as an exploration of the elements and principles of design using Adobe Illustrator. The student will learn about the tools and techniques of drawing on the computer as well as the fundamentals of design. It is a foundation course for further art courses.

## 0740_ADOBE PHOTOSHOP <br> (1/2-Year Course - Spring) <br> $1 / 2$ credit

This course is intended for the beginner digital arts student as an exploration of the elements and principles of design using Adobe Photoshop. The student will learn about the tools and techniques of photo-manipulation and the fundamentals of design. It is a foundation course for further art courses.


## 0840_MULTIMEDIA PRESENTATION

 1 creditStudents will explore a number of multimedia applications that will focus on creative expression. Concentrations will be on the individual and combined use of:

- Image Editing/Manipulation (Adobe Photoshop, scanning, digital photography)
- Digital Video (Final Cut Express, video editing and audio)
- Animation (frame-by-frame \& FLASH)
- Web Design (Dream Weaver, layout \& Design).


## 0400_STUDIO ART

Prerequisite: Drawing and Painting 2 and/or department permission
1 credit
This course is designed for the highly motivated student committed to a career in art. Students will work as a group and on developing an individual portfolio and may be required to spend additional extra time beyond class time to complete their projects. Students will use a variety of media from markers to charcoal, oil paint, acrylics, digital cameras (still and motion), and computer programs such as the Adobe suite. Each portfolio will vary according to the student's interests and talents and the particular requirements of the institution to which it is being submitted.

## 1340_ARCHITECTURAL DRAFTING/ CAD TECHNOLOGY

1 credit
This course provides each student an opportunity to learn the different views that accompany drafting. Students will learn that precise measurements, clean drawn lines and legible lettering are important in relaying information. Once students have demonstrated these skills they will learn about house styles, designs, what encompasses each style of house and will research kitchen designs, room sizes, window styles, doors, bathrooms, etc. Each student will complete architectural plans for a single family residence starting with paper and pencil and learn Auto-CAD to complete the remaining floor plans, elevations, detail cross sections and other plans.

## 1700_INTERACTIVE ART ROBOTICS

Prerequisite: Algebra 1 or higher
1 credit

Students will be introduced to the different components of robotics through computer programming, creating flow charts, Electronics/Robotics and Design. With the use of C++ students learn programming methodology and
how to structure, and write and problem solve simple and sophisticated programs. The Electronics/ Robotics section encompasses: Fundamentals of electronics, Ohm's Law, voltage, current, servos, LEDs, resistors, schematics, micro-processors, I/O controls, and the micro-processor programming language PBASIC.


## 1151_UCONN ECE DIGITAL FOUNDATIONS <br> 1 credit

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.

## HEALTH AND PHYSICAL EDUCATION

The Health Education Program provides students with a comprehensive study of various aspects of personal health, including fitness, nutrition, disease, first aid, mental health, safety, community health and welfare, and substance use and abuse.

The Physical Education Program provides a comprehensive and sequential progression of learning experiences, which contributes to the total growth and development of students. Students review and refine skills and sport strategies while developing a positive approach to fitness.

## COURSE OFFERINGS

Physical Education 1 \& 2 Health

## 9310_PHYSICAL EDUCATION 1

(1/2 Year Course - Fall)
$1 / 2$ credit
The physical education program parallels the health program in encouraging students to develop and maintain good fitness for life. All students will participate in a comprehensive Personal Fitness Program, which will include a battery of fitness tests. They will be introduced to team sports such as: soccer, flag football, softball, floor hockey, volleyball, basketball, team handball, and wiffle ball. Individual sports include tennis and badminton.

## 9901_HEALTH 1 credit



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.

## 9160_PHYSICAL EDUCATION 2 <br> (1/2 Year Course - Spring) <br> $1 / 2$ credit

This physical education program includes the state mandated Physical Fitness Assessment and Substance Abuse unit, weight training, and a choice of team and/or individual sports. Choices include archery, table tennis, tennis, golf, basketball, power volleyball, and slow pitch softball.

## 9800_HUMAN BEHAVIOR 1

Grade: 11, 12

## $1 / 2$ credit

This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive selfimage, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.

## 9840_HUMAN BEHAVIOR 2

Grade: 11, 12
$1 / 2$ credit
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.

## MATHEMATICS

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 $21^{\text {st }}$ century world economy.

Instruction is varied and includes teacher-centered, group work, inquiry-based, and individual learning. Graphing calculators and used extensively in every course. Some classes also include computer software applications.

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 and AP courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Algebra 1
Geometry
Honors Geometry
Algebra 2
Honors Algebra 2

## 6100_ALGEBRA 1

1 credit
This course examines the properties of real numbers, linear and quadratic equations, polynomial expressions and functions, inequalities, exponential expressions and equations, and systems of equations. 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.

## 6250_GEOMETRY <br> 6240_HONORS GEOMETRY

Prerequisite: Algebra 1
1 credit
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.

## 6200_ALGEBRA 2

6210_HONORS ALGEBRA 2
Prerequisite: Geometry and Algebra 1
1 credit
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, 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 computers and graphic calculator technology. Students focus on problem solving and real life applications throughout the year, as well as skills required for the SAT examination.

## 6850_ALGEBRA 3 AND TRIGONOMETRY

(1/2 Year Course - Fall)
Prerequisite: Algebra 2
$1 / 2$ credit
This course is recommended for Junior and Senior students not taking pre-calculus. It is designed to enhance the student's reasoning skills and mathematical understanding. The major concepts of Algebra, Geometry, and Trigonometry will be rigorously revisited to help prepare the student for real world modeling. SAT/ACT preparation is included in the framework of this course. Computer software and graphing calculators will be utilized for instruction.


6360_AP STATISTICS
Prerequisite: Algebra 2
1 credit
AP Statistics is a full year non-calculus based course that introduces the major concepts and tools for collecting, analyzing, and formulating conclusions from raw data. Students will be exposed to four broad conceptual themes: Data Exploration, Planning a Study,

Anticipating Patterns, and Statistical Inference. This course is designed to meet the same objectives as a first year Statistics course at a college level. Graphing calculators and/or computer software will be used as an integral part of the study.

## 6320_PRE-CALCULUS 6330_HONORS PRE-CALCULUS

Prerequisite: Algebra 2
1 credit
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 throughout the year, as well as skills required for the SAT examination.

## 6340_CALCULUS

Prerequisite: Pre-Calculus
1 credit

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.

## 6290_AP CALCULUS AB

Prerequisite: Honors Pre-Calculus or PreCalculus
1 credit

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity, as well as the techniques of differential and integral calculus. These 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.

## 6640_AP COMPUTER SCIENCE

Prerequisite: Algebra 2
1 credit
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 on and emphasize problem solving and real life applications through critical thinking activities including the social and ethical implications of computer use.

## 6680_APPLIED MATH: INTRODUCTION TO AEROSPACE AND ENGINEERING

Prerequisite: Algebra 1
1 credit
A mathematically intensive hands-on course in which students learn to model physical systems using Algebra, Geometry, and Trigonometry in the domains of ballistics, aerodynamics, and electricity. Students will test their mathematical models by building and operating model rockets, ground support systems, and airplanes equipped with cameras, altimeters, and accelerometers, and analyzing flight data. The prerequisite is Algebra 1 and
students will be expected to work independently with minimal direction as they discover solutions to open-ended real world engineering problems from NASA and industry. This course is part of the NASA Explorer Schools program and will include virtual visits with NASA engineers and opportunities to participate in national projects hosted by NASA and affiliated educational institutions.


## 6860_STATISTICS AND PROBABILITY

(1/2 Year Course - Spring)
Prerequisite: Algebra 3
$1 / 2$ credit

This course will utilize a creative and research based learning format, providing opportunities for real world critical thinking and deduction skills. Students will use a hands-on approach to explore applications in Science, Sports, Business, Social/Political Sciences, and Engineering. Students will develop research and data analysis skills across disciplines within a technology rich environment through the integration of Excel, graphic calculator, and Internet resources.

## SCIENCE

We live in a world that is dominated by the influence of science and technology. The ability to make informed decisions as voters and consumers requires an understanding and appreciation of the nature of science. Since science is both a body of knowledge and a process of investigation, these two components are an integral part of each science course offering. Students should expect a rigorous course of study that encourages higher-level reasoning, incorporates the use of technology, and involves laboratory inquiry. Skills in reading, writing, and mathematics are an important component of science instruction. Science courses are carefully aligned with the National Standard of Science Education and the Connecticut Science Frameworks and develop appropriate skills for the SAT. All students are encouraged to take four years of science including a balance of the life sciences and the physical sciences. (For information on Honors, AP, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Biology

Honors Biology
AP Biology
Chemistry
Honors Chemistry
AP Chemistry
Physics
Honors Physics
PLTW Physics
AP Physics 1
AP Physics 2
AP Physics C
UConn ECE/AP Physics 1201Q
UConn ECE/AP Physics 1202Q

Environmental Geology
UConn ECE/AP Environmental Science
Marine Biology
Forensic Science
Human Physiology
Photonics
Principals of Biomedical Science
Honors Biochemistry
Human Body Systems
Medical Interventions
Biomedical Innovation
Science Research

## 8110_BIOLOGY <br> 8120_HONORS BIOLOGY <br> 1 credit

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.

## 8360_AP BIOLOGY

Prerequisite: Biology, Chemistry, and two years of mathematics
1 credit
This course is planned to meet the objectives of a rigorous course in first year biology at the college level. Topics will include: molecules and cells, heredity and evolution, organisms and populations, biotechnology and genetics. Laboratory investigations are an integral part of this course. Each student should complete a lab notebook or portfolio of lab reports.

## 8210_CHEMISTRY <br> 8280_HONORS CHEMISTRY

Prerequisite: Algebra 1 or Geometry and Biology. Concurrent enrollment in Algebra 2 recommended
1 credit

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, electrochemistry, 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.


## 8420_AP CHEMISTRY

Prerequisite: Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics 1 credit

This course is designed to meet the objectives of a rigorous course in first year chemistry at the college level. Topics include: the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, and the basic
concepts of thermodynamics. Each student completes a lab notebook or portfolio of lab reports. Laboratory investigations are an integral part of this course.

## 8310_PHYSICS <br> 8400_HONORS PHYSICS

Prerequisite: Algebra 2 (or concurrent enrollment) and two years of high school science 1 credit

This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermodynamics, 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 activeties. 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.

## 8371_PLTW PHYSICS

Prerequisite: Biochemistry and Principles of Biomedical Science
1 credit

Students in this course explore classical and modern physics principles in a comprehensive approach. Topics in the course include: Newtonian mechanics, heat, kinetic theory and thermodynamics, electricity and magnetism, waves and optics, historical astronomy, and nuclear physics. Students develop a deeper understanding of physics through laboratory investigations, problem solving and critical thinking activities. Laboratory investigations are an integral part of this course. This course is designed as a second year science in the PLTW Biomedical Science curriculum and should be taken concurrently with the Human Body Systems course.

## 8384_AP PHYSICS 1

Prerequisite: Geometry and concurrent enrollment in Algebra 2
1 credit
This course is the equivalent to 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.

## 8385_AP PHYSICS 2

Prerequisite: AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

## 1 credit

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. Inquirybased 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.

## 8388_AP PHYSICS C

Prerequisite: Two years of laboratory science including Physics and concurrent enrollment
in Calculus
1 credit
This course is planned to meet the objectives of a rigorous course in first year Calculusbased physics at the college level. Topics will include Newtonian mechanics, heat, kinetic theory and thermodynamics, electricity and magnetism, waves and optics, and modern physics. Laboratory investigations are an integral part of this course. Each student should complete a lab notebook or portfolio of lab reports.

## 8390_UCONN ECE/AP PHYSICS 1201Q

Grade: 11, 12
Prerequisite: Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year
1 credit
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 thermodynamics, 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.

## 8391_UCONN ECE/AP PHYSICS 1202Q

Grade: 11, 12
Prerequisites: Completion of UCONN 1201Q with a "C" or better and a summer assignment prior to the start of the academic year 1 credit

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.

## 8378_ENVIRONMENTAL GEOLOGY <br> $1 / 2$ credit

Students in this course will investigate the geological history of Connecticut. They will also explore topics such as petroleum energy, fracking, and alternative energy sources such as fuel cells. Laboratory investigations are an integral part of this course.

## 8741_UCONN ECE/AP ENVIRONMENTAL SCIENCE

Prerequisites: Biology and Chemistry 1 credit

This course is an introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation. Laboratory investigations are an integral part of this course.

## 8760_MARINE BIOLOGY

Prerequisite: Two years of science, one being Biology
$1 / 2$ credit
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.

## 8510_ FORENSIC SCIENCE

## Prerequisite:

Biology and Chemistry
$1 / 2$ credit

This course explores the various scientific applications of solving crimes in a comprehensive approach. Students will 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.

## 8200_HUMAN PHYSIOLOGY

Prerequisite: Biology and Chemistry $1 / 2$ credit

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.

## 8850_PHOTONICS

Grade: 11, 12
Prerequisite: Satisfactory completion of
Algebra 2
$1 / 2$ credit
Student will learn how lasers work and can be used for manufacturing. Students will explore the properties of light and waves as they relate to fiber optics. Topics will include the diffraction of light, constructive and destructive interference. Laboratories will include Snell's Law, construction of a Michelson interferometer, and fiber optic cable splicing. Students make holograms, build pinhole cameras and various photonics projects.

## 8870_PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)

Prerequisite: Must be taken concurrently with Biochemistry
1 credit
This is the first of a four-course sequence in which students explore the concepts of human medicine and are introduced to research processes and to bioinformatics. Hands-on projects enable students to investigate human body systems and various health conditions.

## 8290_HONORS BIOCHEMISTRY

Prerequisite: Must be taken concurrently with Principles of Biomedical Science
1 credit
This course explores the basic principles of biochemistry and molecular biology, emphasizing broad understanding of chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. It is designed to pair with the Project Lead the Way course, the Principles of Biomedical Science, in addition to preparing students for the recommended sequence of standard science courses for the Biomedical Science program including AP Physics, AP Biology and AP Chemistry.

## 8880_HUMAN BODY SYSTEMS (PLTW)

Prerequisite: Satisfactory completion of Biology and Principals of Biomedical Science 1 credit

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Students work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

## 8910_MEDICAL INTERVENTIONS (PLTW) <br> Prerequisite: Completion of Biology, Principles of Biomedical Science, and Human Body Systems <br> 1 credit

Students investigate a variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content.

## 8920_BIOMEDICAL INNOVATION

 (PLTW)Prerequisite: Completion of Biology, Principles of Biomedical Science, Human Body Systems, and Medical Interventions 1 credit

In this capstone course, students apply their knowledge and skills to answer questions and solve problems related to the biomedical sciences. Students design innovative solutions for current health challenges, have the opportunity to work on independent research projects, and, if available, participate in a medical related internship.

## 8500_SCIENCE RESEARCH

1 credit
This is a research and seminar based course for juniors and seniors who have taken biology, chemistry, and physics and are considering studying science at the college level. Students read and research scientific literature and make presentations on critical experiments or new technologies in modern science. By the end of the course students will conduct research and write comprehensive research papers on topics in cutting edge fields such as green energy, nanophysics, and biotechnology.

## 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.

## COURSE OFFERINGS

Student Assistant

## 9000_STUDENT ASSISTANT

Students can earn full or half year credit for completing school-related performance based tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student aides have worked in the past include the media center, cafeteria, and guidance office.

Technical Assistant

## 9020_TECHNICAL ASSISTANT

Prerequisite: Technology teacher recommendation

Students can earn full or half year credit for completing school-related technical tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student technical aides have worked in the past include setting up for school assemblies, maintaining audio visual equipment, and troubleshooting basic computer or other technical equipment problems.


## SOCIAL STUDIES

The Social Studies program is designed to prepare students to take an active role in the affairs of their local, state, national, and global communities. 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 historic foundations, students develop the skills and competencies to become responsible citizens in our democratic society. (For information on Honors, AP, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

| COURSE OFFERINGS |  |  |
| :---: | :---: | :---: |
| Requirements: | World History Electives: | Electives: |
| Social Studies 9: Modern | African History | Debate and Rhetoric |
| World History | Ancient World History | Honors Debate and Rhetoric |
| Honors Social Studies 9: Modern | Latin American Studies | Advanced Debate and Rhetoric |
| World History | The Middle Ages | AP Human Geography |
| Early American History | Middle Eastern Studies | UConn ECE Macroeconomics |
| Pre-AP Early American History | UConn ECE/AP European | UConn ECE Microeconomics |
| United States History | History | Introduction to Psychology |
| AP United States History |  | Sociology |
| Civics 1 \& 2 |  |  |
| AP Government and Politics |  |  |

## 5010_SOCIAL STUDIES 9: MODERN WORLD HISTORY 5000_HONORS SOCIAL STUDIES 9: MODERN WORLD HISTORY 1 credit

In this course students learn the history of the modern world. Topics will include: the age of revolution, industrialization, imperialism, World War I, World War II, the Cold War, independence movements, and globalization.

## 5680_EARLY AMERICAN HISTORY <br> $1 / 2$ credit

Early American History is a survey course from the ancient Native American to the Civil war. It considers our world relationships as well as the background of our institutions and events on the domestic front. It includes a
study of the contributions of various ethnic minorities to the development of American civilization and a strong emphasis on citizenship. This course is to be taken in the second semester of the sophomore year.

## 5670_PRE-AP EARLY AMERICAN HISTORY

$1 / 2$ credit

This course is designed to prepare students to meet the requirements of a first year college course in United States History. The course of study includes the origins of nation, the Revolution, the Constitution, development of our political system, industrialization, and the Civil War. This course is to be taken in the second semester of the sophomore year.

## 5210_ UNITED STATES HISTORY 1 credit

United States History focuses on the periods 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.

## 5200_AP UNITED STATES HISTORY 1 credit

This course is designed to meet the requirements of a first year college course in United States History. The course of study includes the origins of nation, the Revolution, the Constitution, development of our political system, industrialization, the Civil War, imperialism, economics, and foreign policy.

## 5710_CIVICS 1

$1 / 2$ credit

This 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 regard 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.

## 5730_CIVICS 2

$1 / 2$ credit

The Civics 2 course is a continuation of Civics 1 and will focus on important principles of American Democracy including the structure and function of state and local government. This course will also examine the impact of
interest groups and the media on the political process and the relationship between the United States and other nations in regard to foreign policy and international relations.


## 5950_AP UNITED STATES GOVERNMENT AND POLITICS 1 credit

This 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.

## 5870_AFRICAN HISTORY <br> $1 / 2$ credit

In this course students examine the history of Africa. Students will study pre-historic cultures, the ancient West African empires, the Swahili Coast, Southern and Central African kingdoms, the period of European imperialism, independence, and contemporary Africa.

## 5890_ANCIENT WORLD HISTORY 1/2 credit

This course is a survey of the ancient civilizations from Egypt, Mesopotamia, and Phoenicia to those of the Greeks, Romans, Chinese, and Aryan India. It will review the rich cultural and technological heritage left behind by these peoples and their effect on the modern world.

## 5560_LATIN AMERICAN STUDIES

 $1 / 2$ creditThis course examines Latin American History from the Pre-Columbian Period. Students will explore the struggles of the Latin American peoples as they struggled for independence and with democracy. A focus of the course will be the involvement of the United States in Latin America.

## 5830_THE MIDDLE AGES

$1 / 2$ credit

This course is a review of the 1000 year period from the fall of the Roman Empire through the Reformation. It begins with the Barbarian invasions, rise of Germanic cultures, the High Middle Ages with the Crusades and advances in science and technology, and the High Middle Ages including the Renaissance and the Reformation.

5660_MIDDLE EASTERN STUDIES
$1 / 2$ credit


From Mohammed to the rise of the modern Islamic state, socio-political-religious issues will be investigated against the light of contemporary current events, as well as the challenging issues of East/West interdependence and independence.

## 5860_DEBATE AND RHETORIC 5865_HONORS DEBATE AND RHETORIC 1 credit

In this class students learn methods of debate and rhetoric. Students learn how to: communicate clearly and persuasively; construct and deliver strong arguments; think and speak on their feet; and research topics efficiently and effectively. Additionally, students learn about current events and contemporary issues in the United States and the rest of the world. This class is open to seniors and juniors. Freshmen and sophomores may enroll with instructor's permission.

## 5861_ADVANCED DEBATE AND RHETORIC <br> 1 credit

Students will expand and refine their debate and rhetoric skills. Students will not only continue to work on extemporaneous debate but also explore other debate formats. In the process, students will learn advanced research skills, philosophy, logic, and decision theory. This course is open to sophomores, juniors, and seniors and is intended for students who have completed the Debate and Rhetoric course or have experience with competitive formal debating.

## 5640_UCONN ECE/AP EUROPEAN HISTORY

1 credit
This course is designed to meet the requirements of a first year college course in European History. This course will cover historical developments in European history from 1500 to the present.

## 5690_AP HUMAN GEOGRAPHY

Prerequisite: Social Studies 9: Modern World History
1 credit

This course introduces studies to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface.

## 5980_UCONN ECE MACROECONOMICS $1 / 2$ credit

Students learn: the organization and function of the economic system as a total unit; economic decisions, institutions, and policies that determine levels and rates of growth of production, employment, and prices; and topical subjects (e.g., government budget deficits and current interest rate policy).

## 5820_UCONN ECE MICROECONOMICS $1 / 2$ credit

Students learn: how the invisible hand of the market functions through the economic decisions of firms and individuals; how prices, wages, and profits are determined; how resources are allocated; how income is distributed; and topical subjects (e.g., energy policy and health care.

## 5610_INTRODUCTION TO PSYCHOLOGY

½ credit

This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.


## 5040_SOCIOLOGY

$1 / 2$ credit
In this course, students will study the nature of society as it relates to various topics including racial and ethnic identity, gender, class, education, and urban issues.

## 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 AITE World Languages program provides for instruction in five 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. Using interdisciplinary philosophies as well as varied technology-based strategies, students learn to communicate effectively in a target language as citizens of the global community. It is recommended that students complete a minimum of a four-year sequence in one of the six world languages. (For information on AP and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Arabic 1, 2, 3, 4
French 1, 2, 3, 4
UConn ECE French
AP French (VHS)

Mandarin Chinese 1, 2, 3, 4
AP Chinese Language and Culture
Russian 1, 2, 3, 4
AP Russian

Spanish 1, 2, 3, 4
AP Spanish Language
UConn ECE Spanish

Latin 1, 2, 3, 4
AP Latin

> A final grade of "C" or better is recommended to proceed to the next level.

## 4820_ARABIC 1 <br> 1 credit

This introductory course is designed for students with little or no previous study of Modern Standard Arabic (MSA) focusing on all four language skills: listening, speaking, reading and writing, with an emphasis on the modern writing system. In addition to traditional methods of assessments, students will role-play, make small oral presentations and engage in guided basic conversations. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4850_ARABIC 2 <br> 1 credit

This course continues to develop the skills begun in Modern Standard Arabic (MSA) Arabic 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 will role-play, make small presentations and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4851_ARABIC 3

1 credit
This course develops extensive language acquisition skills through the four language areas: listening, speaking, reading and writing with an increasing emphasis on reading and writing on a wide variety of selected materials. Students will achieve a high level of comprehension and will be able to communicate concepts from articles by making presentations, readings, dictations and presenting their own skits. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4852_ARABIC 4

1 credit
This course is focused on listening, speaking, reading and writing at the intermediate/preadvanced proficiency level through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Arabic literature as well as other non-fiction texts. Students are encouraged to demonstrate their oral proficiency through discussions of historical, social and cultural aspects of life in the target language. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4100_FRENCH 1 <br> 1 credit

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 will roleplay, make small oral presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4200_FRENCH 2 <br> 1 credit

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 will role-play, make small presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4300_FRENCH 3 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations, and presenting their own skits. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4400_FRENCH 4 1 credit

This course is focused on listening, speaking, reading, and writing at the intermediate/preadvanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Francophone literature, as well as other nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4540_UCONN ECE FRENCH

Prerequisite: Satisfactory completion of
French 3 or 4
1 credit
Selected instructors who are certified by UConn may offer this as an option through the UConn Early College Experience program, either concurrently with enrollment in an upper-level French course or as a separate course. The instructors have the option of offering one course as a year-long 3-credit course or one 3 -credit course each semester for an annual total of 6 credits. The courses which may be offered are French 3267 French Language and Culture or French 3268W Writing in French. Course descriptions and other information may be found at www.ece.uconn.edu/courses/subj/french.php.
Students enrolled in French 3268W have specific requirements for course completion, such as writing a 5-page paper in French and following UConn's requirements for a writing intensive course.

## 4500_AP FRENCH (Virtual High School) 1 credit

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

## 4150_LATIN 1

1 credit
This course develops an understanding of Latin through the study of grammar, vocabulary, translations, familiarization with Roman civilization and culture, and the practical use of the language. Students will
make connections between the ancient world and the modern world. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4250_LATIN 2 1 credit

This course is designed to enrich the work of Latin 1 through the completion of forms, fundamentals of construction, increased vocabulary, and the readings of mythological tales. In addition students will develop an understanding of Roman culture and history. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4350_LATIN 3 <br> 1 credit

This course emphasizes advanced work in Latin vocabulary and English derivatives since $60 \%$ of English words are derived from Latin. The class will focus on poetry and composition as well as the study of Virgil. While this course prepares students for the SAT verbal section, it also strengthens grammar skills and connections across the curricula. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4450_LATIN 4 1 credit

This course emphasizes advance work in Latin vocabulary and English derivatives. The class will focus on poetry and composition as well as the study of Virgil, Catullus, Horace, and Pliny. In addition to traditional assessments, students will demonstrate their understanding of how Latin literature has influenced English literature through various projects. Students are also expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4550_AP LATIN

1 credit
This course is designed to meet the objectives of a rigorous course of Latin at the college level. In addition to advanced grammar and syntax, students will engage in sophisticated literary criticism of texts via class discussion and essays. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4180_MANDARIN CHINESE 1 <br> 1 credit

This is an introductory course in the Mandarin language and Chinese culture emphasizing the development of basic skills: Pinyin, pronunciation, tones, listening and speaking as well as the reading and writing of Chinese words. In addition to traditional methods of assessments, students will role-play, make small oral presentations and engage in guided conversations. Students also study Chinese mythology and Chinese calligraphy. Students are encouraged to participate in the COLT Annual Poetry Contest.


## 4710_MANDARIN CHINESE 2 1 credit

This is the continuation of Mandarin 1 and Chinese culture. Emphasis is placed on the development of basic skills: listening, conversation, comprehension, reading and paragraph writing. In addition to traditional methods of assessments, students will role play, make small oral presentations and engage in guided conversations. Students also study Chinese geography. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4840_MANDARIN CHINESE 3 1 credit

This course develops language acquisition in depth through the four language skills: listening, speaking, reading and writing with an increasing emphasis on reading a wider variety of material. Students will achieve a higher degree of comprehension and will be able to communicate cultural material by making presentations, writing compositions, and conducting discussions. Students research and give presentations on Chinese holidays. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4860_MANDARIN CHINESE 4 1 credit

In this course students read and write a variety of complex texts such as advertisements, news report and essays, while they continue to build conversational and listening skill. Students also study a selection of Chinese literature. An introduction to Chinese history is embedded in the language lessons. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4750_AP CHINESE LANGUAGE AND

 CULTUREPrerequisite: Approval of the instructor 1 credit

This is an intensive course in Chinese language and culture for students with minimum four years of previous study in Chinese. The course consolidates conversational, listening, reading and writing skills for daily life. Furthermore, students read, write and conduct discussions in depth in Chinese on topics ranging from geography, history, and social customs, to Chinese arts. They also read a selection of original texts from The Analects, and Tang and Song poetry. Students examine, describe and analyze a variety of cultural artifacts and try to transform and make connections.


## 4160_RUSSIAN 1

1 credit
This introductory course is designed for students with little or no previous study of Russian, 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 will roleplay, make small oral presentations, and engage in guided conversations.

## 4240_RUSSIAN 2 <br> 1 credit

This course continues to develop the skills begun in Russian 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 will role-play, make small presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest.

## 4360_ RUSSIAN 3 <br> 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations and presenting their own skits. Students are expected to participate in the COLT Annual Poetry Contest.

## 4170_RUSSIAN 4

Prerequisite: Approval of the instructor 1 credit

This course requires students to achieve a high degree of proficiency with the Russian Language. Students will utilize a variety of authentic materials including literature, magazines, newspapers, and audiovisual. Students must also demonstrate knowledge of Russian culture as an integral part of understanding the Russian people and their language. Students will participate in the Russian Poetry Olympiad. A proficiency test will be offered at the end of the course that may lead to college credit.

## 4830_AP RUSSIAN

Prerequisite: Approval of the instructor 1 credit

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of Russian 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 will participate freely and fluently in class discussions in the target language.

## 4130_SPANISH 1

## 1 credit

This introductory course is designed 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 will roleplay, make small oral presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4230_SPANISH 2

1 credit

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 will role-play, make small presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4330_SPANISH 3 <br> 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, written compositions, readings, dictations, and presenting their own skits. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4430_SPANISH 4 <br> 1 credit

This course is focused on listening, speaking, reading, and writing at the intermediate/preadvanced 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 nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.


## 4530_AP SPANISH LANGUAGE

Prerequisite: Approval of the instructor 1 credit

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 will participate freely and fluently in class discussions in the target language and are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish examination.

## 4535_UCONN ECE SPANISH

Prerequisite: Must have completed Spanish 1, $2,3,4$, and be able to understand, speak, read, and write Spanish proficiently.
1 credit
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.

## OTHER 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.

## 9740_INDIVIDUAL EDUCATIONAL DEVELOPMENT PROGRAM

## 1 credit

This course provides direct assistance to identified students in grades 9-12. The course focuses on continuous skill development for academic excellence, studying, self-advocacy, self-management and independence, compensatory learning, peer and adult relationships, and preparation for postsecondary experiences. While earning credits toward a high school diploma, students apply skills learned to the everyday classroom setting and life situations. Administrative approval required.


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## HIGH SCHOOL AND YOUR FUTURE

This booklet has been designed to assist you and your parents in preparing for your high school years and for your future. The high schools in Stamford offer many opportunities to all students.

During your high school years you will make decisions that will enable you to work toward longrange goals in a planned, sequential manner. Consulting with school counselors will enable you to identify personal strengths and to consider a program of study that will be challenging and fulfilling.

## DEVELOPING YOUR PLAN OF STUDIES

With the help of your school counselor, as an entering high school student you should begin to develop a four-year plan of courses. Your plan may change as you consider new information, but it should illustrate what you want to accomplish and the level of skill you want to achieve by the time you graduate. In general, students select courses to meet the requirements of their high school, college, and career goals.

You will benefit from taking advantage of the guidance services available in the high schools. In addition to conferences with your counselor, the Guidance Office provides a number of services.

## CAREER AND COLLEGE PLANNING

Each high school has a fully equipped Career Center. There is easily accessible information on all career fields. Information on careers, planning for the future, and learning more about oneself is available in a variety of print and non-print formats. There are computers, recent college catalogs and videos, handbooks, applications, directories, and trade and vocational school guides. Specific job briefs describing the level of education needed to enter and progress within a career field are also featured.

All students have access to Naviance, a webbased tool for guiding students and their parents through the entire college planning process. See page 70 for information about Naviance.

Students are encouraged to browse, begin a career search, or follow up on interests in the Career Center. This is a means by which individuals become aware of the relationship between school courses and possible career options. The Center is open to students at all times. Career Counselors specializing in career planning are at each high school center to provide additional assistance. Students can use the computers in the Career Center to explore occupations, colleges, the armed services, and financial aid.

## CAREER AND TECHNICAL ACADEMIES

Career awareness and planning are integrated throughout the curriculum in all the subject areas and across all grade levels. In addition, there are a number of career and technical academies and programs that link overall learning to the real global marketplace.

Opportunities for you to learn more about your interests and abilities are made possible through a variety of tests and assessments in various formats. You and your counselor will use this information, along with other factors, to discuss possible careers and their educational requirements.

For more information about activities and programs to help you plan your future, see CAREER AND TECHNICAL EDUCATION on page 70.

## TESTS FOR COLLEGE ENTRANCE

## PSAT/NMSQT

The Preliminary Scholastic Aptitude Test (PSAT) provides critical reading, math problem solving, and writing skill practice. The test does not have an essay. All sophomores are required to take the test. The test provides practice for the SAT. It is given in October at the student's high school. In December, students will receive their test booklet and scores in the form of a comprehensive Score Report. In addition to the results, the Score Report provides information related to college and Advanced Placement course readiness.

The National Merit Scholarship Qualifying Test (NMSQT) is for juniors who wish to apply for the National Merit Scholarship Program, the National Achievement Scholarship Program for Black American Students, or the National Hispanic Recognition Program. In October of their junior year, students retake the PSAT which acts as the qualifying test for these scholarship programs. Only the junior year administration results are used.

When students take the PSAT/NMSQT in October, they will be asked if they want to be part of the College Board Search Service. With the student's permission, his/her name, address, sex, birth date, school, grade level, ethnic group, email address, and intended college major will be sent to colleges that use the service. Scores are not sent as part of this process. Colleges do not receive or use PSAT/NMSQT scores for admissions decisions.

Students are encouraged to take advantage of free, personalized online SAT practice with Khan Academy. The practice test is closely aligned with the PSAT/NMSQT. (www.collegeboard.org/psatpractice)

Students with special accommodations for extended time on national testing must fill out a Services for Students with Disability (SSD) form and have prior approval by the College Board in order to take the PSAT or SAT test with special accommodation.

## Scholastic Aptitude Test (SAT)

Beginning spring 2016, the SAT has been redesigned to focus closely on the knowledge and skills that matter most for postsecondary education and career success. There is a greater emphasis on the meaning of words in extended contexts and on how word choice shapes meaning, tone, and impact. The SAT is aligned to current Stamford Public Schools curriculum and instructional practices.

The SAT counts as the state assessment for Connecticut as well as for college entry. For the state assessment, the SAT is given to all juniors in the spring at their high school. This test includes Evidence-Based Reading and Writing and Math. The Evidence-Based Reading and Writing portion of the test includes (a) reading, (b) writing and language arts. The Math portion of the test includes a calculator portion and a noncalculator portion.

For college entry, the SAT includes the tests listed above and may also include the 50 minute Essay. Students should check the specific college requirements to determine if the Essay is required for admittance.

## SAT Subject Tests

The SAT Subject Tests are a battery of onehour, mostly multiple-choice tests that measure how much students know about a particular academic subject and how well they can apply that knowledge. SAT Subject

Tests are not a requirement but students may choose to take tests in subject areas of interest and in which they excel to demonstrate academic qualification for college admission. SAT scores become part of a student's record.

The SAT tests are offered several times during the year. Registration should take place online at www.collegeboard.com. There are some registration forms in the Career Center. There is a registration fee, but fee waivers are available to financially eligible students. The school codes for registration are: 070750 - Stamford High School 070751 - Westhill High School 070707 - AITE

2017-2018 SAT Test Dates (Anticipated)
SAT Subject
Tests Available
Oct. 7, 2017
Nov. 4, 2017
Yes
Dec. 2, 2017
March 10, 2018
May 5, 2018
Yes

June 2, 2018 Yes
Yes

Contact www.collegeboard.com or your school guidance counselor for registration deadlines.

## American College Test (ACT)

The ACT assessment is designed to measure high school students’ college readiness and is made up of multiple choice tests that cover four skill areas: English, Mathematics, Reading, and Science. The Writing Test, which is optional, measures skills in planning and writing a short essay.

## 2017-2018 ACT National Test Dates

September 9, $2017 \quad$ February 10, 2018
October 28, $2017 \quad$ April 14, 2018
December 9, $2017 \quad$ June 9, 2018

Contact www.actstudent.org or your school guidance counselor for testing information.

## Test of English as a Foreign Language (TOEFL)

The TOEFL is a requirement for admission into Colleges and Universities where instruction is in English. In addition, many government, licensing, and certification agencies, and exchange and scholarship programs use TOEFL scores to evaluate the English proficiency of people for whom English is not their native language.

The TOEFL test is offered in different formats depending on your location. The Internet-based test (iBT) is currently available in the United States. The TOEFL measures the ability of non-native speakers to understand North American English as it is used in college. Scores on the TOEFL are required by almost all two- and four-year colleges and universities in both the United States and Canada. TOEFL is also used by institutions in other countries in which English is the language of instruction. The institutions want to make sure that entering students can understand the instructors and can do college level work. The test is recommended for students who have been in the United States for three years or less.

## Advanced Placement (AP) Tests

AP courses are designed to meet the objectives of rigorous first year courses at the college level as prescribed by the College Entrance Examination Board Advanced Placement Program. AP courses provide students with the opportunity to earn college credit, advanced placement, or both. Each AP course concludes with a collegelevel test which is an essential part of the AP experience enabling students to demonstrate their mastery of college-level course work.

More than 90 percent of 4-year colleges grant credit and placement on the basis of successful AP exam scores. AP courses are offered in the following subject areas to prepare students for taking the AP examination: Art, English, Math, Music, Social Studies, World Languages, and the Sciences. The examinations are given in May.

Students who wish to receive the weighted credit of .07 for rank and grade point average (GPA) in those subjects are required to take the AP examination. To earn college credit a student must receive a passing score of 3 or higher on the AP exam. There are additional course requirements for AP classes, particularly during the summer. Students are expected to consult their AP teachers for those requirements. For more information, visit www.collegeboard.org.

## Armed Services Vocational Aptitude Battery (ASVAB)

The ASVAB is a series of tests related to the skills needed in performing jobs in the Armed Services. Students considering a military career should see their counselors to make an appointment with the service representative for the test. It is given in January. Students participating will have their results interpreted by a representative of the armed services.

University of Connecticut Early College Experience (UConn ECE)
The UConn ECE program provides academically motivated students with the opportunity to take university courses while in high school. Students may earn college credit for each UConn ECE course taken. Successful completion of a UConn ECE course adds .07 weighted credit to a student's rank and GPA. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree and other postsecondary opportunities. College credit is earned for a fraction of the cost it would be if the course were taken on a UConn campus.

UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity, and critical thinking - all important for success in college and careers. UConn ECE courses are offered in Art, English, Math, Music, Social Studies, World Languages, and the Sciences. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to many colleges and universities. Students are charged a program fee of $\$ 35$ per credit plus a resource fee of $\$ 20$. Thus, a 2 -credit course will cost $\$ 90$ and a 3 -credit course will cost $\$ 125$. For additional information, visit www.ece.uconn.edu.

## REQUIREMENTS FOR A HIGH SCHOOL DIPLOMA

The high school graduation requirements for students in the Stamford Public Schools contained in Board of Education Policy 5135.2 continue to be in a process of revision. It is expected that the state legislature will postpone the implementation of the new High School Graduation Requirements (Connecticut General Statutes Section 10-221a) for the graduating class of 2021. The District is awaiting this decision. Nevertheless, all students in the Stamford Public Schools shall pass all district required courses for graduation, as posted in the district Program of Studies. Students who fail to meet these high school graduation requirements shall not graduate from high school, except as may be specifically provided in the regulations.

In order to obtain a high school diploma from the Stamford Public Schools, students are expected to demonstrate proficiency in Reading, Writing, Mathematics, and Science, which are part of the 20 credits of required coursework. Guidance counselors are responsible for monitoring student progress in reaching graduation requirements. Guidance counselors will inform parents of student progress and will work with department heads and teachers to help students reach proficiency in all academic areas.

## District Required Courses and Credits for Graduation:

Students are required to accumulate 20 or more course credits, distributed as follows:

| Course | Credits | Years |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| English | 4 | 4 yrs. |  |  |  |  |
| Math | 3 | 3 yrs. |  |  |  |  |
| Science | 2 | 2 yrs. |  |  |  |  |
| Social Studies | 3 | 3 yrs. |  |  |  |  |
|  <br> Technical Education | 1 | 1 yr. |  |  |  |  |
| Health | 1 | 1 yr. |  |  |  |  |
| Physical Education | 5 | 1 yr. |  |  |  |  |
| Electives | Total |  |  |  | $\mathbf{2 0}$ |  |

## District Required High School Connection Time for Graduation:

Connection Time is a period for teachers and students to develop connections that positively impact students. Teachers facilitate discussions on relevant topics, such as time management, internet safety, bullying, and college planning, and provide a safe, non-judgmental environment for students to discuss and possibly resolve immediate concerns.

High School Connection Time is a graduation requirement for all students. Students must pass 3 out of 4 quarters of Connection Time (i.e., 3 PAs for Participation, not more than 1 NPA for Non-participation) per year to meet the graduation requirement. The rubric for participation or non-participation in Connection Time will be shared with all incoming $9^{\text {th }}$ grade students and their parents or guardians. Participation or non-participation in Connection Time will be reported to parents quarterly via report cards. Students who do not meet this graduation requirement will need to complete alternatives in order to graduate, including Connection Time make up work and/or community service as authorized by the building principal.

## CREDITS

Each student entering grade 9 is required to earn a minimum of 20 credits for graduation. As a general rule, the maximum total credits a student may earn each year is 7 . Of these 7 credits, no more than 2 credits may be transferred from approved programs outside the school. In addition, a student may make up as many as 2 credits in an approved remedial summer program. A student must earn the following number of credits to be promoted: to Sophomore class - 4.5; to Junior class - 7.6; to Senior class - 13.

## HONORS COURSES

Honors courses explore the subject matter in depth and in a comprehensive and accelerated approach. Courses are available in the following academic subjects: English, Mathematics, Science, Social Studies, and World Languages. These courses are intended for students who have demonstrated motivation, interest, and achievement in previous courses taken in this content area. Students are required to meet specific criteria for all honors courses. Successful completion of an honors course adds . 05 weighted credit to a student's rank and GPA. For further information, contact the guidance counselor or department head.

## ONLINE COURSES

Students may choose to enroll in online courses and earn high school credit upon their successful completion. These courses offer students opportunities to participate in online discussions and group projects while learning rigorous course content with teachers not physically located in their own school. Credit will only be given for courses that are offered by an accredited educational institution and approved by the Stamford Public Schools. Credit for these courses is not counted in the student's GPA or class rank. For further information, contact the guidance counselor or department head.

## INDEPENDENT STUDY

(Grade 12 or permission of principal)
Independent study is available in most areas. Students electing this course will conduct an in-depth study of a specific topic in consultation with an advisory teacher. This course of study must be approved by the department head. Credit for these courses is not counted in the GPA.

## SENIOR INTERNSHIP EXPERIENCE

Stamford Public Schools has recently implemented a Senior Internship Experience (SIE) program. The program takes place from mid-May through the end of June for approximately five weeks. The SIE provides various internship opportunities at different locations within the City of Stamford: city departments, schools, non-profits, and approved self-designed sites across the city. This program gives students the opportunity to pursue their unique interests, passions and talents with hands on job experience.

In order to participate, seniors must meet the following prerequisites:

- Have a minimum cumulative GPA of 2.0
- Provide teacher recommendation
- Successfully meet grade, behavior, and attendance requirements for both semesters 1 and 2 of senior year
- Passing and not in danger of failing any senior year course
- Meeting all graduation requirements
- Have health insurance coverage (and auto insurance if driving to, during, and from the internship site)
- Have settled all accountabilities prior to the start of the internship
- Endorsement from their parent or guardian
- Review and approval from the Guidance Counselor, Principal, and SIE Program Coordinator

Students who are approved to participate in the Senior Internship Experience end their regular classes (after AP testing) and have their grades finalized and classwork requirements ended as they transition to their internship sites full-time ( 30 hours per week). The internships effectively take the place of attending classes for the last five weeks of school. All internships are unpaid. Students will have a mentor on the job and a school faculty member who will monitor their progress throughout the internship.

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

## CLASS RANK AND GPA

Each student will receive two class ranks: unweighted and weighted. The unweighted rank is computed by using the grade point average (GPA) of the final marks earned by each student in grades 9-12 in all subjects except those on Pass/Fail (P/F), Physical Education, Online Courses, and Independent Study. The weighted rank is calculated by adding the following values to the unweighted GPA: . 05 weight for each Honors class taken and .07 weight for each

Advanced Placement and UConn ECE course taken. Only students who have attended Stamford Public schools for four semesters are included in the class rank.

While the rules and regulations outlined in the Program of Studies apply to all students, the school principal may make exceptions in the best educational interest of individual students.

## CHOOSING YOUR GOALS

## THE FOUR YEAR COLLEGE

Although requirements differ from college to college, it is generally suggested that students choose their elective sequences from the areas of individual interest and aptitude. The colleges' recommended length of preparation for each subject area is English, 4 years; mathematics, 3-4 years; world language(s), 2-5 years with a minimum of 2 years in any one language; social studies, 3 years; science, 1-3 years. It is helpful to frequently talk with your school counselor to keep track of the tests that should be taken, deadlines to be met, courses to be completed, and opportunities for you to work toward your goals.

The Career Center, the school's website, and counselors also have information about scholarships and financial aid procedures for students and their parents.

In selecting applicants for admission, fouryear colleges consider class rank, grades earned, level of difficulty of subjects studied, as well as scores on standardized aptitude and achievement tests. Also considered are letters of recommendation that include comments on a student's character and his/her academic and extracurricular activities.

## OTHER COLLEGES \& SPECIALIZED SCHOOLS

Students should review websites, catalogs, or brochures from specialized schools to learn their admissions requirements. This should be done early in order to select the high school courses that will best equip the student to be accepted. Some specialized schools, such as art, nursing, or dental hygiene, require aptitude tests. Other schools may require their own admissions or placement tests. Most schools take into account scholastic standing, special aptitudes, and personal qualities of the candidate. Students are urged to consult with their counselor early in their high school career to plan their courses to meet these requirements. Opportunities for financial aid, work-study, and scholarships can also be explored.

## CHOOSING YOUR COURSES

Each school staff member (counselor, teacher, department head, administrator) is available to parents and students to assist them in choosing a program of studies. Individual student conferences with a school counselor are necessary for proper course selection. They will help to ensure that courses meet the individual student's needs, abilities, and interests, as well as his/her goals upon high school graduation.

Regardless of individual interests, there are certain subjects that have been established as Requirements to be taken by all students. There are other subjects, called Electives, designed to meet individual student interests. Because of the sequential nature of certain courses and the necessity for
establishing a firm foundation for more advanced levels of study, many courses have "prerequisites." Under exceptional circumstances, prerequisites may be waived with the approval of appropriate school personnel if the student can show sufficient background and interest. Electives are similar at each high school. However, each school does offer some additional courses based upon the particular needs and interests of the students or the special talents of the faculty. There are also opportunities to take online courses, with prior consultation with the Guidance Office and approval from school officials. To ensure that elected courses have a relationship to their educational goals, students should consider a sequence of courses within a subject area. A sequence is a series of courses within a subject area studied for two or three years.

Selecting a course represents a commitment to remain in that course for its full term. Any course change after the first marking period will be noted on transcripts with a "W" = Withdrawn.

Students will be assigned to supervised study halls during those periods not assigned to elected courses. Attendance is required and monitored in all courses including study hall.

NOTE: All courses are offered subject to sufficient enrollment, staffing, and funding. Courses with chronically low enrollment may be discontinued or offered on an alternating year basis to allow interested students the opportunity to take the course at some point during their high school career.

## STUDENT SUPPORT SERVICES

The Department of Student Support Services oversees Guidance, Psychology, Social Work, and Parent Facilitators. Programs and services described in the following paragraphs have one common goal: to provide a continuum of developmental, preventative, remedial, and supportive services that enhance opportunities for all students to achieve academic success and personal well-being. Students are encouraged to visit with the staff of each department to learn how they can receive appropriate help.

## GUIDANCE SERVICES

Each high school has a staff of school counselors to assist students in selecting options related to educational needs, career planning, and matters of personal and social concern. Upon admission to the high school program, all students are assigned a school counselor. Throughout their high school years, students meet with their counselors to obtain information on matters that will require decisions to be made and action to be taken. Counselors assist students in selecting courses that will meet their educational objectives. Counselors encourage students to take advantage of computer programs such as Naviance (see page 70) for college planning and occupational information, and to participate in the regularly scheduled visits of college and career representatives.

From the Guidance Office, information of general interest to students is widely circulated within the school. Counselors conduct evening programs for parents on topics of special interest relating to financial aid, college admissions, and career orientations. Parents may make appointments to see teachers through the counselor. Students may see their counselor at any time by appointment.

## PSYCHOLOGICAL SERVICES

School psychologists are available to facilitate learning and to promote the cognitive, social, and emotional development of all students.

Each school has an assigned school psychologist whose main activity is to enhance the academic achievement of students. This objective is facilitated through the assessment of student needs, implementation of school-wide programming at the primary prevention level, development of positive individual student outcomes, administration of diagnostic evaluations, progress monitoring of student performance, and the offering of therapeutic counseling and crisis counseling supports. School psychologists also offer consultative resources to parents, faculty, and administration in an effort to further promote student learning and social development. The Psychology Department strives to assist in the harboring of a positive school climate that fosters academic and social competence for all learners.

## SOCIAL WORK SERVICES

School social workers are available to all students needing individual or group counseling in order to alleviate personal crises and problems of adjustment within the school, the home, or the community. The confidential nature of these communications
is understood and respected by each of the social workers and the school community. School social workers are available to parents, faculty, and administration to facilitate and support appropriate education-al plans and services for students. Likewise, school social workers maintain close collaborative ties to community providers and serve to connect families to appropriate communal supports available. School social workers who speak a variety of languages are available to each school to meet the needs of all students and families. The department's goal is to enhance student functioning so as to enable the student to take full advantage of his/her educational resources.

## PARENT FACILITATORS

Parent facilitators provide parents and caregivers of Stamford Public School children with information and support in accessing available resources in the schools. They promote respect for parents and caregivers as partners in education. Facilitators help parents access information about the policies and procedures of the Stamford Public Schools, assist them with issues and concerns they have, and aid them in understanding the protocol when addressing those issues to effectively voice their concerns.

Parent facilitators work with the school community to promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.


## LIBRARY MEDIA CENTERS

The Library Media Centers serve as the focal point for all information literacy and problem solving instruction in the school. Their mission is to ensure that all students become independent, skillful, and discriminating users and communicators of ideas and information.

## RESOURCES

The staff works cooperatively and collaboratively with all teachers, administrators, and parents to guide students in their research and to assist them in their academic and recreational reading needs. A wide range of resources in a variety of formats is available from within and outside the school. Collections include reference books, nonfiction and fiction books, e-books, databases, newspapers and magazines, DVDs, CDs, and audio books.

## COMPUTER TECHNOLOGY

Each library has in excess of 60 networked computers that provide access to the Internet, an online library catalog, and a wide variety of subscription databases appropriate for research. Links are found on the library webpages on the school website. These computers are available before, during, and after school for students to use independently or with a class. The library catalogs and subscription databases are also accessible from home to students with Internet capability.

## MEDIA

Recording, laminating, interlibrary loan, and copy and fax machine services are available for school-related projects.

## AFTER SCHOOL

Services are offered to students after school on designated days with teachers and peer tutors assisting students with homework assignments and test preparation.


## STAFF SUPPORT

The staff members of the library media centers are committed to working with the entire school community for all its information needs. The facilities function as information centers for the schools and offer to all students and staff an environment conducive to academic study and active teaching and learning.

## BILINGUAL / SHELTERED / ESOL PROGRAMS

Students identified as English Learners (EL) at the high school level may be placed in Bilingual, Sheltered, and/or English to Speakers of Other Languages (ESOL) courses which assist them in acquiring listening, speaking, reading, and writing skills while learning content area material.

## BILINGUAL PROGRAM

Bilingual courses are offered to Hispanic and Haitian-Creole 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. All other students who arrive after October 1 of $10^{\text {th }}$ grade are eligible to enroll in Sheltered content classes with intensive ESOL programming.

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 Spanish and English or in Haitian-Creole and English.

## SHELTERED PROGRAM

Sheltered courses are offered at both Stamford High School and Westhill High School to English Learners 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.

## ESOL PROGRAM

ESOL courses are offered to all English Learners at the high school level. The ESOL Program utilizes national TESOL (Teachers of English to Speakers of Other Languages) standards in the development of English language skills with 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.

## PROGRAMAS BILINGÜES/DE INMERSIÓN ESTRUCTURADA/ESOL

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

## PROGRAMA BILINGÜE

Se brindan las asignaturas bilingües a alumnos hispanos y criollos haitianos que llenan los requisitos estatales y federales para la admisión en el Programa Bilingüe. De conformidad con la Sección 10-17a-j de las Leyes Generales de Connecticut, solo reúnen los requisitos para asistir al Programa Bilingüe los estudiantes a quienes les faltan más de 30 meses para poder graduarse. 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 criollo haitiano con tal que los alumnos se inscriban antes del $1^{\circ}$ de octubre de su segundo año. Todos los demás estudiantes que llegan al grado 10 después del $1^{\circ}$ 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 criollo haitiano e inglés.

## 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 criollo haitiano 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.

## PROGRAMA DE ESOL

Se brindan todas las asignaturas de ESOL (Inglés para Hablantes de Otros Idiomas) a todos los del Idioma Inglés al nivel de escuela secundaria (escuela superior). El programa ESOL 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 intense en el uso significativo y auténtico del inglés, el idioma de enfoque, con maestros de TESOL certificados.

## PROGRAMAS BILINGÜES/DE INMERSIÓN ESTRUCTURADA/ESOL

## COURSE OFFERINGS

Salud 1
Salud y Desarrollo Social 2
Matemáticas Fundacionales
Algebra 1
Geometría
Algebra 2
Física de Ciencias Físicas Physics ( $1 / 2$ año)
Química de Ciencias Físicas ( $1 / 2$ año)

Biología
Ciencias Sociales 9
Historia Mundial Moderna
Cívica
Introducción Al Procesamiento De Textos
Habilidades Tecnológicas Para El Siglo XXI
Matemáticas Del Consumido
Artes del Lenguaje del Idioma Nativo Español

## PROGRAMA BILINGÜE EN ESPANOL

## 9890_SALUD 1

$1 / 2$ crédito
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 substancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.

## 9880_SALUD Y DESARROLLO SOCIAL 2 $1 / 2$ crédito

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 substancias no controladas, salud sexual, prevención de violencia y cómo responder a emergencias.

## 6182_MATEMATICAS FUNDACIONALES <br> 1 crédito

Está diseñada esta materia específicamente para estudiantes hispanoparlantes recién llegados a quienes les faltan las habilidades fundacionales para el éxito en una materia de matemáticas de escuela secundaria (escuela superior) bilingüe. Tiene el propósito de ayudar a los estudiantes a desarrollar habilidades de prerrequisito fundamentales y los ocho estándares de las prácticas de las matemáticas básicas esenciales.

## 6104_ ALGEBRA 1 <br> 1 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.

## 6106_ GEOMETRÍA

1 crédito
Prerrequisito: Algebra 1
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.


## 6212_ ALGEBRA 2

Prerrequisito: Geometría
1 crédito
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 logoritmo. 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 aplicaciones auténticas de la vida real, así como otras destrezas que se requieren para el exámen de S.A.T. durante el año para entrar en la universidad.

## 8451_FÍSICA DE CIENCIAS FÍSICAS 1/2 crédito

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.

## 8452_QUÍMICA DE CIENCIAS FÍSICAS 1/2 crédito

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.

## 809_BIOLOGÍA

## 1 crédito

Este curso explora principios biológicos. El curso examina la ecología, biología de células, genética, evolución, micro-organismos, plantas, 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.

## 584_CIENCIAS SOCIALES 9 1 crédito

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.

## 518_HISTORIA MUNDIAL MODERNA $1 / 2$ crédito

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.

## 574_CÍVICA <br> $1 / 2$ crédito

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.

## 2453_INTRODUCCIÓN AL PROCESAMIENTO DE TEXTOS <br> $1 / 2$ crédito

Esta materia se enfoca en el dominio del sistema de teclado. Se cubre el formateo de cartas comerciales personales, cartas de negocios, informes de MLA y curriculum vitae (resumes).

## 2467_HABILIDADES TECNOLÓGICAS PARA EL SIGLO XXI <br> $1 / 2$ crédito

Esta materia está diseñada para alumnos que ya tienen dominio del sistema de teclado. Se estimula a los estudiantes a mejorar sus habilidades de comunicación escrita mediante su participación en varios simulacros de oficinas, y creando cartas comerciales, memorandos y sus curriculum vitae personales. Los alumnos aprenden la etiqueta adecuada de e-mails y las estrategias para desarrollar habilidades de presentaciones eficaces. Colaboran entre ellos en varios proyectos que usan la aplicación Cloud y Google Docs.

## 2401_MATEMÁTICAS DEL CONSUMIDOR

## 1 crédito

Esta materia introduce a los alumnos a principios de matemáticas prácticos, dando énfasis a descuentos, interés, cuentas, fracciones, decimales, porcentajes, ganancias y pérdidas, presupuestos, seguros, cuentas corrientes y récords sencillos. Las Matemáticas del Consumidor, una materia básica para alumnos que se están preparando para entrar en el mundo de los negocios inmediatamente después de su graduación, puede ser usada para completar un año del requisito de matemáticas para graduarse.

## 3141_ARTES DEL LENGUAJE DEL IDIOMA NATIVO ESPAÑOL 1 crédito

Esta asignatura está diseñada para hablantes nativos del español que necesitan desarrollar destrezas de alfabetización en su idioma natal. Comenzará con las destrezas básicas de las artes del lenguaje, incluso fonética, ortografía, lo básico en la lectura e instrucción en escritura.

## PWOGRAM BILENG-KREYOL AYISIEN

## 3496_BILENG-KREYOL AYISIEN

 1 créditKou sa-a konsantre sou devlòpman vokabilè yo itilize anpil nan plizyè matyè, tèl 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.

## SHELTERED PROGRAM

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

## ESOL PROGRAM

See content area for English for descriptions of ESOL courses.

## 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.

## COURSE OFFERINGS

Introduction to Word Processing ( $1 / 2$ year)(WHS)
Technology Skills for the $21^{\text {st }}$ Century ( $1 / 2$ year)(WHS) Information Technology ( $1 / 2$ year)
Information Technology and Design ( $1 / 2$ year)
Accounting 1, 2
Advanced Principles of Accounting
Business Concepts ( $1 / 2$ year)
Business Exploration (SHS)
Business Law
Career Pathways and Success Skills ( $1 / 2$ year)
Business Math
Entrepreneurship

International Business ( $1 / 2$ year)(SHS)
Introduction to Investments and the Stock
Market (1/2 year)
Managerial Accounting ( $1 / 2$ year)(SHS)
Marketing in the $21^{\text {st }}$ Century
Marketing Education 2 (SHS)
Personal Finance ( $1 / 2$ year)
Sports and Entertainment Management and Marketing
Web Design
Introduction to Game Design ( $1 / 2$ year)

## 2450_INTRODUCTION TO WORD PROCESSING (WHS)

2454_Sheltered
$1 / 2$ credit
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 $21^{\text {ST }}{ }^{-}$CENTURY <br> 2466_Sheltered <br> $1 / 2$ credit

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 $1 / 2$ credit

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 <br> $1 / 2$ credit

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 web site. In the database application, students create a database, query a database, and prepare reports and forms.

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit

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 decisionmaking. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.

## 2270_ACCOUNTING 2

Grade: 11, 12
Prerequisite: Accounting 1
1 credit
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 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.

## 2275_ADVANCED PRINCIPLES OF ACCOUNTING (WHS)

## 1 credit

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.

NOTE: 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).


## 2390_BUSINESS CONCEPTS

Grade: 9, 10
$1 / 2$ credit

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.

## 2120_BUSINESS EXPLORATION (SHS)

Grade: 12
1 credit
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.

## 2370_BUSINESS LAW

Grade: 10, 11, 12
1 credit
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.

## 2100_CAREER PATHWAYS AND SUCCESS SKILLS <br> ½ credit

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.


## 2400_BUSINESS MATH <br> 2401_Sheltered

Grade: $10,11,12$
1 credit
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.

## 2080_ENTREPRENEURSHIP 1 credit

Designed for students interested in an entrepreneurial career, this course is offered in conjunction with the Network for Teaching Entrepreneurship (NFTE) www.nfte.com. 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.

## 209_INTERNATIONAL BUSINESS (SHS) $1 / 2$ credit

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.

## 2830_INTRODUCTION TO INVESTMENTS AND THE STOCK MARKET <br> $1 / 2$ credit

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.

## 2274_MANAGERIAL ACCOUNTING (SHS)

Prerequisite: Accounting 1
$1 / 2$ credit
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 efficiently; and how performance evaluations are used. These topics will be investigated using case studies.

## 2180_MARKETING IN THE 21 ${ }^{\text {ST }}$ CENTURY

Grade: 10, 11, 12

## 1 credit

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.

NOTE: Sacred Heart University credit (3 semester hours) will be offered to students who achieve a grade of $B$ or higher.

## 2280_MARKETING EDUCATION 2 (SHS)

Grade: 11, 12
Prerequisite: Marketing in the $21^{\text {st }}$ Century 1 credit

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.

## 2361_PERSONAL FINANCE

Grade: 10, 11, 12
$1 / 2$ credit
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.

## 2352_SPORTS AND ENTERTAINMENT MANAGEMENT AND MARKETING 1 credit

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

## 2630_WEB DESIGN

Grade: $10,11,12$
1 credit
This course helps students plan and develop well-designed web sites 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.

## 2473_INTRODUCTION TO GAME DESIGN <br> $1 / 2$ credit

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.


## 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 HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Child Development ( $1 / 2$ year) (SHS)
UConn ECE Individual \& Family Development (SHS)
Introduction to Culinary Arts ( $1 / 2$ year)
Culinary Arts/Pro-Start 1 (SHS)
Baking \& Pastry/Pro-Start 2 ( $1 / 2$ year) (SHS)
International Foods/Pro-Start 2 ( $1 / 2$ year) (SHS)
Interior Design 1 ( $1 / 2$ year) (SHS)
Interior Design 2 ( $1 / 2$ year) (SHS)

Fashion \& Furnishings 1 (WHS)
Fashion \& Furnishings 2 (WHS)
Fashion Merchandising \& Construction 1 (SHS)
Fashion Merchandising \& Construction 2 ( $1 / 2$ year) (SHS)
Fashion Merchandising \& Construction 3 ( $1 / 2$ year) (SHS)

## 0392_CHILD DEVELOPMENT (SHS)

$1 / 2$ credit
This semester 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.

## 0393_UCONN ECE INDIVIDUAL AND FAMILY DEVELOPMENT (SHS) <br> 1 credit

This course provides students with an understanding of individual and family development over the life span. It focuses on the developing individual in the context of the family system and the changes that occur in family systems over time. The course includes an internship component. Students entering this program will be interviewed prior to acceptance and must carry school accident insurance as well as provide their own transportation to internship sites.


## 0140_INTRODUCTION TO CULINARY ARTS <br> 1/2 credit

This semester 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.

## 0282_CULINARY ARTS/PRO-START 1 (SHS) <br> 1 credit

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.


## 0283_BAKING AND PASTRY/PRO-START 2 (SHS) <br> $1 / 2$ credit

This semester 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.

## 0284 INTERNATIONAL FOODS (SHS) <br> $1 / 2$ credit

This semester course reinforces all of the techniques learned in Introduction to Culinary Arts and Culinary Arts 1 through exploration of international foods. The study of regional, ethnic, and foreign foods is used to increase cultural awareness and appreciation of diversity. Upon completion of the Pro-Start program students are able to earn college scholarships and 3 credits at Norwalk Community College.

## 021_FASHION AND FURNISHINGS 1 (WHS) <br> 1 credit

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.

## 022_FASHION AND FURNISHINGS 2 <br> (WHS)

1 credit
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.

## 0221_FASHION MERCHANDISING AND CONSTRUCTION 1 (SHS)

1 credit
This course introduces students to the world of fashion through project-based learning. Students learn the basics of hand and machine stitching, alterations, and fabric selection and care. Students are introduced to silhouettes and the elements and principles of design. The vast career choices within the fashion industry are also explored.


## 0222_FASHION MERCHANDISING AND CONSTRUCTION 2 (SHS) <br> $1 / 2$ credit

This course reinforces techniques learned in Fashion 1 through expanded project-based learning. Advanced sewing techniques are taught. Textile selection and design are studied, and the elements and principles of design are further explored. Fashion-based colleges and careers are discussed. Fashion merchandising is an integral part of this class through virtual selection, purchasing, and resaling of student designed product.

## 0223_FASHION MERCHANDISING AND CONSTRUCTION 3 (SHS)

1/2 credit

This course reinforces techniques learned in Fashion 1 through expanded project-based learning. Individual projects incorporate advanced construction techniques. Students develop their sketching skills and create a portfolio. This course includes the history of fashion and fashion designers, as well as textile terminology. Current styles and trends are reviewed through the use of WWD.

## 1265_INTERIOR DESIGN 1 (SHS) $1 / 2$ credit

This semester 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) <br> 1/2 credit

This semester 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 projectbased learning. Room design and finishes are discussed. Skills in mathematics, technology, and art are reinforced. Individual projects reinforce research and writing skills.

## 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

Automotive Technology ( $1 / 2$ year) (WHS)

## 1210_AUTOMOTIVE TECHNOLOGY (WHS) <br> $1 / 2$ credit

This course focuses on how an automobile works with a major emphasis on the study of electrical ignition and timing, carburetion, and compression. Included is a study of the engine and the drive train in motion.


Video Technology ( $1 / 2$ year) (WHS)
Wood Technology (1⁄2 year) (SHS)

## 1190_WOOD TECHNOLOGY (WHS)

$1 / 2$ credit
This is an introductory course in the use of woodworking machines and portable power tools. Students have hands-on experiences in elementary woodworking, planning, design, and wood finishing.

## 1560_VIDEO TECHNOLOGY (SHS)

$1 / 2$ credit
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.

## CO-CURRICULAR ELECTIVES

## COURSE OFFERINGS

AVID
SAT Review 11 \& 12 (SHS)
Communications
Journalism

Yearbook: Design and Publications (SHS)
Publication Design and Development (WHS)
Publication Editing and Evaluation (WHS)
UConn Prep (SHS)

## 920_AVID (Advancement Via Individual Determination) 1 credit

This program is designed to increase schoolwide learning and performance by ensuring that all students will succeed in a rigorous curriculum, enter mainstream activities of the school, increase their enrollment in four-year colleges, and become educated and responsible participants in a democratic society. Students who participate in the AVID program enroll in an AVID Elective Class that includes: AVID Tutorials (i.e., collaborative study groups, writing groups, and Socratic seminars) and AVID curriculum that includes writing, college and career preparation, and strategies for success.


6450_SAT REVIEW 11 (SHS) 3600_SAT REVIEW 12 (SHS) $1 / 2$ credit

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

## 3250_COMMUNICATIONS

Prerequisite: English 10
Grade: 11, 12
1 credit
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.

## 3270_JOURNALISM

Prerequisite: Communications and consultation with department head
Grade: 11, 12
1 credit
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.

## 0300_YEARBOOK DESIGN AND PUBLICATION (SHS) <br> 1 credit

Design and Publication offers an interdisciplinary 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.

## 3650_PUBLICATION DESIGN AND DEVELOPMENT (WHS) <br> ½ credit - First Semester Only

This course offers an interdisciplinary approach to the production of the school yearbook. Students study contemporary print design and use their knowledge to learn layout development, use of graphics and photo journalism, business management, and marketing. Publication Design and Development requires additional hours after school.


## 3660_PUBLICATION EDITING AND <br> EVALUATION (WHS) <br> ½ credit - Second Semester Only

Students edit yearbook proofs and prepare the yearbook for final production. They use contemporary print design critical theory to evaluate the yearbook during the editing or proofing process and following the book's distribution that will be used to design and develop the following year's book

## 9590_UCONN PREP (SHS) 1 credit

The UConn Pre-College Readiness and Enrichment Program (PREP), a cooperative endeavor with the University of Connecticut, is designed to provide academic support, leadership training, and career exploration for disadvantaged and minority students who are motivated and want to go to college. Students are selected after careful screening and recommendation from the middle school faculty and staff.


## 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Requirements:

English 9
Honors English 9
English 10
Honors English 10
English 11
Honors English 11
AP English Language and
Composition 11
UConn ECE English Language
and Composition 11

English 12
Honors English 12
AP English Literature and Composition 12
UConn ECE English Literature and Composition 12

## Electives:

Creative Writing 1
Creative Writing 2
Diverse Perspectives in Literature
English Lab 9
Literacy Lab

Language Studies
Bridges English
People in Literature
Reading
Science Fiction and Fantasy Speech
Sports Literature
Writing Center (WHS)
Writing Workshop (SHS)
English Learner Program:
ESOL (English to Speakers of Other Languages) A, B, C EL Lab

## 3010_ENGLISH 9

3000_Honors
3140_Sheltered
337_/965_Administrative approval required 1 credit

This course focuses 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 the persuasive, narrative, and expository essays, response to literature, and other modes. Literature instruction encourages thoughtful interpretation of various genres including adolescent fiction and mythology, as well as novels, short stories, informational texts, and poetry. Students also participate in thematic Literature Studies units.

## 3110_ENGLISH 10

3100_Honors
3240_Sheltered
339_/956_Administrative approval required 1 credit

This course examines the interpretation of literature through the mediums of the short story, the novel, and expository articles. Instruction focuses on written and oral expression including the persuasive essay and literary response with attention to research, editing, and oral expression skills. Students develop interpretive skills and become fluent in written response to literature. Students also participate in thematic Literature Studies units.

3210_ENGLISH 11
3200_Honors
3231_Sheltered
957_Administrative approval required 1 credit

This course develops an understanding of the American experience through the study of the novel, biography, drama, essay, and poetry. Attention is given to developing fluent, wellstructured, and well-edited written expression, as well as formal and informal oral expression. In addition, students gain a deepened appreciation of the many cultures that make up and contribute to the American experience. Students also participate in thematic Literature Studies units.

## 3260_AP ENGLISH LANGUAGE AND COMPOSITION 11

## 3261_UConn ECE

1 credit
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 1 credit

This course focuses on a selection of literature that examines the human condition from multiple perspectives. Students continue to develop analytical skills in a variety of written and oral formats. Students also participate in thematic literature studies units.

## 3300_AP ENGLISH LITERATURE AND COMPOSITION 12 3301_UConn ECE 1 credit

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.

## ELECTIVES

## 3361_CREATIVE WRITING 1 <br> $1 / 2$ credit

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) $1 / 2$ credit

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.

## 383_DIVERSE PERSPECTIVES IN LITERATURE

Grade: 10, 11, 12
$1 / 2$ credit
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, LatinAmerican, female, or other diverse communities.

## 3791_ENGLISH LAB 9

Grade 9
$1 / 2$ credit
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.

## 3792_LITERACY LAB

Grade: 10, 11, 12
$1 / 2$ credit
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.

## 399_LANGUAGE STUDIES <br> $1 / 2$ credit

This course is designed for Grade 9 and 10 students to provide additional support in reading and writing. Students work in small groups practicing skills. The overall outcome of this course is threefold: to improve the standardized test scores of the selected students, to address the achievement gap between low and higher achieving groups through innovative curriculum and instruction, and to raise the overall test performance of the school.

## 3576_BRIDGES ENGLISH

Grade 12
1 credit
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.

## 357_PEOPLE IN LITERATURE

Grade 12
1 credit
This course is a humanities course that examines the areas of philosophy, literature, drama, and religion. Using a wide range of literary traditions, in addition to film, lectures, guest speakers, class discussion, and collaborative groups, the course explores past and present social issues, cultural and historical developments, psychological concepts, and the theme of men and women's responses to the human condition. While students engage in the above activities, they examine humankind's attempts to struggle against and to live with the forces that surround the world.


## 8650_READING

1 credit
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. Administrative approval required.

## 3820_SCIENCE FICTION AND FANTASY $1 / 2$ credit

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

Grade: 10, 11, 12
$1 / 2$ credit

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

Grade: $10,11,12$
$1 / 2$ credit

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)

Grade: 12
$1 / 2$ credit

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_WRITING WORKSHOP (SHS) $1 / 2$ credit

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.


## ENGLISH LEARNERS PROGRAM

## 3381/3382_ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL-A) <br> 1 credit per semester

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.

## 3450_ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL-B)

Prerequisite: ESOL-A or skill proficiency 1 credit

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.

3460 ENGLISH TO SPEAKERS OF OTHER LANGUAGES ADVANCED LEVEL (ESOL-C)
Prerequisite: ESOL-B or skill proficiency 1 credit

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.

## 3470_EL LAB <br> Non-credit

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


## FINE 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 HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Choral:

Concert Choir
Advanced Choir:
Chamber Singers (WHS)
Madrigal Singers (SHS)
Gospel Choir (WHS)
Voice Class ( $1 / 2$ year)

Instrumental:
Concert/Marching Band
Jazz Ensemble
Orchestra
Piano Instruction 1, 2 ( $1 / 2$ year)
Guitar Instruction 1, 2 ( $1 / 2$ year) (SHS)
Non-Performance:
AP Music Theory
UConn ECE Fundamentals/Ear Training (SHS)
Introduction to the Music Business ( $1 / 2$ year)

## CHORAL

## 7210_CONCERT CHOIR

1 credit
7211_CONCERT CHOIR (SHS)
$1 / 2$ credit
This course explores opportunities in ensemble singing of a varied repertoire of traditional, contemporary, sacred, and secular music. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette is developed through the daily study and performance of a varied repertoire. 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.

## ADVANCED CHOIR:

 7230_CHAMBER SINGERS (WHS) 7231_MADRIGAL SINGERS (SHS) 1 credit
## 7232_MADRIGAL SINGERS (SHS)

$1 / 2$ credit
Prerequisite: Vocal audition and director approval

This course involves advanced studies in choral literature. 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.

## 7000_GOSPEL CHOIR (WHS) 1 credit

This ensemble concentrates on the performance and appreciation of traditional and contemporary Spiritual repertoire. Ear training, harmony, diction, and techniques in breathing are emphasized. 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.

## 7470_VOICE CLASS <br> $1 / 2$ credit

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.

## INSTRUMENTAL

## 7220_CONCERT/MARCHING BAND

 1 credit7225_CONCERT/MARCHING BAND $1 / 2$ credit

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.

## 7510_JAZZ ENSEMBLE

## 1 credit

7515_JAZZ ENSEMBLE
$1 / 2$ credit
Prerequisite: By audition
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.

## 7120_ORCHESTRA <br> 1 credit <br> 7125_ORCHESTRA <br> $1 / 2$ credit

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.

## 7700_PIANO INSTRUCTION 1 <br> 1/2 credit

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.

## 7710_PIANO INSTRUCTION 2 ½ credit

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.

## 7720_GUITAR INSTRUCTION 1 (SHS) $1 / 2$ credit

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 must own or rent their own guitar. An acoustic guitar is recommended; no amplifiers will be allowed.)

## 7730_GUITAR INSTRUCTION 2 (SHS) $1 / 2$ credit

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.)


## NON-PERFORMANCE

## 752_AP MUSIC THEORY

Prerequisite: Instructor approval 1 credit

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.

## 7750_UCONN ECE FUNDAMENTALS/ EAR TRAINING (SHS) <br> 1 credit

The course is designed for motivated students, offering instruction in fundamental music skills and the Western musical notation system. Music experience is not required. First semester will focus on basic music theory, music literacy, ear training (aural skills), and rudimentary keyboard skills. Second semester will build on these skills, examining major and minor keys, intervals, and basic diatonic harmony. Composition and notation skills will be developed on MuseScore.

## 7740_INTRODUCTION TO THE MUSIC BUSINESS <br> 1/2 credit

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, researchbased and practical projects, and written tests.

## FINE ARTS - THEATRE ARTS

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 theatre. In conjunction with Drama Club activities, students are able to explore all fields of theatre work.

## COURSE OFFERINGS

Dramatic Arts

## 0360_DRAMATIC ARTS

1 credit
This course is an introduction to the study of theatre. Students read and perform scenes and monologues, 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

Prerequisite: Dramatic Arts or extensive stage experience

## 1 credit

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.

Acting Workshop


## FINE ARTS - 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 AP and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Drawing and Painting 1, 2, 3
Color and Design ( $1 / 2$ year)
Studio Art
AP Studio Art
AP Art History
Ceramics 1, 2
Potter's Wheel 1, 2 ( $1 / 2$ year) Crafts

Jewelry and Metalsmithing 1, 2
Photography 1, 2
Sculpture 1, 2 ( $1 / 2$ year)
Computer Graphic Art and Design
Drawing with Adobe Illustrator (1/2 year) (SHS)
Working with Adobe Photoshop ( $1 / 2$ year) (SHS)
UConn ECE Digital Foundations (SHS)

## 0150_DRAWING AND PAINTING 1 <br> 1 credit

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.

## 0250_DRAWING AND PAINTING 2 1 credit

This course is designed to help students develop an ability to interpret and represent still life, nature, and portraiture through an indepth 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.

## 0350_DRAWING AND PAINTING 3 1 credit

This course explores complex drawing and painting problems. Students select and work toward an area of portfolio concentration using a variety of media. Students paint on a variety of prepared surfaces, stretched canvas, masonite, and illustration board. The accent is on creative application of fundamentals and techniques helping students develop their own styles in portfolio development. Students develop an objective view of their work through self-evaluation, critique, and continued study of art history.

## 0850_COLOR AND DESIGN <br> $1 / 2$ credit

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.


## 0400_STUDIO ART

1 credit
This course is designed for the advanced student wishing to engage in higher levels of study in 2-D, 3-D, drawing, ceramics, photography, computer graphics, crafts, sculpture, jewelry, and metalsmithing. The goals and levels of achievement are demonstrated through the student's portfolio at the midterm and conclusion of each marking period. It is recognized that students need to work outside the classroom and beyond the scheduled class periods.

## 0460_AP STUDIO ART

1 credit
This course is designed for the highly motivated student committed to serious study in art. This course reflects three major concerns in art education: quality, concentration, and breadth. Students develop an
individual portfolio in 2-D design, 3-D, or drawing as prescribed by the College Board. Current trends in art history are discussed to support students in their concentration themes as they demonstrate growth over time. Class sessions include individual and group critiques. It is recognized that students need to work outside the classroom and beyond the scheduled class periods in preparation for the Advanced Placement examination.

## 0480_AP ART HISTORY <br> 1 credit

This course is designed to offer the same instruction as provided in an introductory college survey of art history. It covers the history of art in Western and non-European cultures from prehistoric to present times, giving students an understanding of art forms in their historical and cultural contexts. Artists, schools, movements, period and style, non-Western traditions, patronage function and ethnicity are among the topics included in discussion, reading and research. Unit tests prepare students for the Advanced Placement examination.


## 0240_CERAMICS 1 <br> 1 credit

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 nonfunctional pieces. Surface decoration, underglazing, and glazing techniques are included in the production of ceramic art.

## 0310_CERAMICS 2 <br> 1 credit

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.

## 0730_POTTER'S WHEEL 1 <br> $1 / 2$ credit

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.

## 0731_POTTER'S WHEEL 2 $1 / 2$ credit

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.

## 0260 CRAFTS <br> 1 credit <br> 0262_CRAFTS <br> 1/2 credit

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.

## 0230_JEWELRY AND METALSMITHNG 1 1 credit

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.

## 0370_JEWELRY AND METALSMITHING 2 1 credit

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.


## 0190_PHOTOGRAPHY 1 <br> 1 credit

Students explore black and white photography using a manual 35 mm SLR camera and a digital camera. They learn chemistry, darkroom 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. Ownership of a 35 mm SLR camera and a digital camera is recommended. A limited number of loaner cameras are available from the department.

## 0200_PHOTOGRAPHY 2 <br> 1 credit

Students refine and master photography techniques including color, black and white, and digital imagery. Students may create "C" prints from color negatives. While mastering manual camera functions, electronic imaging, computer manipulation, digital cameras, and scanners, students produce a series of advanced photographic images.

## 0340_SCULTPURE 1

$1 / 2$ credit
This course explores three dimensional form and anatomy in sculpture while working with various media that may include clay, plasticene, plaster, soft stone, papier-mâché, found objects, and wood. Casting and armature support techniques are explored in the production of various three-dimensional forms.

0388_SCULPTURE 2
$1 / 2$ credit

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.

## 0440_COMPUTER GRAPHIC ART AND DESIGN <br> 1 credit

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.

## 0720_DRAWING WITH ADOBE ILLUSTRATOR (SHS) <br> 1/2 credit

Students produce art using basic and intermediate Adobe Illustrator techniques. Editing, saving images, merging features, scanning, and other methods are used to produce finished products. Techniques for creating dramatic backgrounds, distortions, and edit features are included in the preparation for printable images. Critiques and portfolio development are emphasized.


## 0740_WORKING WITH ADOBE PHOTOSHOP (SHS)

$1 / 2$ credit

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.

## 1151_UCONN ECE DIGITAL FOUNDATIONS (SHS)

## 1 credit

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.


## 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 $9^{\text {th }}$ and $10^{\text {th }}$ 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 $9^{\text {th }}$ and $10^{\text {th }}$ grades. During their sophomore year all students will participate in the state mandated Connecticut Physical Fitness Test within their Physical Education class.

## COURSE OFFERINGS

Health 1, 2
Human Behavior 1, 2
Physical Education 1, 2
Adaptive Physical Education
Unified Physical Education (SHS)
Health Skills
Sports Medicine
Team Sports
Leisure Sports

Fitness/Weight Training
Cardio Fitness
Power Walking
Dance Forms
Yoga
Fitness with Technology (WHS)
Sports Officiating (WHS)
Beginner Swimming (WHS)
Intermediate Swimming (WHS)

## 9900_HEALTH 1

9831_Sheltered
9680_Administrative approval required $1 / 2$ credit

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 $1 / 2$ credit

This course further examines topics covered in Health 1 in greater 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.

## 9830_HUMAN BEHAVIOR 1

Prerequisite: Health 1 and 2
Grade: 11, 12
$1 / 2$ credit
This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive selfimage, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.

## 9840_HUMAN BEHAVIOR 2

Prerequisite: Health 1 and 2
Grade: 11, 12
$1 / 2$ credit
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.

## 9010_PHYSICAL EDUCATION 1

## $1 / 2$ credit

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.

## 9160_PHYSICAL EDUCATION 2 $1 / 2$ credit

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.

## 9643_UNIFIED PHYSICAL EDUCATION (SHS) <br> $1 / 2$ credit

This course offers students, with and without special needs, the opportunity to participate together in sports, cooperative games, and team building activities. Skills acquisition and sportsmanship are fostered through competition and partner activities. Students must meet specific criteria to be selected for this course.

## Administrative approval required

## 9640_ADAPTIVE PHYSICAL EDUCATION (WHS) <br> 1 credit

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 competition. Administrative approval required.

## 9902_HEALTH SKILLS

1/2 credit
The course is offered to students who wish to learn better skills to manage social and emotional challenges. Students learn coping skills to manage these challenges and explore ways to improve academic, social and emotional functioning.
Administrative approval required.

## 9030_SPORTS MEDICINE

Prerequisite: Health 1 and 2 and Biology
Grade: 11, 12
$1 / 2$ credit
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 jobshadowing project.

## 9340_TEAM SPORTS

Grade: 11, 12
$1 / 2$ credit

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.

## 9350_LEISURE SPORTS

Grade: 11, 12
$1 / 2$ credit
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 tabletennis.

## 9360_FITNESS/WEIGHT TRAINING

Grade: 11, 12
$1 / 2$ credit

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

Grade: 11, 12
$1 / 2$ credit
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

Grade: 11, 12
$1 / 2$ credit

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

Grade: 11, 12
$1 / 2$ credit
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

Grade: 11, 12
$1 / 2$ credit

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.

9110_FITNESS WITH TECHNOLOGY (WHS)
Grade: 11,12
$1 / 2$ credit
This course engages students in physical activities through the use of technology and gaming systems that help improve all components of physical fitness (cardiovascular endurance, muscular strength and endurance, and flexibility). Fitness with technology creates a unique learning environment in which students can develop physical skills, create self-imposed goals, encourage healthy competition, and promote accountability.

## 9111_SPORTS OFFICIATING (WHS)

Grade: 11, 12

## $1 / 2$ credit

This course provides students with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of a variety of sports.
This course is designed so that students will be able to demonstrate knowledge of the official rules, and demonstrate correct officiating techniques and mechanics of selected team sports.


## 9170_BEGINNER SWIMMING (WHS)

Grade: 11, 12
$1 / 2$ credit
This course introduces students to basic swimming instruction and water safety. Instruction develops and enhances participants' swimming levels.

## 9180_INTERMEDIATE SWIMMING (WHS)

Grade: 11, 12
$1 / 2$ credit
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.

## MATHEMATICS



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 $21^{\text {st }}$ century world economy.

Instruction is varied and includes teacher-centered, group work, inquirybased, 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

| Math $9 / 10$ | Pre-Calculus | Advanced Computer Science (WHS) |
| :--- | :--- | :--- |
| Algebra 1 | Honors Pre-Calculus | Computer Based Investigative |
| Geometry | Calculus | Mathematics |
| Honors Geometry | AP Calculus AB | Mathematical Logic and Inquiry |
| Algebra 2 | UConn ECE Calculus AB | Engineering Fundamentals |
| Honors Algebra 2 | AP Calculus BC | Math Center |
|  | Multivariable Calculus | Math Tutorial 9 |
| Electives: | AP Statistics | Math Lab |
| Algebra 3 and | UConn ECE Statistics | Math Independent Study |
| Trigonometry $(1 / 2$ year) | Introduction to Computer Science | Bridges Math |
| Statistics and | $1 / 2$ year) |  |
| Probability $(1 / 2$ year) | AP Computer Science (WHS) |  |
|  | AP Computer Science Principles |  |
|  |  |  |

## 637_/961_MATH 9/10 <br> 1 credit

This course is an activity-based mathematics course focusing on pre-algebra and pregeometry 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.
Administrative approval required.

## 6100_ALGEBRA 1 <br> 6500_Sheltered <br> 1 credit

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.

## 6250_GEOMETRY

6241_Honors
Prerequisite: Algebra 1 with a minimum grade of B
6660_Sheltered
Prerequisite: Algebra 1
1 credit
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.

## 6200_ALGEBRA 2

Prerequisite: Algebra 1 and Geometry 6210_Honors
Prerequisite: Algebra 1 and Honors Geometry or Geometry with a minimum grade of B 1 credit

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 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.


## ELECTIVES

## 6850_ALGEBRA 3 AND TRIGONOMETRY

Prerequisite: Algebra 2
$1 / 2$ credit

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.

## 6860_STATISTICS AND PROBABILITY

Prerequisite: Algebra 2
$1 / 2$ credit
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.

## 6320_PRE-CALCULUS <br> Prerequisite: Algebra 2 <br> 6330_Honors

Prerequisite: Honors Algebra 2 or Algebra 2 with a minimum grade of B
1 credit
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.

## 6340_CALCULUS

Prerequisite: Pre-Calculus
1 credit

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.

## 6290_AP CALCULUS AB 6341_UConn ECE (WHS)

Prerequisite: Honors Pre-Calculus or PreCalculus with a minimum grade of B 1 credit

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

## 6291_AP CALCULUS BC

Prerequisite: Honors Pre-Calculus

## 1 credit

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity. Techniques of differential and integral calculus and concepts of sequences and series will be developed and applied to algebraic, trigonometric, exponential parametric and polar 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 graphing calculator technology.

## 6342_MUTLIVARIABLE CALCULUS <br> Prerequisite: AP Calculus BC <br> 1 credit

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.

## 6360_AP STATISTICS <br> 6361_UConn ECE (WHS) <br> Prerequisite: Algebra 2 <br> 1 credit

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 on problem solving and real life applications through critical thinking activities as well as the use of computers and graphic calculator technology.

## 6630_INTRODUCTION TO COMPUTER SCIENCE

Prerequisite: Algebra 1
$1 / 2$ credit
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.

6640_AP COMPUTER SCIENCE (WHS)
Prerequisite: Algebra 2 with a minimum grade of B
1 credit
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 on problem solving and real life applications through critical thinking activities including the social and ethical implications of computer use.

## 6644_AP COMPUTER SCIENCE PRINCIPLES <br> 1 credit

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.

## 6643_ADVANCED COMPUTER SCIENCE (WHS)

Prerequisite: AP Computer Science
1 credit
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.

## 6600_COMPUTER BASED INVESTIGATIVE MATHEMATICS <br> 1 credit

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 package including the internet. Students focus on problem solving and real life applications through critical thinking activities.

## 6111_MATHEMATICAL LOGIC AND INQUIRY <br> ½ credit

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.

## 6121_ENGINEERING FUNDAMENTALS $1 / 2$ credit

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.


## 695_MATH CENTER <br> 1 credit

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. Administrative approval required.

## 690_MATH TUTORIAL 9

Grade: 9
1 credit

This course is for freshman in Algebra I and provides additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6901_MATH LAB

Grade: 9
$1 / 2$ credit
This course is for freshman who need additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6902_MATH LAB

Grade: 10, 11, 12
$1 / 2$ credit
This course is for students who need additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and teacher recommendation.

## 6510_MATH INDEPENDENT STUDY 1 credit

This course is designed for high performing juniors and seniors who have a possible interest in teaching (especially math) or working in social services. They will work with the most at-risk students (under the guidance of the classroom teacher) in Algebra 1, Geometry, and Algebra 2 classrooms (including Bilingual, Academic, and Sheltered classes) using and assessing alternative ways to create significantly improved student achievement.
Administrative approval required.

## 640 BRIDGES MATH

Grade: 12
1 credit
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.


## 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.

## COURSE OFFERINGS

Physical Science Physics
( $1 / 2$ year)
Physical Science Chemistry ( $1 / 2$ year)
Biology
Honors Biology
Chemistry
Honors Chemistry
Physics
Honors Physics

AP and UConn ECE:
AP Biology
UConn ECE Biology (SHS)
AP Chemistry
UConn ECE Chemistry (SHS)
AP Physics 1
UConn ECE Physics 1 (WHS)
AP Physics 2
AP Physics C
UConn ECE Physics C (SHS)
UConn ECE Physics 1201Q
UConn ECE Physics 1202Q
AP Environmental Science
UConn ECE Environmental
Science
UConn ECE Applied Mechanics

## Electives:

Environmental Science ( $1 / 2$ year) Earth Systems (1/2 year)
Space Systems ( $1 / 2$ year)
Human Physiology
Marine Biology ( $1 / 2$ year)
Biobotics ( $1 / 2$ year)
Bioethics ( $1 / 2$ year)
Biotechnology ( $1 / 2$ year)
Forensic Science
Forensic Science ( $1 / 2$ year

## 8373_PHYSICAL SCIENCE PHYSICS

8375_Sheltered
8377_Administrative approval required $1 / 2$ credit

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.

## 8374_PHYSICAL SCIENCE CHEMISTRY 8376_Sheltered <br> 8369_Administrative approval required $1 / 2$ credit

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.

8110_BIOLOGY
8060_Sheltered
861_/987_Administrative approval required Prerequisite: One year of high school science 8121_Honors
Prerequisite: B average in science
8362_AP
8361_UConn ECE (SHS)
Prerequisite: Biology, Chemistry, and two years of mathematics with a minimum grade of B 1 credit

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.

## 8210_CHEMISTRY

Prerequisite: Algebra 1 or Geometry and one year of high school science. Concurrent enrollment in Algebra 2 recommended
8221_Sheltered 8280_Honors
Prerequisite: B Average in science and mathematics (Geometry or Algebra1). Concurrent enrollment in Algebra 2 recommended

## 8422_AP

Prerequisite: Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics

## 8424_UConn ECE (SHS)

Prerequisite: Successful completion of two years of laboratory science including Chemistry (Honors Chemistry is recommended) and successful completion of Algebra 2
1 credit

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, electrochemistry, 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.

## 8310_PHYSICS <br> 8400_Honors

Prerequisite: Algebra 2 (or concurrent enrollment) and two years of high school science 1 credit

This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermodynamics, 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.


## 8384_ AP PHYSICS 1 <br> 8375_UConn ECE (WHS)

Prerequisite: Geometry and concurrent enrollment in Algebra 2
1 credit

This course is the equivalent to 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.

## 8385_ AP PHYSICS 2

Prerequisite: AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

## 1 credit

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. Inquirybased 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.

## 8388_AP PHYSICS C <br> 8383_ UConn ECE (SHS)

Prerequisite: Two years of laboratory science including Physics and concurrent enrollment in Calculus
1 credit
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 and may extend to electricity and magnetism. Laboratory investigations are an integral part of this course.


## 8390_UCONN ECE PHYSICS 1201Q (SHS)

Grade: 11, 12
Prerequisite: Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year
1 credit
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 thermodynamics, 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.

## 8391_UCONN ECE PHYSICS 1202Q (SHS) <br> Grade: 11, 12 <br> Prerequisites: Completion of UCONN 1201Q with a C or better and a summer assignment prior to the start of the academic year 1 credit

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.

## 8740_AP ENVIRONMENTAL SCIENCE 8741_UConn ECE

Prerequisite: Biology and Chemistry 1 credit

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.

## 8379_UCONN ECE APPLIED MECHANICS 1 (SHS)

Prerequisite: Calculus or concurrent enrollment in Calculus
1 credit
This is a college level course focusing on 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.

## ELECTIVES

## 8750_ENVIRONMENTAL SCIENCE

Prerequisite: Two years of science
$1 / 2$ credit

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 nonrenewable 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.

## 8930_EARTH SYSTEMS

Prerequisite: One year of high school science $1 / 2$ credit

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 activeties. 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.

## 8940_SPACE SYSTEMS

Prerequisite: One year of high school science 1/2 credit

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.

## 8200_HUMAN PHYSIOLOGY <br> Prerequisite: Biology and Chemistry 1 credit

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.


## 8760_MARINE BIOLOGY

Prerequisite: Two years of science, one being Biology
$1 / 2$ credit
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.

## 1700_BIOBOTICS

Prerequisite: Two years of science and mathematics
$1 / 2$ credit
This course explores the emerging interdisciplinary field of robotics. The course includes: robotics, artificial intelligence, engineering, and technology. Programming and construction of the robot are explored on every level from conception to completion. Laboratory investigations are an integral part of this course. As a result of this course students are expected to create an autonomous robot that can function in a limited domain and in various situations.

## 8470_BIOETHICS

$1 / 2$ credit
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 morality of choices. Finally, bioethical practices of different cultures will be examined.

## 8800_BIOTECHNOLOGY

Prerequisite: Two years of science. Concurrent enrollment in Chemistry is recommended.
$1 / 2$ credit
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.

## 8510_FORENSIC SCIENCE

Prerequisite: Biology and Chemistry 1 credit

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.

## 8511_FORENSIC SCIENCE

Prerequisite: Biology and Chemistry
$1 / 2$ credit
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.

## 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.

## SERVICE LEARNING

## 900_STUDENT ASSISTANT

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, Guidance Office, Departmental Offices, or Main Office.


## SOCIAL STUDIES

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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.

## COURSE OFFERINGS

## Requirements:

Social Studies 9
Honors Social Studies 9
Modern World History ( $1 / 2$ year)
Honors Modern World History
AP World History
Civics ( $1 / 2$ year)
Honors Civics
United States History
Honors United States History
AP United States History
UConn ECE United States
History
Electives:
AP European History
UConn ECE European History (WHS)
AP United States Government and Politics
Honors Seminar in Philosophy
AP Psychology
Economics
UConn ECE Essentials of Economics (WHS)
AP Microeconomics
UConn ECE Microeconomics (WHS)
AP Macroeconomics
Applied Economics ( $1 / 2$ year)

African American History 1 (1⁄2 year)
African American History 2 ( $1 / 2$ year)
Contemporary Issues ( $1 / 2$ year)
Introduction to Psychology (1/2 year)
Law and Justice ( $1 / 2$ year)
American History through Pop Culture ( $1 / 2$ year)
Latin American Studies ( $1 / 2$ year)
World Geography and Cultures ( $1 / 2$ year)
AP Human Geography

## 5110_MODERN WORLD HISTORY <br> 5160_Sheltered <br> 5100_Honors <br> $1 / 2$ credit

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.

## 5050_AP WORLD HISTORY

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

5710_CIVICS
5760_Sheltered
5700_Honors
977_ Administrative approval required $1 / 2$ credit

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 regard 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.


5210_UNITED STATES HISTORY
5260_Sheltered
5240_Honors
5200_AP United States History
5230_UConn ECE
976_ Administrative approval required 1 credit

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.

## ELECTIVES

## 5410_AP EUROPEAN HISTORY 5411_UConn ECE (WHS) <br> 1 credit

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 firstyear college course in European history.

## 5950_AP UNITED STATES GOVERNMENT AND POLITICS

 1 creditThe 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.

## 5360_HONORS SEMINAR IN PHILOSOPHY

Grade 12
1 credit

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.

## 5970_AP PSYCHOLOGY 1 credit

This course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals through the study of psychological theory, principles, and phenomena. They also learn about methods psychologists use in their science and practice and study topics including the biological bases of behavior, states of consciousness, learning, and abnormal psychology.

## 5320_ECONOMICS <br> 1 credit

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.

## 5981_UCONN ECE ESSENTIALS OF ECONOMICS (WHS) <br> 1 credit

This course is a general introduction to microand 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.

## 5960_ AP MICROECONOMICS 5961_UConn ECE (WHS) 1 credit

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.

## 5983_AP MACROECONOMICS <br> 1 credit

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.

## 5420_APPLIED ECONOMICS <br> $1 / 2$ credit

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.


## 5392_AFRICAN AMERICAN HISTORY 1 $1 / 2$ credit

This course emphasizes a poly-centric approach to understanding the human experience, enabling students to appreciate diverse world views by focusing on the cultural, economic, and political aspects of African American life from 1619 until the turn of the $20^{\text {th }}$ century.

## 5393 AFRICAN AMERICAN HISTORY 2 $1 / 2$ credit

This course emphasizes a poly-centric approach to understanding the human experience, enabling students to appreciate diverse world views by focusing on the cultural, economic, and political aspects of African American life from the turn of the $20^{\text {th }}$ century to the present.

## 5310_CONTEMPORARY ISSUES

Prerequisite: U.S. History
$1 / 2$ credit
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.

## 5610_INTRODUCTION TO PSYCHOLOGY <br> ½ credit

This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.

## 5550_LAW AND JUSTICE

Prerequisite: Civics
$1 / 2$ credit
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 cornerstone document.

## 5681_AMERICAN HISTORY THROUGH POP CULTURE

Prerequisite: U.S. History
$1 / 2$ credit
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 handson 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.

## 5560_LATIN AMERICAN STUDIES $1 / 2$ credit

This course examines Latin American History from the Pre-Columbian Period. Students explore the struggles of the Latin American peoples as they struggled for independence and with democracy. A focus of the course is the involvement of the United States in Latin America.

## 5810_WORLD GEOGRAPHY AND CULTURES <br> 1/2 credit

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.

## 5690_AP HUMAN GEOGRAPHY 1 credit

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.

## 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 and AP courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

French 1, 2, 3, 4
Honors French 2, 3, 4, 5
AP French

Italian 1, 2, 3
Honors Italian 3, 4
Latin 1, 2, 3
Honors Latin 3, 4

Spanish 1, 2, 3, 4
Honors Spanish 2, 3, 4, 5
Heritage Spanish 1
Honors Heritage Spanish 2
AP Spanish Language
AP Spanish Literature

A final grade of "C" or better is recommended to proceed to the next level.

## 4100_FRENCH 1

1 credit
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.

## 4200_FRENCH 2 <br> 4610_Honors

Prerequisite: Completion of French 1
1 credit
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.

## 4300_FRENCH 3 <br> 4620_Honors <br> Prerequisite: Completion of French 2 <br> 1 credit

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.

## 4400_FRENCH 4

4640_Honors
Prerequisite: Completion of French 3 1 credit

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

## 4670_HONORS FRENCH 5

Prerequisite: Completion of French 4 1 credit

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.

## 4500_AP FRENCH

Prerequisite: Completion of Honors French 5 1 credit

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.

## 4120_ITALIAN 1 <br> 1 credit

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

## Prerequisite: Completion of Italian 1

1 credit
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.


## 4320_ITALIAN 3 <br> 4321_Honors <br> Prerequisite: Completion of Italian 2 <br> 1 credit

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.

## 4421_HONORS ITALIAN 4

## Prerequisite: Completion of Italian 3 <br> 1 credit

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.

## 4150_LATIN 1 <br> 1 credit

This course is the beginning course in Latin. Grammar, vocabulary, translations, Roman civilization and culture, and the practical use of Latin are the essential elements of the course. Students make connections between the ancient world and the modern world.

## 4250_LATIN 2

Prerequisite: Completion of Latin 1
1 credit
This course is an expansion of the work of Latin I. Continued study of vocabulary, grammar, English derivatives, and cultural topics, and the reading of adapted Latin passages are included in the course. Students expand their understanding of the language and of Roman culture and history, and make connections between Latin and English.

## 4350_LATIN 3

4351_Honors
Prerequisite: Completion of Latin 2
1 credit
This course emphasizes advanced work in Latin vocabulary, grammar, English derivatives and cultural topics. It also includes the
continued reading of adapted Latin passages and introduction to authentic Latin literature. Students continue to make connections between Latin and English, enhance their preparation for the SAT verbal section, and make connections across the curricula.

## 4450_LATIN 4 <br> 4451_Honors <br> Prerequisite: Completion of Latin 3 <br> 1 credit

This course emphasizes advanced work in Latin grammar, vocabulary, and English derivatives. Selected readings of prose and poetry by various Latin authors are included in the course. Students discover how the elements of classical literature influence modern works.

## 4130_SPANISH 1 <br> 1 credit

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 <br> 4600_Honors

Prerequisite: Completion of Spanish 1
1 credit
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.

## 4330_SPANISH 3

4630_Honors
Prerequisite: Completion of Spanish 2 1 credit

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.

## 4430_SPANISH 4

4650_Honors
Prerequisite: Completion of Spanish 3 1 credit

This course focuses on listening, speaking, reading, and writing at the intermediate/preadvanced 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.

## 4680_HONORS SPANISH 5

Prerequisite: Completion of Spanish 4 1 credit

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.


## 4131_HERITAGE SPANISH 1 1 credit

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.

## 4231_HONORS HERITAGE SPANISH 2 1 credit

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.

## 4530_AP SPANISH LANGUAGE

Prerequisite: Completion of Honors Spanish 5 or Honors Heritage Spanish 2
1 credit
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.

## 4580_AP SPANISH LITERATURE

Prerequisite: Completion of Honors Spanish 5 or Honors Heritage Spanish 2
1 credit
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.


## OTHER 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.

## COURSE OFFERINGS

Literacy/Math Skills Centers
Vocational Communications
Functional Academics
Daily Living Skills

Vocational Skills
Leisure Skills
Travel Time
Communication Skills

## 399_LITERACY SKILLS CENTER 1 credit <br> 695_MATH SKILLS CENTER 1 credit

These courses provide direct assistance to students in grades 9-12, focusing on continuous development of academic excellence in literacy and math practices. Individual instruction is provided in the areas of executive functioning, study skill preparation, self-advocacy, self-management, independence, and preparation for post-secondary experience. While earning credits toward a high school diploma, students apply all skills and strategies learned to everyday classroom settings, vocational experiences, and life situations. Administrative approval required.

## 9950_VOCATIONAL COMMUNICATIONS 1 credit

This course develops entry-level job skills such as: resume writing, job applications, interviewing and interpersonal relationships as well as components of a good work ethic. Each student is required to have a part-time job utilizing the skills taught in this course. Administrative approval required.

## 9500_FUNCTIONAL ACADEMICS <br> 1 credit

This course develops, maintains, and enhances basic skills in reading, math, science, and writing, utilizing approaches adapted to meet individual student needs. The program includes speech and language development, development of social/emotional skills, and fine and gross motor development. Students apply basic functional skills to everyday activities. Administrative approval required.

## 9620_DAILY LIVING SKILLS 1 credit

This course provides students with opportunities to develop and enhance independent self-help skills at home, in the community, and at the workplace. Activities emphasize personal development through health and nutrition, personal hygiene, laundry skills, community awareness, money management, food preparation, safety, household management, and basic living skills. Students apply basic self-help skills to everyday living as well as "real-life" experiences in the community to promote generalization. Administrative approval required.

## 9600_VOCATIONAL SKILLS <br> 1 credit

This course provides the opportunity for students to develop pre-vocational skills necessary for employment. The course includes an introduction to career opportunities, training requirements, work ethics, and structured supervised work experience based on individual needs and interests. Students acquire the skills necessary for positive job exploration and apply these skills in supervised on-the-job experiences. Administrative approval required.

## 9670_LEISURE SKILLS <br> 1 credit

This course provides exposure to a variety of recreational/leisure activities. The course includes guidance to students in their decisionmaking 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. Administrative approval required.

## 9690_TRAVEL TIME 1 credit

This course develops community navigation skills and ability to read maps and schedules. The course emphasizes learning to make transportation arrangements. Students make travel arrangements throughout the community and travel independently. Administrative approval required.

## 9700_COMMUNICATION SKILLS

## 1 credit

This course provides opportunity to learn the basic communication skills necessary for selfadvocacy. This course includes role-playing and real life experiences. Students selfadvocate in everyday life situations and express their wants and needs. Administrative approval required.


## CAREER AND TECHNICAL EDUCATION

## STUDENT ACTIVITIES \& OPPORTUNITIES

WHAT ARE YOU DOING TO PREPARE FOR THE FUTURE?
Get involved in Career and Technical Education (CTE) activities that help you learn about various careers, plan your coursework, and make good career decisions! These activities are designed to support Student Success Planning to develop competence, confidence, and understanding that ensure successful careers and citizenship in young people. In addition, these activities give students a view of the range of post-secondary options available to them. Although CTE concepts are integrated in all curriculum areas, the following programs and activities are designed to prepare students to be lifelong learners and workers.

## CAREER ACADEMIES

You can choose to apply to an academy. These curricula areas help you explore future career opportunities:

- Academy of Finance
- Agriscience \& Technology
- Junior Reserve Officers' Training Corps (JROTC)
- Academy of Information Technology \& Engineering (AITE)


## MENTORING PROGRAM

- ACE (Architecture, Construction, Management \& Engineering) - Students interested in design and construction industries can become part of this after school mentoring program and work with professionals on authentic projects and activities designed to expose students to related careers and educational opportunities.


## WORK-BASED EXPERIENCES

- Job Shadowing - High School and Middle School students can spend a full day in a business environment shadowing an adult who is in a job they are interested in learning more about. This exposure allows a student to see first hand what it's like to work in a variety of different environments.
- Internships - Students who are part of a career academy or preparation program can participate in an internship in and around the city of Stamford. Several different internship programs (paid and non-paid) are available including: part-time after school; volunteer/ community service positions; and full-time summer internships in the business industry or in an educational environment.


## CAREER PLANNING \& DEVELOPMENT

A career center and career counselors are available at each of the high schools.

- Naviance Family Connection - Students can manage their college and career planning with Naviance Family Connection, a webbased tool for students, parents, and counselors. The website guides individual students through the entire college planning, application, and decision making process. Students can search for scholarships, explore careers, take interest inventories, investigate their learning style, and participate in ACT and SAT tutorials and test practice using PrepMe. They can review academic and admission data for colleges across the United States and also gauge their chances of acceptance by comparing their own grade point average and SAT/ACT scores with statistics of recent successful applicants. Students and parents can access further information, including log-on credentials, for Naviance Family Connection from their school's Guidance Office.
- Career Expo - This day-long event, jointly sponsored by the Stamford Chamber of Commerce, includes presentations from professionals representing eight career fields who engage, motivate, and captivate students with many real-life experiences related to their particular industry. Students choose break-out sessions based on career interests and academy programs.


## ACADEMY OF FINANCE

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.

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

- Accounting 1

In Junior year

- Principles of Finance
- Financial Planning

In Senior year

- Business Economics
- 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. All applications are reviewed and interviews are conducted by Stamford administrators, teachers, and Academy students.

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit
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 decisionmaking. Business transactions are analyzed, recorded and summarized for the preparation of financial statements.

## 2810_FINANCIAL PLANNING

Grade: 11
$1 / 2$ credit
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.

## 2800_PRINCIPLES OF FINANCE

Grade: 11
$1 / 2$ credit

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.

## 2820_BUSINESS ECONOMICS

Grade: 12
$1 / 2$ credit

This course in macro and micro-economics provides an understanding of how our market economy functions in a global setting. It provides the students with a survey of economic concepts including all of the twentytwo basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play on our overall economic framework.

## 2840_BUSINESS IN GLOBAL ECONOMY

Grade: 12
$1 / 2$ credit
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 the multinational corporation.

See CAREER \& TECHNICAL EDUCATION - BUSINESS for additional courses helpful in preparation for a career in finance and business.

## AGRISCIENCE AND TECHNOLOGY



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

Agriscience and Technology 1
Agriscience and Technology 2

Agriscience and Technology 3
Agriscience and Technology 4

## 0540_AGRISCIENCE AND TECHNOLOGY 1 <br> 1 credit

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.

## 0650_AGRISCIENCE AND TECHNOLOGY 2

Prerequisite: Agriscience \& Technology 1
2 credits
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.

## 066_AGRISCIENCE AND <br> TECHNOLOGY 3

10 Points
Prerequisite: Agriscience \& Technology 2
Students in the third and fourth year of Agriscience and Technology explore in greater depth the fields of animal science, aquaculture, plant science, environmental science, and agriculture mechanization. Individual and classroom projects are emphasized so that students can pursue their own specialized Agriscience and Technology interests. Areas of emphasis include equine and companion animals, advanced floral design, greenhouse management and landscaping, food science, watershed management and recycling, aqua culture, and small gas engine repair/maintenance. FFA participation and SAE (Supervised Agriculture Experience) are required of all students.

## 067_AGRISCIENCE AND <br> TECHNOLOGY 4

10 Points

This course continues Agriscience \& Technology 3.


## JUNIOR RESERVE OFFICERS’ TRAINING CORPS



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) <br> 1 credit

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.

## 926_LEADERSHIP, EDUCATION, AND TRAINING 2 (LET 2) <br> 1 credit

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.

## 927_LEADERSHIP, EDUCATION, AND TRAINING 3 (LET 3) <br> 1 credit

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, your American citizenship, role of the U.S. Armed Forces, contemporary issues, leadership laboratory, and technology awareness.

## 928_LEADERSHIP, EDUCATION, AND TRAINING 4 (LET 4) <br> 1 credit

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.

## ACADEMY OF INFORMATION TECHNOLOGY \& ENGINEERING



The Academy of Information Technology \& Engineering (AITE) is an inter-district, collegepreparatory high school. AITE combines traditional high school courses, cutting edge technology training, industry certification, college credit, and paid corporate work-based experiences. AITE accepts students from Stamford and neighboring communities through an application and lottery system. All classes take place in the state-of-the-art AITE school building on High Ridge Road. Bus transportation is provided.

The school is designed to give students in grades 9-12 a decided edge upon graduation from high school, whether they are looking to secure high-paying jobs or gain admittance to competitive colleges.

Students can choose electives from five areas of concentration, dual credit college courses, and Virtual High School courses, in addition to college preparatory academics requirements.

## Information Technologies Concentration

This concentration consists of courses that enable students to develop advanced computer skills to use in an IT related field or to use technology as a tool in a broad variety of other fields. In addition to regular academic courses, students following this area of concentration will take required courses to expose them to the basics of computer systems and programs, and then follow with a series of professional level courses in their own areas of interest, such as:

Cisco Networking Academy - This four year program provides students with the skills needed to succeed in networking-related degree programs and helps them prepare for CCNA certification. (http://cisco.netacad.net)

Digital Applications - For the student interested in a career in graphic arts, marketing, web design, music, or business, we provide the opportunity to explore a multitude of courses. Additionally, the student will be able to spend the time preparing a portfolio of his/her work for submission to prestigious colleges throughout the United States.

## Architectural \& Engineering Concentration

This is a pre-engineering interest based program for students providing them with the knowledge needed to succeed in the challenging and rapidly changing world of design, manufacturing, and technology for careers where job descriptions are being rewritten almost daily. Students take specialized courses offered by Project Lead the Way (PLTW) each semester and use cutting edge technologies including Computer-Aided Design (CAD) and other advanced application programs. PLTW (www.pltw.org) is a four year course sequence which offers an opportunity for college credit.

## Business Concentration

This is a four-year curriculum introducing students to skills and knowledge associated with business activities both nationally and globally. Students learn practical and valuable applications using Microsoft Office, accounting, digital publications, business law, financial analysis, and management tools in preparation for college and careers. Field trips to corporate environments, round table discussions with business leaders, and potential internships at local businesses are part of this concentration.

## Fine Arts - Music and Visual Concentration

This is a fine arts interest based program for students providing the integration of music and art skills through traditional and digital applications. Students learn and enhance skills through practical hands-on work, digital applications utilizing current music and graphic arts software, and video-conferencing and interactive mentoring. Performance and portfolio activities are incorporated.

## Biomedical Sciences Concentration

This concentration consists of a sequence of four full-year courses and additional science electives: Principles of the Biomedical Sciences; Human Body Systems; Medical Interventions; and a capstone course entitled Biomedical Innovations. Students should also take Biochemistry in their freshman year and PLTW Physics in their junior year. The courses have been designed and developed through Project Lead the Way. These courses are weighted at the "Honors" level.

## VIRTUAL HIGH SCHOOL

This program is recommended for students who can work independently in a project-based, team-oriented, and distance-learning environment. An interest survey is given prior to sign-up to verify that the student is self-directed and will be successful in such a program. Parents and students are required to sign a contract of acknowledgement. For more information, and for the complete catalogue of courses offered by VHS, please visit www.govhs.org.

## COLLEGE CREDIT

Students may take college-level courses offered by the University of Connecticut, the University of New Haven, and Norwalk Community College. These courses, offered on-site at AITE, UConn Stamford, or at the Norwalk campus, offer additional challenges, make a college application more competitive, provide dual credit (high school and college), and enable students to save money on college tuition. Students may also take advantage of a five and one-half year high school Associate's Degree Program offered through a partnership between the Stamford Public Schools and Norwalk Community College.

## Norwalk Community College/AITE College Credit Partnership

AITE and Norwalk Community College collaborate on several programs that benefit AITE students. For freshmen and sophomores, ConnCAP (Connecticut Collegiate Awareness and Preparation) provides a six-week academic summer program plus after-school tutoring throughout the academic year for incomeeligible students or those who aspire to be the first in their families to complete a college degree. ConnCAP students take college prep classes and meet young role models in different jobs and professions as they begin to plan their futures.

For juniors and seniors, NCC offers College Pathway Initiative (CPI). CPI students pursue a sequence of summer and after-school academic courses at NCC in English, Math, and Science. They also explore career and college options through weekly meetings with college counselors, employers, and young professionals in a wide variety of careers. CPI students may earn up to 12 college-level credits before beginning college full-time. This program is offered through the high school partnership program at NCC.

All costs of ConnCAP and CPI, including tuition, books, and transportation, are covered through NCC. Interested students should contact their guidance counselor.

Any AITE junior or senior with a "B" average may be eligible to take an NCC course in any field during the fall or spring semesters through the High School Partnership Program. Students must be recommended by their guidance counselor and take the Accuplacer test in the preceding semester to determine eligibility. Students who are eligible for HSP pay no NCC tuition. Interested students should contact Mr. Bill Chagnon at NCC at 203-857-7090.

## University of Connecticut Early College Experience (UConn ECE)

The UConn ECE program provides academically motivated students with the opportunity to take university courses while in high school. Students may earn college credit for each UConn ECE course taken. Successful completion of a UConn ECE course adds .07 weighted credit to a student's rank and GPA. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree and other post-secondary opportunities. College credit is earned for a fraction of the cost it would be if the course were taken on a UConn campus.

UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity, and critical thinking - all important for success in college and careers. UConn ECE courses are offered in Art, English, Math, Music, Social Studies, World Languages, and the Sciences. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to many colleges and universities. Students are charged a program fee of $\$ 35$ per credit plus a resource fee of $\$ 20$. Thus, a 2 -credit course will cost $\$ 90$ and a 3 -credit course will cost $\$ 125$. For additional information, visit www.ece.uconn.edu.

## The Special Features of AITE:

- College Preparatory courses with high academic standards and rigorous graduation requirements
- State-of-the-art technology access through a one-to-one laptop program and computer laboratories
- Highly qualified and trained staff, many with business and other professional experiences
- Career and Technical Education emphasis, including Work Based Learning, Employment Skills Training, Career Counseling
- A wide variety of languages including Arabic, Mandarin Chinese, French, Latin, Russian, and Spanish
- Partnerships with the University of Connecticut, the University of New Haven, and Norwalk Community College provide college credit-bearing courses
- Clubs, leadership opportunities, and a variety of activities including intramural sports
- Option to participate in one's respective comprehensive high school for sports or other extra-curricular programs
- Involvement of Business Advisory Committee as guest speakers, curriculum advisors, and student mentors


## CAREER AND TECHNICAL EDUCATION

As we look to compete in the national and increasingly global economy of the $21^{\text {st }}$ century, we must be able to prepare all students for the technical, high-skill jobs of the future. The workplace of the $21^{\text {st }}$ century requires a new kind of worker - one who excels at solving problems, thinking critically, working in teams, using technology, and constantly learning on the job.
When students can see the connection between schoolwork and the world of work, they become motivated to learn. That is the premise behind the Career and Technical Education philosophy in the Stamford Public Schools.

Career and Technical Education is a collaboration of educators, employers, parents, and community agencies working together to provide young people with the skills and practical knowledge necessary to make a successful transition to advanced education and the workplace. This combination of school-based and work-based learning enables students to explore numerous career options and to tap into resources that will enable them to chart a challenging and rewarding career path.

Career and Technical Education activities are designed to develop in young people the competence, confidence, and understanding that will ensure successful careers and citizenship. In addition, these activities will give students a view of the range of post-secondary options available to them. These options include four-year colleges, community or technical colleges, technical training opportunities, and structured entry-level work along a charted career path.

Career and Technical Education concepts are integrated into all curriculum areas. The following programs and activities are designed to prepare students to be life-long learners and workers:

> Academy of Information Technology \& Engineering (AITE)
> Cisco Networking Academy
> Junior Achievement Programs
> Annual Career Fair \& Exploration Expo
> FIRST Robotics Club \& Competitions

Architecture and Engineering College Fair - Every spring the guidance office conducts a special college fair designed to bring representatives of colleges with architecture and engineering programs for students interested in pursuing careers in these areas.

## Work-based experiences include:

- Job Shadowing
- Career Focused Work-Based Experiences
- Academy Internships


## ACADEMY OF INFORMATION TECHNOLOGY \& ENGINEERING RECOMMENDED REQUIREMENTS FOR AN AITE DIPLOMA

All students are encouraged to meet and exceed the graduation requirements as established by the State of Connecticut and the Stamford Board of Education. As a college preparatory high school, AITE believes that it is in the best interest of every student to pursue a rigorous high school education. We recommend and encourage all students to exceed the required 20 credits to include successful completion of four-year sequences in English, Social Studies, Mathematics, Science, a World Language, as well as those additional courses required by the State of Connecticut and the Stamford Board of Education.

| English | 4 Years | Social Studies | 4 Years |
| :--- | :--- | :--- | :--- |
| Mathematics | 4 Years | Science | 4 Years |
| World Language | 4 Years | Health | 2 Semesters |
| Fine/Unified Arts | 6 Classes | Physical Ed | 2 Semesters |

## Unique and significant areas recommended for graduation from AITE include the completion of a SENIOR CAPSTONE PROJECT and COMMUNITY SERVICE.

SENIOR CAPSTONE PROJECT: AITE students are encouraged to complete a year-long exit activity, known as the Senior Capstone project. The Senior Capstone project is designed to imitate real-world processes and to give students the opportunity to demonstrate the research, writing, and communication skills that they have honed during their high school years. Students will determine their own curriculum with the assistance of an adult mentor. Students must submit a formal proposal, a research paper, and a technology based presentation to successfully complete the Senior Capstone project.

COMMUNITY SERVICE: AITE students are encouraged to complete 12.5 hours of community service per year. Community service gives students an opportunity to serve the local or global community in a positive way. It also fosters responsibility, understanding, and leadership in our students. Students are encouraged to volunteer at local non-profit organizations in and around the lower Fairfield County area. Students can volunteer through our after school community service club, Interact. Students can also consult their guidance counselors for help finding community service opportunities. Proof of volunteer hours is required. Forms can be found on the school's website under the "Student Resources" tab.

NOTE: All courses are offered subject to sufficient enrollment, staffing, and funding. Courses with chronically low enrollment may be discontinued or offered on an alternating year basis to allow interested students the opportunity to take the course at some point during their high school career.

## ARCHITECTURE AND ENGINEERING

The Architecture and Engineering Concentration provides project-based activities that integrate technology applications with historical perspectives and engineering principles. Students will be given opportunities to analyze design problems and utilize computer technology to create solutions.

The Architecture and Engineering courses listed in this section are part of an innovative preengineering and technology education partnership program called PROJECT LEAD THE WAY (PLTW). This specially developed high school program seeks to create dynamic partnerships with students to introduce them to and create successful pathways into the fields of architecture, engineering, and technology. The courses are designed to allow students to earn college credit upon successful completion of the classes and the college portion of the final exam in each class. The PLTW classes offered at AITE are supervised and accredited by the University of New Haven.

## COURSE OFFERINGS

Introduction to Engineering Design
Digital Electronics
Principles of Engineering

Civil Engineering and Architecture Engineering Design and Development

## 1500_INTRODUCTION TO ENGINEERING DESIGN (PLTW) 1 credit

Introduction to Engineering Design is an introductory course which develops student problem solving skills with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by modern, state-of-the-art computer hardware and software, Inventor. This modern computer-based process supplements the traditional hand drawing methods. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed and evaluated, using parametric design principles. Various design applications will be explored along with discussion of possible career opportunities.

## 1510_DIGITAL ELECTRONICS (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit
This course is based on the principles and laws of traditional electronics and electrical theory. Digital Electronics and embedded microcomputers (a direct application of Digital) are in every product that is either plugged into a wall or operated by batteries, and is therefore a technology that all people are exposed to in their daily lives. Students will begin with a study of basic electrical theory then move on to learn the basic principles and theories of digital circuits. The curricula used in this course were created by Project Lead the Way, Inc. It uses project-based learning through circuit design and testing.

## 1520_PRINCIPLES OF ENGINEERING (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit
Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering, engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. The main purpose of this course is to experience through theory and hands-on problem solving activities what engineering is all about and to answer the question, "Is a career in engineering or engineering technology for me?"

## 1440_CIVIL ENGINEERING AND ARCHITECTURE (PLTW)

Prerequisite: Introduction to Engineering Design
1 credit

Students will explore aspects of civil engineering and architecture through project development. Topics will include site selection and project planning, surveying, project plan layout, permits and licenses, building design and codes, building systems, and cost analysis. Students will work with cutting-edge technology applications, make site visits, and work with professionals from the field.

## 1530_ENGINEERING DESIGN AND DEVELOPMENT (PLTW)

Prerequisites: Introduction to Engineering Design; Principles of Engineering 1 credit

In this course, students will work in teams of two to four to design and construct the solution, to an engineering problem, applying the principles developed in the preceding four courses. The problem may be selected from a database of engineering problems, be a recognized national challenge, or be an original engineering problem identified by the team and approved by the teacher. The problems will involve a wide range of engineering applications (e.g. a school robo-mascot, automated solar water heater, remote control hover craft). Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project for an outside review panel. The completed portfolio will be invaluable as students apply to college.


## 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.

## COURSE OFFERINGS

Accounting 1
Accounting 2
Business Law
Business Publications
Entrepreneurship

## 2170_ACCOUNTING 1

Grade: 10, 11, 12
1 credit
This course is designed to present the introductory phases of accounting for a single proprietorship, partnership, and corporation. Preparation and interpretation of the accounting cycle is stressed. In addition, a unit on the federal income tax will be included. Each student is expected to complete at least one double-entry practice set of books. This course introduces students to vocational bookkeeping and accounting. It is also valuable for collegebound students who are interested in pursuing careers in business.

## 2270_ACCOUNTING 2

Prerequisite: Accounting 1
Grade: 11, 12
1 credit

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. The students will use standard accounting practices

Finance
Introduction to Business
Marketing in the $21^{\text {st }}$ Century
Sports and Entertainment Management
Virtual High School
Yearbook
and business procedures with an emphasis on the various managerial aspects of a business operation. Computers will be used to perform the various accounting applications such as spreadsheet. Students will also gain a deeper understanding of financial literacy. After completing this course, students may earn 3 college credits by passing the CLEP exam in Financial Accounting. Students participating in this course may also have an opportunity to participate in an internship through a community partnership with First County Bank.

## 2370_BUSINESS LAW <br> Prerequisite: Foundations of Information <br> Technology; Introduction to Business <br> 1 credit

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 courts structure, the laws of business, contracts, sales, bailments, negotiable paper, agency insurance, and business organization. Students will 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.

## 2991_BUSINESS PUBLICATIONS

Prerequisite: Foundations of Information
Technology
$1 / 2$ credit
Students produce real-world documents such as newsletters, brochures, greeting cards, flyers, logos, signs, and much more. Students work independently using word processing, desktop publishing, and presentation software. Students will also create an integrated Microsoft Office Project for a company.

## 2080_ENTREPRENEURSHIP 1 credit

This course is offered in conjunction with the Network for Teaching Entrepreneurship. Students study the basics of marketing, financing, and managing a business. The focus is on preparing students to start a "real business" as well as developing an understanding of opportunity recognition, marshaling resources, risk analysis, and other pending business issues.

## 2363_FINANCE

Grade: 11, 12
1 credit
In this course, students will study finance from at least three points of view: personal, corporate and international. Students will learn how to keep and balance a checkbook, prepare tax returns, develop a budget, and understand the social security and tax withholding systems. The focus will be on learning how to make wise financial decisions including investing and insurance, as well as establishing and maintaining credit. Students will study the global economy and how the United States fits into the worldwide financial world. The focus will be on identifying the social, cultural, political, and economic differences that form the unique identity of countries with which the United States trades. International finance is designed to help students develop the appreciation, knowledge, skills, and abilities needed to live and work in a global
marketplace. Business structure and management, trade, global entrepreneurship, marketing, financial literacy, and career planning will be studied.

## 2350_INTRODUCTION TO BUSINESS <br> Prerequisite: Foundations of Information Technology <br> 1 credit

Students will be introduced to business concepts and skills needed in today's competitive environment. Major business concepts, such as Finance, Marketing, operations, and Management will be covered. Students will gain valuable information and skills for the workplace, as well as preparation for success in competitive events.

## 2180_MARKETING IN THE 21 ${ }^{\text {ST }}$ CENTURY

Grade: $10,11,12$
1 credit
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.

NOTE: Sacred Heart University credit (3 semester hours) will be offered to students who achieve a grade of $B$ or better.


## 2351_SPORTS AND ENTERTAINMENT MANAGEMENT

Prerequisite: Introduction to Business $1 / 2$ credit

Sports and Entertainment Management serves as a one-semester course for marketing and business management students. Using topics in the sports and entertainment industries, the text and multimedia supplements cover the basic functions of management as outlined in national and state standards.

## 1990_VIRTUAL HIGH SCHOOL

Prerequisite: Permission of VHS Coordinator 1 credit $/ 2$ credits

Virtual High School classes take place entirely over the Internet. The VHS classes are offered in a scheduled asynchronous mode following a college semester schedule; assignments are due at specified weekly intervals. Students may choose up to two semester courses (Fall and Spring) or one full year course. All VHS courses are monitored regularly and adhere to the National Education Association's recommended course guidelines. For more information, and for the complete catalogue of courses offered by VHS, please visit www.govhs.org.

## 0690_YEARBOOK

Grade: 11, 12
1 credit
Students will work on the AITE yearbook using the assigned software and learn projectplanning techniques for a complex multi-task project. Responsibilities will include photography, writing and editing, interviewing, using computer software to work with images, and written copy to produce the yearbook draft for submission to the production company and to produce the CD yearbook. Class members will be expected to sell yearbook ads, attend afterschool meetings, and attend selected school evening events.

## CAREER \& TECHNICAL EDUCATION - TECHNOLOGY

The Technology program provides students with an opportunity to participate in many wellorganized 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 have the opportunity to obtain 16 college credits at Norwalk Community College if they successfully complete Cisco Networking Academy courses. These NCC credits may be used toward satisfaction of the graduation requirements for an Associate Degree at Norwalk Community College or will be eligible toward completion of a 4 year Bachelor of Science Degree at Western Connecticut State University under the terms of the NCC/WCSU articulation agreement.

## COURSE OFFERINGS

Cisco Networking Academy - CCNA Routing and Switching:

Introduction to Networks
Routing and Switching Essentials
Scaling Networks
Connecting Networks
Foundations of Information Technology
Introduction to Game Design
Game Design and Development
Advanced Game Design
Geographic Information Systems

AP Computer Science Principles (PLTW)
Introduction to Programming Concepts
Computer Programming (NCC Partnership)
Studio Production 1
Studio Production 2
Introduction to Networking
Smart Apps
Web Design

## 2721_CCNA ROUTING AND SWITCHING: INTRODUCTION TO NETWORKS

Grade: 11
1 credit
This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

## 2731_CCNA ROUTING AND SWITCHING: ROUTING AND SWITCHING ESSENTIALS

1 credit
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, singlearea and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

## 2751_CCNA ROUTING AND SWITCHING: SCALING NETWORKS <br> 1 credit

This course describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

## 2791_CCNA ROUTING AND SWITCHING: CONNECTING NETWORKS <br> 1 credit

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network.

## 2222_FOUNDATIONS OF INFORMATION TECHNOLOGY <br> Required course for all AITE students $1 / 2$ credit

Students in this course will learn about their laptops and the hardware, software, and applications they will be using on a daily basis at AITE. In addition to improving their keyboarding skills, student will also learn how to use the Microsoft Office Suite: Word, PowerPoint, Access, Excel, and Publisher.

## 2473_INTRODUCTION TO GAME DESIGN

(1/2 Year Course - Fall)
Grade: 10, 11
$1 / 2$ credit

The 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.


## 2472_GAME DESIGN AND DEVELOPMENT

(1/2 Year Course - Spring)
Grade: 10, 11
Prerequisites: Algebra, Animation, Introduction to Game Design, Foundations of Information Technology $1 / 2$ credit

This course takes the students on a creative journey that starts at a conceptual beginning and arrives at a polished end - the "game prototype". Students will work individually or with a partner/group to produce storyboards, categorize interfaces, control schemes, manage game assets and script interactive elements to produce a "game prototype."

## 2474_ADVANCED GAME DESIGN

Grade: 11, 12
Prerequisites: Introduction to Game Design, Game Design and Development
1 credit
The purpose of this course is to give the students who have taken Introduction to Game Design and Game Design and Development, an opportunity to create real world type applications. Students will use the latest technology and software to create smart phone apps and games for the Microsoft Xbox.

## 1330_GEOGRAPHIC INFORMATION SYSTEMS

Prerequisite: Recommended for students taking AP Human Geography
1 credit
Students will learn the theory of Geographic Information Systems using mapping techniques known as GIS. GIS technology is one of the hottest new tools in business, education and research, and is one of the fastest growing high-tech careers for students today. This course provides students an opportunity to gain a basic, practical understanding of GIS concepts, techniques, and real world applications, and develop computer literacy, analytical approaches to problem solving, communication and presentation skills.

## 6645_AP COMPUTER SCIENCE PRINCIPLES (PLTW) <br> 1 credit

This course helps students to develop computer programming expertise and explore the workings of the Internet. Projects include APP development, visualization of data, cybersecurity, and simulation.

## 2688_INTRODUCTION TO PROGRAMMING CONCEPTS

Grade: 10, 11, 12
Prerequisite: Foundations of Information
Technology
1 credit
This course will introduce students to advanced Excel, Visual C\# and Java Programming. Students learn the basics of programming logic, understand relational database, and learn how to create a simple archival database.

## 6630_COMPUTER PROGRAMMING (NCC PARTNERSHIP) <br> 1 credit

Students in this course will be provided with an introduction to the world of programming utilizing VisualBasic.NET, a high-level event driven programming language. Students will learn and apply the basic concepts of VisualBasic to solve problems. More advanced programming concepts, including database programming and object-oriented programing, will also be explored. Students who meet the criteria are eligible to earn dual credit for college.


## 2217_STUDIO PRODUCTION 1

Grade: 11, 12
1 credit
Topics in this course include production in the media arts and editing, as well as applications in the field of videography. Extensive training in audio, lighting, set design, camerawork, production, and postproduction are emphasized.

## 2218_STUDIO PRODUCTION 2

1 credit
Grade: 12

This is a Master's Course in all aspects of photography and cinema. Students will be exposed to advanced topics in film production and commercial/editorial photography. Careers and opportunities in the industry will be discussed. Admission by teacher approval only.

## 2430_INTRODUCTION TO NETWORKING

Grade: 10, 11, 12
Prerequisite: Foundations of Information Technology, Algebra 1
1 credit
This course is designed to introduce students to a more advanced understanding of information technology and data communications. Students will develop the necessary skills to enter this field by building a computer system, installing the operating systems, adding peripherals, connecting the computer to a local area network, and to the Internet. Characteristics of the Linux, Windows 2000, NT and XP Network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access. This is a hands-on, laboriented course that stresses lab safety and working effectively in a group environment. This course will help prepare students for CompTIA's A+ certification.

## 2512_SMART APPS

Prerequisite: Introduction to Programming Concepts
$1 / 2$ credit
The course will introduce students to the various platforms in use on small and mobile devices. Platforms will include Apple iPhone, Google Android OS, and Microsoft Windows Phone 7. Students will create applications for each platform using specialized development environments. Norwalk Community College credit is available upon the successful completion of this course.


## 2342_WEB DESIGN

Prerequisite: Foundations of Information Technology
$1 / 2$ credit

This course will introduce students to the design, creation, and maintenance of web pages and websites. Students will learn how to critically evaluate website quality, how to create and maintain quality web pages, how to create and manipulate images, and the importance of web design standards.

## ENGLISH

The four-year English program is designed to provide students with reading, writing and oral skills, to encourage responsible social interaction, enhance the learning process, and generate enthusiasm for the power of language particularly imaginative language. All students are required to take four years of English. 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, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Requirements:

English 9
English 9 Honors
English 10
English 10 Honors
English 11
English 11 Honors
AP English Language \& Composition 11

English 12
English 12 Honors
UConn ECE/AP English Literature \& Composition 12

## Electives:

Web Newspaper
Creative Writing $1 \& 2$

## 3010_ENGLISH 9

3000_ENGLISH 9 HONORS
1 credit
This course is devoted to 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 the persuasive, narrative, and expository essays, response to literature, and other modes. Appropriate attention is paid to editing skills. Literature instruction encourages thoughtful interpretation of various genres including adolescent fiction and mythology, as well as novels, short stories, information, and poetry. Students also participate in thematic Literature Studies units.

## 3110_ENGLISH 10 3100_ENGLISH 10 HONORS 1 credit

This course examines the interpretation of literature through the mediums of the short story, the novel, and expository articles. Instruction focuses on written and oral expression including the persuasive essay and literary response with attention to research, editing, and oral expression skills. Students develop interpretive skills and become fluent in written response to literature. Students also participate in thematic literature studies units.

## 3210_ENGLISH 11 <br> 3200_ENGLISH 11 HONORS <br> 1 credit

This course develops an understanding of the American experience through the study of the novel, biography, drama, essay, and poetry. Attention is given to developing fluent, wellstructured, and well-edited written expression as well as formal and informal oral expression. In addition, students gain deepened appreciation of the many cultures that make up and contribute to the American experience. Students also participate in thematic literature studies units.

## 3260_AP ENGLISH LANGUAGE AND COMPOSITION 11 <br> 1 credit

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.

## 3730_ENGLISH 12

3900_ENGLISH 12 HONORS

## 1 credit

This course focuses on a selection of world literature, nonfiction, and film that examines the human condition from multiple perspectives. Students continue to develop analytical skills in a variety of written and oral formats. Students also participate in thematic literature studies units.

## 3301_UCONN ECE/AP ENGLISH LITERATURE AND COMPOSITION 12 1 credit

This course offers students the opportunity to participate in an intensive program intended to prepare students both for the Advanced Placement test and for the rigors of college English. Critical analysis of literature, advanced levels of academic writing, intensive group discussion, projects, occasional creative
writing, the personal narrative essay, and critical reading form the core of the course. Successful scores of 4 or 5 on the Advanced Placement test often excuse the student from a semester of freshman level English at participating colleges.

## 3920_WEB NEWSPAPER 1 3921_WEB NEWSPAPER 2 1 credit

Students will learn different formats of journalistic writing including, but not limited to, news, features, columns, editorials, and sports. Students will plan, draft, and complete written assignments on a regular basis and under deadline constraints, using the correct conventions and mechanics of written English. Students will participate in the publication of the online school newspaper.

## 3361_CREATIVE WRITING 1 <br> 1/2 credit

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, novellas, plays, and poetry. Group reading of works in progress is expected and revision based on peer critique is required.

## 3590_CREATIVE WRITING 2 <br> 1/2 credit

Students in this course will continue to write in a variety of literary formats to include the short story, drama, and poetry. Group reading of works in progress is expected and revision based on peer critique is required. Students will analyze the writing of established writers to demonstrate their understanding of the creative process and learn to discover their own creative voices. The goal of the advanced student is to strive for publication.

## FINE 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.

## COURSE OFFERINGS

Band
Piano Instruction 1
Piano Instruction 2
Concert Choir 1
Concert Choir 2
Advanced Choir: Chamber Singers

## 7220_BAND

Prerequisite: Previous study in instrumental music
1 credit
The purpose of this course is to continue studies in instrumental music. Participating in various concerts during the school year is required. This is a performance-based class requiring participation, performance, and attendance in class and at rehearsals as an integral part of the student's grade.

## 7700_PIANO INSTRUCTION 1

(1/2 Year Course - Fall)
Prerequisite: None
$1 / 2$ credit
This class 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

Digital Music Production
Digital Music Theory and Composition
Guitar Instruction 1
Guitar Instruction 2
from various cultures and styles. This is a performance-based class where students will also use computers to aid instruction and evaluation

## 7710_PIANO INSTRUCTION 2

(1/2 Year Course - Spring)
Prerequisite: Piano Instruction 1 or permission of instructor.
$1 / 2$ credit
This class 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.

## 7210_CONCERT CHOIR 1

1 credit
This course explores opportunities in ensemble singing of sacred and secular music. The study of proper vocal technique, diction, tone production, fundamentals of music theory, and performance etiquette will be developed through the daily study and performance of a varied repertoire.

## 7212_CONCERT CHOIR 2

1 credit

This course is for students who have successfully completed Concert Choir 1 and would like to continue developing their vocal techniques and performance skills.

## 7430 ADVANCED CHOIR: CHAMBER SINGERS

Prerequisite: Vocal audition
1 credit

This course involves advanced studies in choral literature. 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.

## 1961_DIGITAL MUSIC PRODUCTION

Prerequisite: None
1 credit
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.

## 7630_DIGITAL MUSIC THEORY AND COMPOSITION

Prerequisite: Digital Music, Piano Instruction
1, Guitar 1, or permission of instructor.
1 credit
This is a project-based class that will focus on computer aided music theory and composition. Students will learn a variety of recording and production software that they will use to create and produce their own compositions. Students will also continue with piano instruction.

## 7720_GUITAR INSTRUCTION 1

(1/2-Year Course - Fall)
Prerequisite: Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.)
$1 / 2$ credit
This class 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.

## 7730_GUITAR INSTRUCTION 2 (1/2 Year Course - Spring) <br> Prerequisite: Successful completion of Guitar Instruction 1 or permission of instructor. <br> $1 / 2$ credit

Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.) This class 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.

## FINE ARTS - VISUAL ARTS

In Visual Arts, a wide range of coursework is designed to develop an understanding of art, art production, art history, creative problem solving, and technical applications. Art courses may be used for personal satisfaction as well as for acceptance to advanced schools, college, or computer arts careers. (For information on UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Drawing 1
Painting 1
Drawing and Painting 2
Design 1
Advertising Design
Animation
Advanced Animation

Adobe Illustrator
Adobe Photoshop
Multimedia Presentation
Studio Art
Architectural Drafting/CAD Technology
Interactive Art Robotics
UConn ECE Digital Foundations

## 0153_DRAWING 1

(1/2-Year Course - Fall)
$1 / 2$ credit
This course introduces the students to the basic aspects of drawing. It is recommended as a foundation course for all fine art classes. Students draw with a variety of media, such as a pencil, charcoal, and ink in black and white as well as color. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

## 0154_PAINTING 1

(1/2-Year Course - Spring)
$1 / 2$ credit
This course introduces the students to the basic aspects of painting. It is recommended that the student has taken Drawing 1. Students paint with a variety of media, such as tempura, watercolors, and acrylics. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate
art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

## 0250_DRAWING AND PAINTING 2

Prerequisite: Drawing 1 or Painting 1 or Art
Department approval
1 credit
Students develop an ability to interpret and produce three-dimensional objects through use of elements of art such as line, form, and color. Still life structural representation, nature study, rendering, and portraiture will be investigated. Students study color in depth through the use of pencil, chalk, watercolor and paint. Students study the history of art in detail, as well as contemporary movements. Critiques and the objective development of student work are emphasized.

## 0860_DESIGN 1

$1 / 2$ credit
This is a half year course exploring design concepts in two and three dimensional work. Students will apply the elements and principles of design in projects utilizing cut paper, paint, clay, stick and wire construction, and computer graphics. This introductory course will provide the techniques and skills necessary to understand and create projects based on the components of formal design.

## 0420_ADVERTISING DESIGN 1 credit

This course introduces the elements of design and the techniques used to produce posters, CD and book covers, movie ads, and box designs. An emphasis is placed on the fundamentals of hand lettering using pencil, markers, and pens. Some computer graphics are also explored.

## 0820_ ANIMATION <br> 1 credit

This course will explore the illusion of movement and the development of animation through time. Students will brainstorm, write, storyboard, and create animations using a traditional approach, computer-generated and stop motion. FLASH is the predominant software used in this class. Students must be willing to draw on paper and write.

## 0830_ADVANCED ANIMATION

Prerequisite: Full year of Animation or teacher permission.
1 credit

Students will continue exploring the illusion of movement through detailed hand drawings, stop motion and digital creations. Software explored may include FLASH \& Final Cut Express.

## 0720_ADOBE ILLUSTRATOR <br> (1/2-Year Course - Fall) <br> $1 / 2$ credit

This course is intended for the beginner digital arts student as an exploration of the elements and principles of design using Adobe Illustrator. The student will learn about the tools and techniques of drawing on the computer as well as the fundamentals of design. It is a foundation course for further art courses.

## 0740_ADOBE PHOTOSHOP <br> (1/2-Year Course - Spring) <br> $1 / 2$ credit

This course is intended for the beginner digital arts student as an exploration of the elements and principles of design using Adobe Photoshop. The student will learn about the tools and techniques of photo-manipulation and the fundamentals of design. It is a foundation course for further art courses.


## 0840_MULTIMEDIA PRESENTATION

 1 creditStudents will explore a number of multimedia applications that will focus on creative expression. Concentrations will be on the individual and combined use of:

- Image Editing/Manipulation (Adobe Photoshop, scanning, digital photography)
- Digital Video (Final Cut Express, video editing and audio)
- Animation (frame-by-frame \& FLASH)
- Web Design (Dream Weaver, layout \& Design).


## 0400_STUDIO ART

Prerequisite: Drawing and Painting 2 and/or department permission
1 credit
This course is designed for the highly motivated student committed to a career in art. Students will work as a group and on developing an individual portfolio and may be required to spend additional extra time beyond class time to complete their projects. Students will use a variety of media from markers to charcoal, oil paint, acrylics, digital cameras (still and motion), and computer programs such as the Adobe suite. Each portfolio will vary according to the student's interests and talents and the particular requirements of the institution to which it is being submitted.

## 1340_ARCHITECTURAL DRAFTING/ CAD TECHNOLOGY

1 credit
This course provides each student an opportunity to learn the different views that accompany drafting. Students will learn that precise measurements, clean drawn lines and legible lettering are important in relaying information. Once students have demonstrated these skills they will learn about house styles, designs, what encompasses each style of house and will research kitchen designs, room sizes, window styles, doors, bathrooms, etc. Each student will complete architectural plans for a single family residence starting with paper and pencil and learn Auto-CAD to complete the remaining floor plans, elevations, detail cross sections and other plans.

## 1700_INTERACTIVE ART ROBOTICS

Prerequisite: Algebra 1 or higher
1 credit

Students will be introduced to the different components of robotics through computer programming, creating flow charts, Electronics/Robotics and Design. With the use of C++ students learn programming methodology and
how to structure, and write and problem solve simple and sophisticated programs. The Electronics/ Robotics section encompasses: Fundamentals of electronics, Ohm's Law, voltage, current, servos, LEDs, resistors, schematics, micro-processors, I/O controls, and the micro-processor programming language PBASIC.


## 1151_UCONN ECE DIGITAL FOUNDATIONS <br> 1 credit

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.

## HEALTH AND PHYSICAL EDUCATION

The Health Education Program provides students with a comprehensive study of various aspects of personal health, including fitness, nutrition, disease, first aid, mental health, safety, community health and welfare, and substance use and abuse.

The Physical Education Program provides a comprehensive and sequential progression of learning experiences, which contributes to the total growth and development of students. Students review and refine skills and sport strategies while developing a positive approach to fitness.

## COURSE OFFERINGS

Physical Education 1 \& 2 Health

## 9310_PHYSICAL EDUCATION 1

(1/2 Year Course - Fall)
$1 / 2$ credit
The physical education program parallels the health program in encouraging students to develop and maintain good fitness for life. All students will participate in a comprehensive Personal Fitness Program, which will include a battery of fitness tests. They will be introduced to team sports such as: soccer, flag football, softball, floor hockey, volleyball, basketball, team handball, and wiffle ball. Individual sports include tennis and badminton.

## 9901_HEALTH 1 credit



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.

## 9160_PHYSICAL EDUCATION 2 <br> (1/2 Year Course - Spring) <br> $1 / 2$ credit

This physical education program includes the state mandated Physical Fitness Assessment and Substance Abuse unit, weight training, and a choice of team and/or individual sports. Choices include archery, table tennis, tennis, golf, basketball, power volleyball, and slow pitch softball.

## 9800_HUMAN BEHAVIOR 1

Grade: 11, 12

## $1 / 2$ credit

This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive selfimage, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.

## 9840_HUMAN BEHAVIOR 2

Grade: 11, 12
$1 / 2$ credit
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.

## MATHEMATICS

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 $21^{\text {st }}$ century world economy.

Instruction is varied and includes teacher-centered, group work, inquiry-based, and individual learning. Graphing calculators and used extensively in every course. Some classes also include computer software applications.

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 and AP courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Algebra 1
Geometry
Honors Geometry
Algebra 2
Honors Algebra 2

## 6100_ALGEBRA 1

1 credit
This course examines the properties of real numbers, linear and quadratic equations, polynomial expressions and functions, inequalities, exponential expressions and equations, and systems of equations. 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.

## 6250_GEOMETRY <br> 6240_HONORS GEOMETRY

Prerequisite: Algebra 1
1 credit
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.

## 6200_ALGEBRA 2

6210_HONORS ALGEBRA 2
Prerequisite: Geometry and Algebra 1
1 credit
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, 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 computers and graphic calculator technology. Students focus on problem solving and real life applications throughout the year, as well as skills required for the SAT examination.

## 6850_ALGEBRA 3 AND TRIGONOMETRY

(1/2 Year Course - Fall)
Prerequisite: Algebra 2
$1 / 2$ credit
This course is recommended for Junior and Senior students not taking pre-calculus. It is designed to enhance the student's reasoning skills and mathematical understanding. The major concepts of Algebra, Geometry, and Trigonometry will be rigorously revisited to help prepare the student for real world modeling. SAT/ACT preparation is included in the framework of this course. Computer software and graphing calculators will be utilized for instruction.


6360_AP STATISTICS
Prerequisite: Algebra 2
1 credit
AP Statistics is a full year non-calculus based course that introduces the major concepts and tools for collecting, analyzing, and formulating conclusions from raw data. Students will be exposed to four broad conceptual themes: Data Exploration, Planning a Study,

Anticipating Patterns, and Statistical Inference. This course is designed to meet the same objectives as a first year Statistics course at a college level. Graphing calculators and/or computer software will be used as an integral part of the study.

## 6320_PRE-CALCULUS 6330_HONORS PRE-CALCULUS

Prerequisite: Algebra 2
1 credit
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 throughout the year, as well as skills required for the SAT examination.

## 6340_CALCULUS

Prerequisite: Pre-Calculus
1 credit

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.

## 6290_AP CALCULUS AB

Prerequisite: Honors Pre-Calculus or PreCalculus
1 credit

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity, as well as the techniques of differential and integral calculus. These 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.

## 6640_AP COMPUTER SCIENCE

Prerequisite: Algebra 2
1 credit
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 on and emphasize problem solving and real life applications through critical thinking activities including the social and ethical implications of computer use.

## 6680_APPLIED MATH: INTRODUCTION TO AEROSPACE AND ENGINEERING

Prerequisite: Algebra 1
1 credit
A mathematically intensive hands-on course in which students learn to model physical systems using Algebra, Geometry, and Trigonometry in the domains of ballistics, aerodynamics, and electricity. Students will test their mathematical models by building and operating model rockets, ground support systems, and airplanes equipped with cameras, altimeters, and accelerometers, and analyzing flight data. The prerequisite is Algebra 1 and
students will be expected to work independently with minimal direction as they discover solutions to open-ended real world engineering problems from NASA and industry. This course is part of the NASA Explorer Schools program and will include virtual visits with NASA engineers and opportunities to participate in national projects hosted by NASA and affiliated educational institutions.


## 6860_STATISTICS AND PROBABILITY

(1/2 Year Course - Spring)
Prerequisite: Algebra 3
$1 / 2$ credit

This course will utilize a creative and research based learning format, providing opportunities for real world critical thinking and deduction skills. Students will use a hands-on approach to explore applications in Science, Sports, Business, Social/Political Sciences, and Engineering. Students will develop research and data analysis skills across disciplines within a technology rich environment through the integration of Excel, graphic calculator, and Internet resources.

## SCIENCE

We live in a world that is dominated by the influence of science and technology. The ability to make informed decisions as voters and consumers requires an understanding and appreciation of the nature of science. Since science is both a body of knowledge and a process of investigation, these two components are an integral part of each science course offering. Students should expect a rigorous course of study that encourages higher-level reasoning, incorporates the use of technology, and involves laboratory inquiry. Skills in reading, writing, and mathematics are an important component of science instruction. Science courses are carefully aligned with the National Standard of Science Education and the Connecticut Science Frameworks and develop appropriate skills for the SAT. All students are encouraged to take four years of science including a balance of the life sciences and the physical sciences. (For information on Honors, AP, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

## Biology

Honors Biology
AP Biology
Chemistry
Honors Chemistry
AP Chemistry
Physics
Honors Physics
PLTW Physics
AP Physics 1
AP Physics 2
AP Physics C
UConn ECE/AP Physics 1201Q
UConn ECE/AP Physics 1202Q

Environmental Geology
UConn ECE/AP Environmental Science
Marine Biology
Forensic Science
Human Physiology
Photonics
Principals of Biomedical Science
Honors Biochemistry
Human Body Systems
Medical Interventions
Biomedical Innovation
Science Research

## 8110_BIOLOGY <br> 8120_HONORS BIOLOGY <br> 1 credit

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.

## 8360_AP BIOLOGY

Prerequisite: Biology, Chemistry, and two years of mathematics
1 credit
This course is planned to meet the objectives of a rigorous course in first year biology at the college level. Topics will include: molecules and cells, heredity and evolution, organisms and populations, biotechnology and genetics. Laboratory investigations are an integral part of this course. Each student should complete a lab notebook or portfolio of lab reports.

## 8210_CHEMISTRY <br> 8280_HONORS CHEMISTRY

Prerequisite: Algebra 1 or Geometry and Biology. Concurrent enrollment in Algebra 2 recommended
1 credit

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, electrochemistry, 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.


## 8420_AP CHEMISTRY

Prerequisite: Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics 1 credit

This course is designed to meet the objectives of a rigorous course in first year chemistry at the college level. Topics include: the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, and the basic
concepts of thermodynamics. Each student completes a lab notebook or portfolio of lab reports. Laboratory investigations are an integral part of this course.

## 8310_PHYSICS <br> 8400_HONORS PHYSICS

Prerequisite: Algebra 2 (or concurrent enrollment) and two years of high school science 1 credit

This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermodynamics, 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 activeties. 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.

## 8371_PLTW PHYSICS

Prerequisite: Biochemistry and Principles of Biomedical Science
1 credit

Students in this course explore classical and modern physics principles in a comprehensive approach. Topics in the course include: Newtonian mechanics, heat, kinetic theory and thermodynamics, electricity and magnetism, waves and optics, historical astronomy, and nuclear physics. Students develop a deeper understanding of physics through laboratory investigations, problem solving and critical thinking activities. Laboratory investigations are an integral part of this course. This course is designed as a second year science in the PLTW Biomedical Science curriculum and should be taken concurrently with the Human Body Systems course.

## 8384_AP PHYSICS 1

Prerequisite: Geometry and concurrent enrollment in Algebra 2
1 credit
This course is the equivalent to 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.

## 8385_AP PHYSICS 2

Prerequisite: AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

## 1 credit

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. Inquirybased 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.

## 8388_AP PHYSICS C

Prerequisite: Two years of laboratory science including Physics and concurrent enrollment
in Calculus
1 credit
This course is planned to meet the objectives of a rigorous course in first year Calculusbased physics at the college level. Topics will include Newtonian mechanics, heat, kinetic theory and thermodynamics, electricity and magnetism, waves and optics, and modern physics. Laboratory investigations are an integral part of this course. Each student should complete a lab notebook or portfolio of lab reports.

## 8390_UCONN ECE/AP PHYSICS 1201Q

Grade: 11, 12
Prerequisite: Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year
1 credit
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 thermodynamics, 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.

## 8391_UCONN ECE/AP PHYSICS 1202Q

Grade: 11, 12
Prerequisites: Completion of UCONN 1201Q with a "C" or better and a summer assignment prior to the start of the academic year 1 credit

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.

## 8378_ENVIRONMENTAL GEOLOGY <br> $1 / 2$ credit

Students in this course will investigate the geological history of Connecticut. They will also explore topics such as petroleum energy, fracking, and alternative energy sources such as fuel cells. Laboratory investigations are an integral part of this course.

## 8741_UCONN ECE/AP ENVIRONMENTAL SCIENCE

Prerequisites: Biology and Chemistry 1 credit

This course is an introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation. Laboratory investigations are an integral part of this course.

## 8760_MARINE BIOLOGY

Prerequisite: Two years of science, one being Biology
$1 / 2$ credit
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.

## 8510_ FORENSIC SCIENCE

## Prerequisite:

Biology and Chemistry
$1 / 2$ credit

This course explores the various scientific applications of solving crimes in a comprehensive approach. Students will 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.

## 8200_HUMAN PHYSIOLOGY

Prerequisite: Biology and Chemistry $1 / 2$ credit

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.

## 8850_PHOTONICS

Grade: 11, 12
Prerequisite: Satisfactory completion of
Algebra 2
$1 / 2$ credit
Student will learn how lasers work and can be used for manufacturing. Students will explore the properties of light and waves as they relate to fiber optics. Topics will include the diffraction of light, constructive and destructive interference. Laboratories will include Snell's Law, construction of a Michelson interferometer, and fiber optic cable splicing. Students make holograms, build pinhole cameras and various photonics projects.

## 8870_PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)

Prerequisite: Must be taken concurrently with Biochemistry
1 credit
This is the first of a four-course sequence in which students explore the concepts of human medicine and are introduced to research processes and to bioinformatics. Hands-on projects enable students to investigate human body systems and various health conditions.

## 8290_HONORS BIOCHEMISTRY

Prerequisite: Must be taken concurrently with Principles of Biomedical Science
1 credit
This course explores the basic principles of biochemistry and molecular biology, emphasizing broad understanding of chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. It is designed to pair with the Project Lead the Way course, the Principles of Biomedical Science, in addition to preparing students for the recommended sequence of standard science courses for the Biomedical Science program including AP Physics, AP Biology and AP Chemistry.

## 8880_HUMAN BODY SYSTEMS (PLTW)

Prerequisite: Satisfactory completion of Biology and Principals of Biomedical Science 1 credit

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Students work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

## 8910_MEDICAL INTERVENTIONS (PLTW) <br> Prerequisite: Completion of Biology, Principles of Biomedical Science, and Human Body Systems <br> 1 credit

Students investigate a variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content.

## 8920_BIOMEDICAL INNOVATION

 (PLTW)Prerequisite: Completion of Biology, Principles of Biomedical Science, Human Body Systems, and Medical Interventions 1 credit

In this capstone course, students apply their knowledge and skills to answer questions and solve problems related to the biomedical sciences. Students design innovative solutions for current health challenges, have the opportunity to work on independent research projects, and, if available, participate in a medical related internship.

## 8500_SCIENCE RESEARCH

1 credit
This is a research and seminar based course for juniors and seniors who have taken biology, chemistry, and physics and are considering studying science at the college level. Students read and research scientific literature and make presentations on critical experiments or new technologies in modern science. By the end of the course students will conduct research and write comprehensive research papers on topics in cutting edge fields such as green energy, nanophysics, and biotechnology.

## 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.

## COURSE OFFERINGS

Student Assistant

## 9000_STUDENT ASSISTANT

Students can earn full or half year credit for completing school-related performance based tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student aides have worked in the past include the media center, cafeteria, and guidance office.

Technical Assistant

## 9020_TECHNICAL ASSISTANT

Prerequisite: Technology teacher recommendation

Students can earn full or half year credit for completing school-related technical tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student technical aides have worked in the past include setting up for school assemblies, maintaining audio visual equipment, and troubleshooting basic computer or other technical equipment problems.


## SOCIAL STUDIES

The Social Studies program is designed to prepare students to take an active role in the affairs of their local, state, national, and global communities. 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 historic foundations, students develop the skills and competencies to become responsible citizens in our democratic society. (For information on Honors, AP, and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

| COURSE OFFERINGS |  |  |
| :---: | :---: | :---: |
| Requirements: | World History Electives: | Electives: |
| Social Studies 9: Modern | African History | Debate and Rhetoric |
| World History | Ancient World History | Honors Debate and Rhetoric |
| Honors Social Studies 9: Modern | Latin American Studies | Advanced Debate and Rhetoric |
| World History | The Middle Ages | AP Human Geography |
| Early American History | Middle Eastern Studies | UConn ECE Macroeconomics |
| Pre-AP Early American History | UConn ECE/AP European | UConn ECE Microeconomics |
| United States History | History | Introduction to Psychology |
| AP United States History |  | Sociology |
| Civics 1 \& 2 |  |  |
| AP Government and Politics |  |  |

## 5010_SOCIAL STUDIES 9: MODERN WORLD HISTORY 5000_HONORS SOCIAL STUDIES 9: MODERN WORLD HISTORY 1 credit

In this course students learn the history of the modern world. Topics will include: the age of revolution, industrialization, imperialism, World War I, World War II, the Cold War, independence movements, and globalization.

## 5680_EARLY AMERICAN HISTORY <br> $1 / 2$ credit

Early American History is a survey course from the ancient Native American to the Civil war. It considers our world relationships as well as the background of our institutions and events on the domestic front. It includes a
study of the contributions of various ethnic minorities to the development of American civilization and a strong emphasis on citizenship. This course is to be taken in the second semester of the sophomore year.

## 5670_PRE-AP EARLY AMERICAN HISTORY

$1 / 2$ credit

This course is designed to prepare students to meet the requirements of a first year college course in United States History. The course of study includes the origins of nation, the Revolution, the Constitution, development of our political system, industrialization, and the Civil War. This course is to be taken in the second semester of the sophomore year.

## 5210_ UNITED STATES HISTORY 1 credit

United States History focuses on the periods 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.

## 5200_AP UNITED STATES HISTORY 1 credit

This course is designed to meet the requirements of a first year college course in United States History. The course of study includes the origins of nation, the Revolution, the Constitution, development of our political system, industrialization, the Civil War, imperialism, economics, and foreign policy.

## 5710_CIVICS 1

$1 / 2$ credit

This 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 regard 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.

## 5730_CIVICS 2

$1 / 2$ credit

The Civics 2 course is a continuation of Civics 1 and will focus on important principles of American Democracy including the structure and function of state and local government. This course will also examine the impact of
interest groups and the media on the political process and the relationship between the United States and other nations in regard to foreign policy and international relations.


## 5950_AP UNITED STATES GOVERNMENT AND POLITICS 1 credit

This 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.

## 5870_AFRICAN HISTORY <br> $1 / 2$ credit

In this course students examine the history of Africa. Students will study pre-historic cultures, the ancient West African empires, the Swahili Coast, Southern and Central African kingdoms, the period of European imperialism, independence, and contemporary Africa.

## 5890_ANCIENT WORLD HISTORY 1/2 credit

This course is a survey of the ancient civilizations from Egypt, Mesopotamia, and Phoenicia to those of the Greeks, Romans, Chinese, and Aryan India. It will review the rich cultural and technological heritage left behind by these peoples and their effect on the modern world.

## 5560_LATIN AMERICAN STUDIES

 $1 / 2$ creditThis course examines Latin American History from the Pre-Columbian Period. Students will explore the struggles of the Latin American peoples as they struggled for independence and with democracy. A focus of the course will be the involvement of the United States in Latin America.

## 5830_THE MIDDLE AGES

$1 / 2$ credit

This course is a review of the 1000 year period from the fall of the Roman Empire through the Reformation. It begins with the Barbarian invasions, rise of Germanic cultures, the High Middle Ages with the Crusades and advances in science and technology, and the High Middle Ages including the Renaissance and the Reformation.

5660_MIDDLE EASTERN STUDIES
$1 / 2$ credit


From Mohammed to the rise of the modern Islamic state, socio-political-religious issues will be investigated against the light of contemporary current events, as well as the challenging issues of East/West interdependence and independence.

## 5860_DEBATE AND RHETORIC 5865_HONORS DEBATE AND RHETORIC 1 credit

In this class students learn methods of debate and rhetoric. Students learn how to: communicate clearly and persuasively; construct and deliver strong arguments; think and speak on their feet; and research topics efficiently and effectively. Additionally, students learn about current events and contemporary issues in the United States and the rest of the world. This class is open to seniors and juniors. Freshmen and sophomores may enroll with instructor's permission.

## 5861_ADVANCED DEBATE AND RHETORIC <br> 1 credit

Students will expand and refine their debate and rhetoric skills. Students will not only continue to work on extemporaneous debate but also explore other debate formats. In the process, students will learn advanced research skills, philosophy, logic, and decision theory. This course is open to sophomores, juniors, and seniors and is intended for students who have completed the Debate and Rhetoric course or have experience with competitive formal debating.

## 5640_UCONN ECE/AP EUROPEAN HISTORY

1 credit
This course is designed to meet the requirements of a first year college course in European History. This course will cover historical developments in European history from 1500 to the present.

## 5690_AP HUMAN GEOGRAPHY

Prerequisite: Social Studies 9: Modern World History
1 credit

This course introduces studies to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface.

## 5980_UCONN ECE MACROECONOMICS $1 / 2$ credit

Students learn: the organization and function of the economic system as a total unit; economic decisions, institutions, and policies that determine levels and rates of growth of production, employment, and prices; and topical subjects (e.g., government budget deficits and current interest rate policy).

## 5820_UCONN ECE MICROECONOMICS $1 / 2$ credit

Students learn: how the invisible hand of the market functions through the economic decisions of firms and individuals; how prices, wages, and profits are determined; how resources are allocated; how income is distributed; and topical subjects (e.g., energy policy and health care.

## 5610_INTRODUCTION TO PSYCHOLOGY

½ credit

This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.


## 5040_SOCIOLOGY

$1 / 2$ credit
In this course, students will study the nature of society as it relates to various topics including racial and ethnic identity, gender, class, education, and urban issues.

## 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 AITE World Languages program provides for instruction in five 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. Using interdisciplinary philosophies as well as varied technology-based strategies, students learn to communicate effectively in a target language as citizens of the global community. It is recommended that students complete a minimum of a four-year sequence in one of the six world languages. (For information on AP and UConn ECE courses, see HIGH SCHOOL AND YOUR FUTURE.)

## COURSE OFFERINGS

Arabic 1, 2, 3, 4
French 1, 2, 3, 4
UConn ECE French
AP French (VHS)

Mandarin Chinese 1, 2, 3, 4
AP Chinese Language and Culture
Russian 1, 2, 3, 4
AP Russian

Spanish 1, 2, 3, 4
AP Spanish Language
UConn ECE Spanish

Latin 1, 2, 3, 4
AP Latin

> A final grade of "C" or better is recommended to proceed to the next level.

## 4820_ARABIC 1 <br> 1 credit

This introductory course is designed for students with little or no previous study of Modern Standard Arabic (MSA) focusing on all four language skills: listening, speaking, reading and writing, with an emphasis on the modern writing system. In addition to traditional methods of assessments, students will role-play, make small oral presentations and engage in guided basic conversations. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4850_ARABIC 2 <br> 1 credit

This course continues to develop the skills begun in Modern Standard Arabic (MSA) Arabic 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 will role-play, make small presentations and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4851_ARABIC 3

1 credit
This course develops extensive language acquisition skills through the four language areas: listening, speaking, reading and writing with an increasing emphasis on reading and writing on a wide variety of selected materials. Students will achieve a high level of comprehension and will be able to communicate concepts from articles by making presentations, readings, dictations and presenting their own skits. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4852_ARABIC 4

1 credit
This course is focused on listening, speaking, reading and writing at the intermediate/preadvanced proficiency level through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Arabic literature as well as other non-fiction texts. Students are encouraged to demonstrate their oral proficiency through discussions of historical, social and cultural aspects of life in the target language. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4100_FRENCH 1 <br> 1 credit

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 will roleplay, make small oral presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4200_FRENCH 2 <br> 1 credit

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 will role-play, make small presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4300_FRENCH 3 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations, and presenting their own skits. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4400_FRENCH 4 1 credit

This course is focused on listening, speaking, reading, and writing at the intermediate/preadvanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Francophone literature, as well as other nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

## 4540_UCONN ECE FRENCH

Prerequisite: Satisfactory completion of
French 3 or 4
1 credit
Selected instructors who are certified by UConn may offer this as an option through the UConn Early College Experience program, either concurrently with enrollment in an upper-level French course or as a separate course. The instructors have the option of offering one course as a year-long 3-credit course or one 3 -credit course each semester for an annual total of 6 credits. The courses which may be offered are French 3267 French Language and Culture or French 3268W Writing in French. Course descriptions and other information may be found at www.ece.uconn.edu/courses/subj/french.php.
Students enrolled in French 3268W have specific requirements for course completion, such as writing a 5-page paper in French and following UConn's requirements for a writing intensive course.

## 4500_AP FRENCH (Virtual High School) 1 credit

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

## 4150_LATIN 1

1 credit
This course develops an understanding of Latin through the study of grammar, vocabulary, translations, familiarization with Roman civilization and culture, and the practical use of the language. Students will
make connections between the ancient world and the modern world. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4250_LATIN 2 1 credit

This course is designed to enrich the work of Latin 1 through the completion of forms, fundamentals of construction, increased vocabulary, and the readings of mythological tales. In addition students will develop an understanding of Roman culture and history. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4350_LATIN 3 <br> 1 credit

This course emphasizes advanced work in Latin vocabulary and English derivatives since $60 \%$ of English words are derived from Latin. The class will focus on poetry and composition as well as the study of Virgil. While this course prepares students for the SAT verbal section, it also strengthens grammar skills and connections across the curricula. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4450_LATIN 4 1 credit

This course emphasizes advance work in Latin vocabulary and English derivatives. The class will focus on poetry and composition as well as the study of Virgil, Catullus, Horace, and Pliny. In addition to traditional assessments, students will demonstrate their understanding of how Latin literature has influenced English literature through various projects. Students are also expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4550_AP LATIN

1 credit
This course is designed to meet the objectives of a rigorous course of Latin at the college level. In addition to advanced grammar and syntax, students will engage in sophisticated literary criticism of texts via class discussion and essays. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

## 4180_MANDARIN CHINESE 1 <br> 1 credit

This is an introductory course in the Mandarin language and Chinese culture emphasizing the development of basic skills: Pinyin, pronunciation, tones, listening and speaking as well as the reading and writing of Chinese words. In addition to traditional methods of assessments, students will role-play, make small oral presentations and engage in guided conversations. Students also study Chinese mythology and Chinese calligraphy. Students are encouraged to participate in the COLT Annual Poetry Contest.


## 4710_MANDARIN CHINESE 2 1 credit

This is the continuation of Mandarin 1 and Chinese culture. Emphasis is placed on the development of basic skills: listening, conversation, comprehension, reading and paragraph writing. In addition to traditional methods of assessments, students will role play, make small oral presentations and engage in guided conversations. Students also study Chinese geography. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4840_MANDARIN CHINESE 3 1 credit

This course develops language acquisition in depth through the four language skills: listening, speaking, reading and writing with an increasing emphasis on reading a wider variety of material. Students will achieve a higher degree of comprehension and will be able to communicate cultural material by making presentations, writing compositions, and conducting discussions. Students research and give presentations on Chinese holidays. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4860_MANDARIN CHINESE 4 1 credit

In this course students read and write a variety of complex texts such as advertisements, news report and essays, while they continue to build conversational and listening skill. Students also study a selection of Chinese literature. An introduction to Chinese history is embedded in the language lessons. Students are encouraged to participate in the COLT Annual Poetry Contest.

## 4750_AP CHINESE LANGUAGE AND

 CULTUREPrerequisite: Approval of the instructor 1 credit

This is an intensive course in Chinese language and culture for students with minimum four years of previous study in Chinese. The course consolidates conversational, listening, reading and writing skills for daily life. Furthermore, students read, write and conduct discussions in depth in Chinese on topics ranging from geography, history, and social customs, to Chinese arts. They also read a selection of original texts from The Analects, and Tang and Song poetry. Students examine, describe and analyze a variety of cultural artifacts and try to transform and make connections.


## 4160_RUSSIAN 1

1 credit
This introductory course is designed for students with little or no previous study of Russian, 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 will roleplay, make small oral presentations, and engage in guided conversations.

## 4240_RUSSIAN 2 <br> 1 credit

This course continues to develop the skills begun in Russian 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 will role-play, make small presentations, and engage in guided conversations. Students are expected to participate in the COLT Annual Poetry Contest.

## 4360_ RUSSIAN 3 <br> 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations and presenting their own skits. Students are expected to participate in the COLT Annual Poetry Contest.

## 4170_RUSSIAN 4

Prerequisite: Approval of the instructor 1 credit

This course requires students to achieve a high degree of proficiency with the Russian Language. Students will utilize a variety of authentic materials including literature, magazines, newspapers, and audiovisual. Students must also demonstrate knowledge of Russian culture as an integral part of understanding the Russian people and their language. Students will participate in the Russian Poetry Olympiad. A proficiency test will be offered at the end of the course that may lead to college credit.

## 4830_AP RUSSIAN

Prerequisite: Approval of the instructor 1 credit

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of Russian 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 will participate freely and fluently in class discussions in the target language.

## 4130_SPANISH 1

## 1 credit

This introductory course is designed 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 will roleplay, make small oral presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4230_SPANISH 2

1 credit

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 will role-play, make small presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4330_SPANISH 3 <br> 1 credit

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 will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, written compositions, readings, dictations, and presenting their own skits. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

## 4430_SPANISH 4 <br> 1 credit

This course is focused on listening, speaking, reading, and writing at the intermediate/preadvanced 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 nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.


## 4530_AP SPANISH LANGUAGE

Prerequisite: Approval of the instructor 1 credit

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 will participate freely and fluently in class discussions in the target language and are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish examination.

## 4535_UCONN ECE SPANISH

Prerequisite: Must have completed Spanish 1, $2,3,4$, and be able to understand, speak, read, and write Spanish proficiently.
1 credit
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.

## OTHER 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.

## 9740_INDIVIDUAL EDUCATIONAL DEVELOPMENT PROGRAM

## 1 credit

This course provides direct assistance to identified students in grades 9-12. The course focuses on continuous skill development for academic excellence, studying, self-advocacy, self-management and independence, compensatory learning, peer and adult relationships, and preparation for postsecondary experiences. While earning credits toward a high school diploma, students apply skills learned to the everyday classroom setting and life situations. Administrative approval required.


