



Stamford Public Schools

EXCELLENCE IS THE POINT.

ACADEMY OF INFORMATION TECHNOLOGY & ENGINEERING PROGRAM OF STUDIES



2020-2021

*Stamford Public Schools will support productive habits of: Mind, Body and **Heart***



Mind

- Critical
- Self regulating
- Creative



Body

- Active lifestyle
- Healthy choices
- Self care



Heart

- Emotional health
- Good character
- Positive decisions

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Juan Pazmino – Administrative Intern

SCHOOL COUNSELORS

Christine Bisceglie	203-977-4342	Maria DeAntonis	203-977-6134
Josh Bogard	203-977-6637	Jason Roberts	203-977-0841



Stamford Public Schools

EXCELLENCE IS THE POINT.

Mission Statement

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

Vision Statement

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

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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 long-range 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 school counseling services available in the high schools. In addition to conferences with your counselor, the School Counseling Office provides a number of services.

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 non-calculator 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 one-hour, mostly multiple-choice tests that measure how much students know about a particular academic subject and how well they can apply that knowledge. Some schools require SAT Subject Tests, students should plan ahead and accordingly. However, students may also 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.

COLLEGE LEVEL CURRICULA/COURSES

The SAT tests are offered several times during the year. Registration should take place online at www.collegeboard.org. 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

2020-2021 SAT Test Dates (Anticipated)

SAT Date	SAT Subject Tests Available
August 29, 2020	Yes
October 3, 2020	Yes
November 7, 2020	Yes
December 5, 2020	Yes
March 13, 2021	No
May 8, 2021	Yes
June 5, 2021	Yes

Contact www.collegeboard.org or your school 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.

2020-2021 ACT Test Dates

September 12, 2020	April 17, 2021
October 24, 2020	June 12, 2021
December 12, 2020	July 17, 2021
February 6, 2021	

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

Assistance is available for students with disabilities taking the ACT. The ACT is accepted for college entry.

Advanced Placement (AP)

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 college-level 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.

REQUIREMENTS FOR A HIGH SCHOOL DIPLOMA

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. School counselors are responsible for monitoring student progress in reaching graduation requirements. School counselors will inform parents of student progress and will work with department heads and teachers to help students reach proficiency in all academic areas.

Grades 9th and 10th (Graduating classes 2023 and 2024)

District Required Courses and Credits for Graduation:

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

HUMANITIES	9 TOTAL CREDITS
➤ English	4 credits
➤ Social Studies	3 credits (.5 in Civics)
➤ Arts	1 credit
➤ Subject Area Elective	1 credit
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS	9 TOTAL CREDITS
➤ Mathematics (must earn credit in Algebra & Geometry)	3 credits
➤ Science	3 credits
➤ Subject Area Elective	3 credits
WELLNESS	2 TOTAL CREDITS
➤ Physical Education	1 credit
➤ Health and Safety Ed	1 credit
WORLD LANGUAGE	1 TOTAL CREDIT
MASTERY-BASED LEARNING	1 TOTAL CREDIT
GENERAL ELECTIVES	3 TOTAL CREDITS

Grades 11th and 12th (Graduating classes 2021 and 2022)

District Required Courses and Credits for Graduation:

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

COURSE	CREDITS
English	4
Math	3
Science	2
Social Studies	3
Fine Arts/Career & Technical Education	1
Health	1
Physical Education	1
Electives	5
Total	20

CREDITS

Each student entering grade 9 is required to earn a minimum of 25 credits for graduation. As a general rule, the maximum total credits a student may earn each year is 8.

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 and Social Studies. 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 school counselor or department head.

SEAL OF BILITERACY

Stamford Public Schools recognizes students who have studied and attained proficiency in English and another language and have met specific requirements at the time of graduation by awarding a Seal of Biliteracy on their transcripts and diplomas. The seal recognizes the value of students' academic efforts, the tangible benefits of being bilingual and biliterate, and prepares students to be productive contributing members of our global society. The Seal of Biliteracy was adopted by the district in 2018.

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

GPA

Each student will receive an unweighted and weighted GPA. The unweighted is computed by using the grade point average of the final marks earned by each student in grades 9-12 in all subjects except those on Pass/Fail (P/F). The weighted GPA 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.

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.

HONOR ROLL

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

- Honors with Distinction: Straight A's (Includes A and A-)
- High Honors: All A's with the exception of one B (Includes B+, B, and B-)
- Honors: All A's and/or B's with the exception of one C (includes C+, C, and C-)

All course grades will be included in the calculation for qualifying for Honor Roll. Honor Roll status will be indicated on report cards quarterly.

Note: New students enrolled in the Stamford Public Schools who do not have grades awarded by the Stamford Public Schools would not be included in the Honor Roll determination

SENIOR INTERNSHIP EXPERIENCE

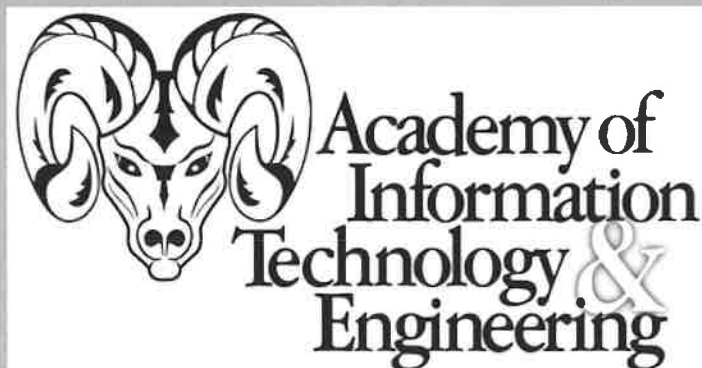
Stamford Public Schools offers a Senior Internship Experience (SIE) program. The SIE provides various internship opportunities at different locations within the City of Stamford: city departments, schools, non-profits, and approved self-designed sites across the city. This program gives students the 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 School 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.

ACADEMY OF INFORMATION TECHNOLOGY & ENGINEERING



The Academy of Information Technology & Engineering (AITE) is an inter-district, college-preparatory high school with a STEAM focus. With high academic standards and rigorous graduation requirements, students take 4 years of English, math, science, social studies, and a world language. In addition to college preparatory academics requirements, students can choose electives from five areas of concentration, dual credit college courses, and Virtual High School online courses.

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.

Architectural & Engineering Concentration

Students in the nationally renowned Project Lead the Way (PLTW) pre-engineering program take specialized courses offered over year where they engage in real-world challenges that help them become better critical thinkers, collaborators and problem solvers. Students who successfully complete the four courses in the sequence may be eligible to earn college credit.

Business Concentration

The courses in this concentration help 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 and potential internships at local businesses are part of this concentration.

Fine Arts – Music and Visual Concentration

Students who take courses in this concentration learn skills through hands-on projects, digital applications utilizing current music and graphic arts software, and traditional practices. Students also are provided with opportunities to present their work to various audiences through performances and competitions.

Biomedical Sciences Concentration

Students in the Project Lead the Way Biomedical program take a sequence of four, full-year courses: Principles of the Biomedical Sciences; Human Body Systems; Medical Interventions; and a capstone course entitled Biomedical Innovations. These courses are weighted at the “Honors” level. Students also take 4 additional science course concurrently and may elect to take additional science courses.

VIRTUAL HIGH SCHOOL

Online courses through Virtual High School are offered to juniors and seniors who have demonstrated the ability to work independently and meet deadlines. This program helps to expand the course offerings at AITE. Parents and students are required to sign a contract of expectations and course requirements. For more information about this program contact your school counselor, 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, University of Bridgeport, University of New Haven, and Norwalk Community College which provide dual credit (high school and college), and enable students to save money on college tuition. Many of these courses are taught by AITE teachers on our campus.

Norwalk Community College/AITE College Credit Partnership

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 school 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 their school counselor.

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 courses are taught by high school teachers who become 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 English, Math, Social Studies, World Language, and Science. To support rigorous learning University of Connecticut databases are available to all UConn ECE students.

UConn credits are transferable to many colleges and universities. Students are charged a program fee of \$50 per credit plus a resource fee of \$20. Thus, a 2-credit course will cost \$100 and a 3-credit course will cost \$150. For additional information, visit www.ece.uconn.edu.

CAREER AND TECHNICAL EDUCATION

Career and Technical Education subject areas focus on academic integration, career development, skill proficiency and work-based learning. They provide students with the opportunity to explore possible college and career post-secondary pathways. These options include four-year colleges, community or technical colleges, technical training opportunities, and structured entry-level work along a charted career path.

ACADEMY OF INFORMATION TECHNOLOGY & ENGINEERING 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 minimum 25 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 Credits	Social Studies	4 Credits
Mathematics	4 Credits	Science	4 Credits
World Language	4 Credits	Health	1 Credit
Fine/Unified Arts	1 Credit	Physical Ed.	1 Credit
Career and Life Skills	*2 Credits *(CTE Electives)		
Electives	7 Credits		

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

SENIOR CAPSTONE PROJECT: AITE students are required 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 required 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 school 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 pre-engineering 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 and Geometry

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 robot, auto-mated 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
Honors Accounting 1
Accounting 2
Business Law
Business Publications
Entrepreneurship
Honors Entrepreneurship

Finance
Introduction to Business
Marketing in the 21st Century
Sports and Entertainment Marketing and Management
Virtual High School
Yearbook

2170_ACCOUNTING 1

2171_HONORS ACCOUNTING

Grade: 10, 11, 12

1 credit

This course introduces students to the basic principles of Accounting, and how to account for business transactions. Students will learn 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. Students may earn college credit through the University of Bridgeport upon successful completion of this course.

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 and business pro-

cedures 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

Prerequisite: Foundations of Information Technology; Introduction to Business

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

½ 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 Micro-soft Office Project for a company.

2080_ENTREPRENEURSHIP**2081_HONORS ENTREPRENEURSHIP**

1 credit

Students will be introduced to entrepreneurial concepts such business opportunity recognition, market research, estimating start-up costs, financing and operating a business. Students will also learn business etiquette and hone their oral communication and presentation skills. Each student will be required to write a complete business plan and create a multi-media presentation using PowerPoint. Students will compete in school and in county/regional competition to determine the best business plans and concepts. Students may earn college credit through the University of Bridgeport upon successful completion of this course.

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

Prerequisite: Foundations of Information Technology

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.

2352_MARKETING IN THE 21ST CENTURY

Grade: 10, 11, 12

1 credit

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

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.

**2352_SPORTS AND ENTERTAINMENT
MARKETING AND MANAGEMENT**
1 credit

This course covers the foundations of consumer behavior as it relates to the sports and entertainment industry. Students will learn how to design and implement business and marketing plans. Students will also learn the integration of product and services with pricing, promotion and distribution. Finally, students will conduct an analysis of the management of leagues, teams, events, corporations and manufacturers in the industry. The role of ethics in sports and entertainment is also addressed.

1990_VIRTUAL HIGH SCHOOL

Prerequisite: Permission of VHS Coordinator

1/2 credit /1 credit

Virtual High School classes are online courses which 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

The Yearbook course offers an interdisciplinary approach to the production of the school's yearbook. Students will learn layout design, photojournalism, business management, marketing, and advertising while using graphics software and the Internet. The yearbook is produced online utilizing interactive programs provided by the publishing company.



CAREER & TECHNICAL EDUCATION - TECHNOLOGY

The Technology program provides students with an opportunity to participate in many 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 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

- AP Computer Science Principles (PLTW)
- Introduction to Computer Science
- Computer Programming (NCC Partnership)
- Studio Production 1
- Studio Production 2
- Introduction to Networking
- Web Design
- Internet of Things: Connecting Things

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, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

**2751_ CCNA ROUTING AND SWITCHING:
SCALING NETWORKS***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***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**

Required course for all AITE students

½ 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

½ 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

½ 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.

6645_AP COMPUTER SCIENCE PRINCIPLES (PLTW)

Prerequisite: Introduction to Computer Science
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 COMPUTER SCIENCE**

Grade: 10, 11, 12

Prerequisite: Foundations of Information Technology
1 credit

This is an introductory course for students new to programming and computer science. Students will learn problem solving strategies, software design, and the foundations of computer science. Students will learn to code using the Python language and eventually create their own programs. This course will prepare students for AP Computer Science Principles or AP Computer Science A.

6630_COMPUTER PROGRAMMING (NCC PARTNERSHIP)

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 Visual-Basic to solve problems. More advanced programming concepts, including database programming and object-oriented programming, 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, lab-oriented

course that stresses lab safety and working effectively in a group environment. This course will help prepare students for CompTIA's A+ certification.

2342_WEB DESIGN

Prerequisite: Foundations of Information Technology

½ 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.

2771_INTERNET OF THINGS: CONNECTING THINGS

½ credit

This is the first course of three in the Cisco Networking Academy's IoT Fundamentals. The curriculum provides students with a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate students in applying creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, networking, security, data analytics, and business. The student-centric approach translates into the student being able to ideate, design, prototype and present an IoT solution for an identified business or society need.



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

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
English Lab 9
Literacy Lab

9743_ACADEMIC INTERVENTION-LITERACY

½ credit

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

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

3200_ENGLISH 11 HONORS

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, well-structured, 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

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.

3791 ENGLISH LAB 9

½ credit

This course is designed to provide freshmen with additional support with literacy skills. During English Lab, students develop comprehension skills through direct instruction, software, and individual practice. Course enrollment is determined by grades, assessment data, and referral.

3792 LITERACY LAB

½ credit

This course is for students who need additional time and support with literacy skills. Course enrollment is determined by grades, assessment data, and referral.

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*½ 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*½ 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.

VISUAL AND PERFORMING ARTS – MUSIC

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

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

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

COURSE OFFERINGS

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

Digital Music Production
Digital Music Theory and Composition
Guitar Instruction 1
Guitar Instruction 2

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 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.)

½ 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)

Prerequisite: Successful completion of Guitar Instruction 1 or permission of instructor.

½ 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.

VISUAL AND PERFORMING ARTS – VISUAL

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.

COURSE OFFERINGS

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

Adobe Photoshop
Computer Graphic Art and Design 1 & 2
Photography 1
Multimedia Presentation
Studio Art
Architectural Drafting/CAD Technology
Interactive Art Robotics
UConn ECE Digital Foundations

0153_DRAWING 1

(1/2-Year Course – Fall)

½ 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)

½ 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

½ 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*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*(1/2-Year Course – Fall)**½ 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*(1/2-Year Course – Spring)**½ 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.

0441 COMPUTER GRAPHIC ART AND DESIGN 1**0442 COMPUTER GRAPHIC ART AND DESIGN 2**

Prerequisite: Adobe Photoshop and/or Adobe Illustrator

½ credit each

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.

0191 PHOTOGRAPHY 1*½ credit*

Students explore photography using digital cameras. Through a variety of assignments, students incorporate the elements and principles of art and design, aesthetics, history, and philosophy of photography. Ownership of a digital camera recommended; cell phones acceptable.

0840 MULTIMEDIA PRESENTATION*1 credit*

Students 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.

1701_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, microprocessors, I/O controls, and the microprocessor programming language PBASIC.

1151_UCONN ECE DIGITAL FOUNDATIONS

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

Human Behavior 1 & 2

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

(1/2 Year Course – Spring)

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 self-image, 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 21st century world economy.

Instruction is varied and includes teacher-centered, group work, inquiry-based, and individual learning. Graphing calculators are 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.

COURSE OFFERINGS

Algebra 1
Geometry
Honors Geometry
Algebra 2
Honors Algebra 2

Electives:
Algebra 3 and Trigonometry
AP Statistics
Pre-Calculus
Honors Pre-Calculus
Calculus
AP Calculus AB
AP Calculus BC

AP Computer Science
Applied Math: Introduction to Aerospace and Engineering
Honors Applied Math: Introduction to Aerospace and Engineering
Statistics and Probability
Math Lab

9744_ACADEMIC INTERVENTION-MATHEMATICS

½ credit

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

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

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

½ 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 Pre-Calculus

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.

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.

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**6681_Honors**

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

½ 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.

6901_MATH LAB*½ credit*

This course is designed to assist students with various areas of growth in mathematics to ensure their success in high school algebra. During Math Lab, students develop math skills through direct instruction, software, and individual practice. Course enrollment is determined by grades, assessment data, and referral.

6902_MATH LAB*½ 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 referral.

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.

COURSE OFFERINGS

Biology
Honors Biology
AP Biology
Chemistry
Honors Chemistry
AP Chemistry
Conceptual Physics
Physics
Honors Physics
AP Physics 1
AP Physics 2
UConn ECE Physics 1201Q
UConn ECE Physics 1202Q

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

8110_ BIOLOGY

8120_ HONORS BIOLOGY

1 credit

The course is the continuation of the Physics First format of instruction at AITE. Building on the skills and NGSS concepts learned in Conceptual Physics and Chemistry, this course explores biological principles in a comprehensive, evolutionary approach to explore the diversity of the living world. The course examines: chemistry of life, cell biology, genetics, evolution, and classification (including microorganisms, fungi, plants, invertebrates, and vertebrates). Students'

understanding of biology is fostered through laboratory investigations, problem solving, and critical thinking activities. Laboratory investigations, emphasizing data analysis, questioning, argumentation, and inquiry, are an integral part of this course.

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

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, electro-chemistry, and nuclear chemistry. Students' understanding of chemistry is fostered through laboratory investigations, problem solving, and critical thinking activities. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of chemistry and its related applications.

8280_HONORS CHEMISTRY

Prerequisite: Conceptual Physics and Algebra 1 or Geometry.

1 credit

This course is the continuation of the Physics First format of instruction at AITE. Building on the skills and NGSS concepts learned in Conceptual Physics, this course examines: atomic structure, periodicity, ionic and covalent bonding, chemical equations, stoichiometry, solutions, reaction rates, chemical equilibrium, acids and bases, oxidation and reduction, electrochemistry, and hydrocarbons and functional groups.

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 equilib-

rium, 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.

8320_CONCEPTUAL PHYSICS

1 credit

This course introduces students to scientific tools and methods and provides an introduction to physics. Topics covered include measurement conversion, model creation, use of scientific methods, interpretation of atoms, identification of the properties of common compounds, the impact of force on linear motion, and the study of various physical phenomena and forms of energy. This NGSS aligned freshman course prepares students to take Chemistry in sophomore year followed by Biology in junior year.

8310_PHYSICS

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 thermo-dynamics, electricity and magnetism, waves and optics, historical astronomy, and nuclear physics. Students' understanding of physics is fostered through laboratory investigations, problem solving, and critical thinking active-ties. 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

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. 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.

8390_UCONN ECE 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 back-ground to ensure successful comprehension and completion of this course.

8391_UCONN ECE 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

½ 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.

8460_ENVIRONMENTAL BIOLOGY

½ credit

Students in this course will explore the scientific study of the origins, functions, relationships, interactions, and natural history of living populations, communities, species, and ecosystems in relation to dynamic environmental processes. Students will also study biodiversity, molecular, genetic, and genomic evolution, mesoscale ecology, computational biology and modeling, conservation biology, local and global environmental change, and restoration ecology.

8741_ AP ENVIRONMENTAL SCIENCE
8820_ UCONN ECE 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, range-lands, 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
½ 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

8512_ HONORS FORENSIC SCIENCE

Prerequisite: Biology and Chemistry
½ credit

This course explores the various scientific applications of solving crimes in a comprehensive approach. Students will perform numerous laboratory techniques. This course examines analyzing fingerprints, blood spatter, DNA, firearms and ballistics, arson and explosives, natural and

synthetic fibers, documents, impression evidence, glass fragments, and case studies. Laboratory investigations, with an emphasis on qualitative data, 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. Students will complete a comprehensive research project including an annotated bibliography and formal presentation.

8200_ HUMAN PHYSIOLOGY

8203_ HONORS HUMAN PHYSIOLOGY

Prerequisite: Biology and Chemistry
½ credit

This course explores the structures and functions 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. Laboratory investigations, including a fetal pig dissection, are an integral part of this course. Case studies, with an emphasis on bioethics, will be used to understand the connections between the different body systems. Students will complete a comprehensive, independent research project including an annotated bibliography, research paper, and formal presentation.

8850_ PHOTONICS

Grade: 11, 12

Prerequisite: Satisfactory completion of Algebra 2
½ 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.

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)

Prerequisite: Completion of Biology, Principles of Biomedical Science, and Human Body Systems

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 intro-

duces 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.

SERVICE LEARNING

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 assistants have worked in the past include the media center, cafeteria, and school counselor's 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 assistants 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.

COURSE OFFERINGS

Requirements:

Social Studies 9: Modern
World History
Honors Social Studies 9: Modern
World History
Early American History
Pre-AP Early American History
United States History
AP United States History
Civics 1 & 2
AP Government and Politics

World History Electives:

African History
Ancient World History
Latin American Studies
The Middle Ages
Middle Eastern Studies
UConn ECE/AP European
History

Electives:

Debate and Rhetoric
Honors Debate and Rhetoric
Advanced Debate and Rhetoric
AP Human Geography
UConn ECE Macroeconomics
UConn ECE Microeconomics
Introduction to Psychology
Sociology

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

½ 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 contri-

butions 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

½ 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*½ 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*½ 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*½ 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*½ 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*½ credit*

This 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*½ 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*½ 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 inter-dependence 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*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*½ 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*½ 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*½ 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

COURSE OFFERINGS

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

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

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

Latin 1, 2, 3, 4
AP Latin

Russian 1, 2, 3, 4
AP Russian

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 will role-play, 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

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/pre-advanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Francophone literature, as well as other 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 de-

scriptions 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*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*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 presenta-

tions 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 CULTURE

Prerequisite: 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 role-play, make small oral presentations, and engage in guided conversations.

4240 RUSSIAN 2

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

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 audio-visual. 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.

tions. In addition to traditional methods of assessments, students will role-play, 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

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

1 credit

This course is focused on listening, speaking, reading, and writing at the intermediate/pre-advanced proficiency levels through a variety of

authentic resources such as radio and TV announcements, newspapers and magazines, literature from Latin America and Spain, as well as other 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 post-secondary experiences. While earning credits toward a high school diploma, students apply skills learned to the everyday classroom setting and life situations. *Administrative approval required.*





Stamford Public Schools

EXCELLENCE IS THE POINT.

Administrative Offices
Stamford Government Center
888 Washington Boulevard
Phone: 203-977-4105
www.stamfordpublicschools.org