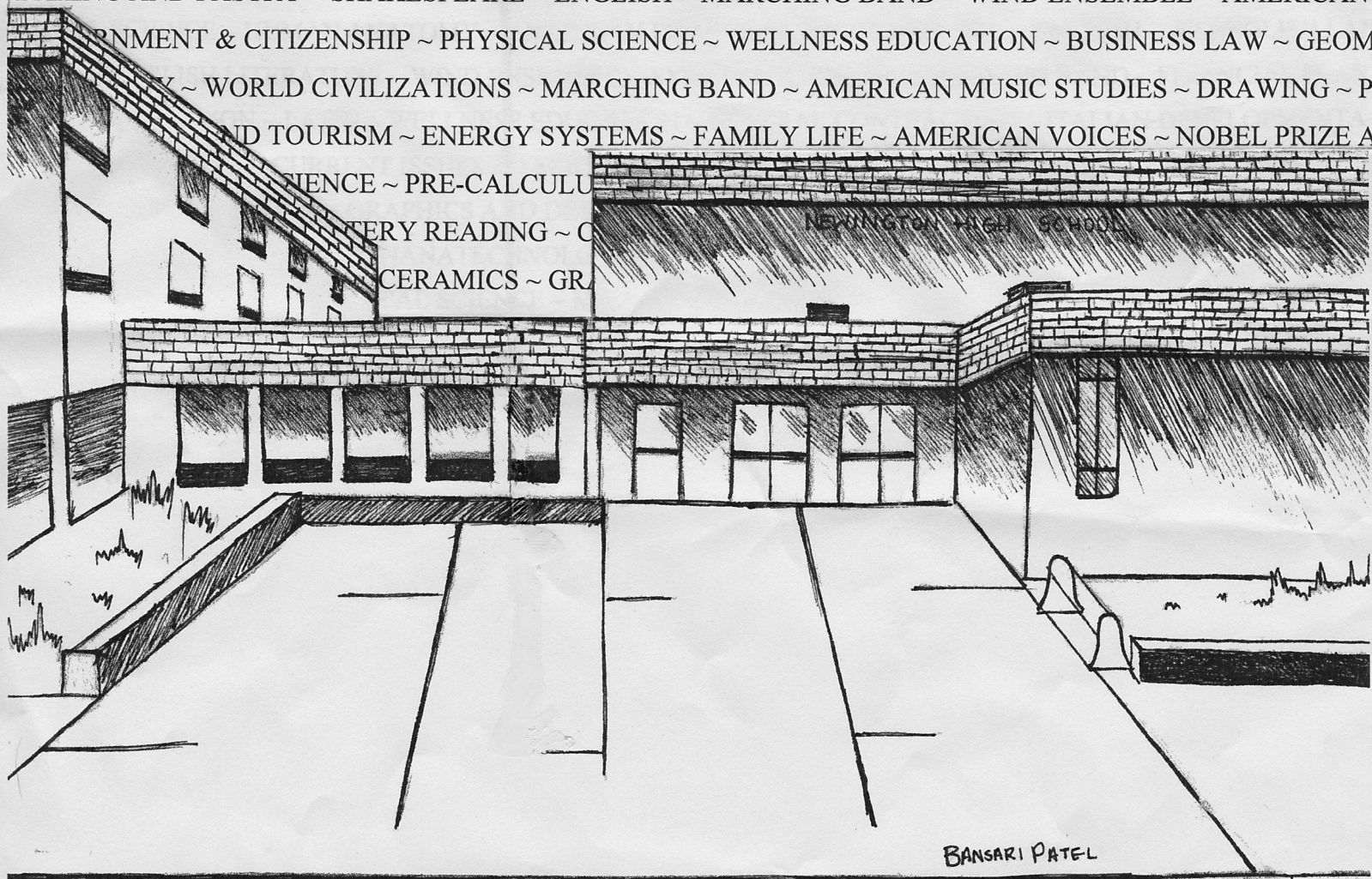


NEWINGTON HIGH SCHOOL

Newington, Connecticut

AP STUDIO ART ~ CERAMICS ~ GRAPHICS AND DESIGN ~ CARPENTRY ~ JOURNALISM ~ CALCULUS ~ DR
LATIN ~ SPANISH ~ ECONOMICS ~ ALGEBRA 1 ~ DRAWING ~ AP PHYSICS ~ MARINE BIOLOGY ~ FRENCH ~
WOMEN'S CHORUS ~ DISCRETE MATH ~ POETRY ~ BIOLOGY ~ ROBOTICS ~ ORCHESTRA ~ JOURNALISM
CREATIVE DRAWING ~ PHOTOGRAPHY ~ ENERGY SYSTEMS ~ INFORMATION PROCESSING ~ NANOTECH
SCULPTURE/3D DESIGN ~ PAINTING ~ MARK TWAIN'S AMERICA ~ HEALTHY CUISINE ~ FAMILY LIFE ~ H
SPANISH ~ PIANO KEYBOARD ~ ACTING ~ FORENSIC SCIENCE ~ AP CHEMISTRY ~ MARINE BIOLOGY ~ B
PHOTOGRAPHY ~ ROBOTICS ~ WOMEN'S CHORUS ~ CHAMBER CHOIR ~ SYMPHONIC BAND ~ PSYCHOLO
AMERICAN FEMALE AUTHORS ~ HUMAN ANATOMY ~ GENERAL CONTRACTING ~ JOURNALISM ~ MUSIC
BAKING AND PASTRY ~ SHAKESPEARE ~ ENGLISH ~ MARCHING BAND ~ WIND ENSEMBLE ~ AMERICAN
GOVERNMENT & CITIZENSHIP ~ PHYSICAL SCIENCE ~ WELLNESS EDUCATION ~ BUSINESS LAW ~ GEOM
WORLD CIVILIZATIONS ~ MARCHING BAND ~ AMERICAN MUSIC STUDIES ~ DRAWING ~ P
AND TOURISM ~ ENERGY SYSTEMS ~ FAMILY LIFE ~ AMERICAN VOICES ~ NOBEL PRIZE A
SCIENCE ~ PRE-CALCULUS
POETRY READING ~ C
CERAMICS ~ GR



PSYCHOLOGY ~ PHYSICAL SCIENCE ~ AMERICAN STUDIES ~ COMMUNICATIONS AND MASS MEDIA ~ SCULPTURE/
DRAWING ~ CONTEMPORARY WORLD HISTORY ~ PHYSICS ~ GEOMETRY ~ PRE-CALCULUS ~ DISCRETE MATH ~ IN
COMPUTER SCIENCE ~ MUSICAL THEATER WORKSHOP ~ MUSIC HISTORY ~ DEVELOPMENTAL GUIDANCE

PROGRAM OF STUDIES 2013-2014

Published by:

NEWINGTON HIGH SCHOOL

605 Willard Avenue
Newington, CT 06111
(860)666-5611
www.hs.npsct.org

This PROGRAM OF STUDIES Belongs to:

Name _____ HR _____

Address _____

The student is responsible for meeting all
graduation requirements and all course requirements
stated in this Program of Studies

Price: First copy to each student - no charge
Additional copies \$3

Cover Designed by:
Bansari Patel, Class of 2013

Table of Contents

On-Line Registration Instructions for Course Selection.....	3
Suggestions for Good Program Planning	5
Credits for Graduation	5
Course Levels and Weighting	6
Grading	7
Honor Roll	7
Rank in Class	7
Program Selection	7
Schedule Changes.....	7
Course Offerings	8
Approaches for Acceleration	8
Summer School	9
Special Programs	9
University of Connecticut Early College Experience Program	9
University of Saint Joseph Challenge Program	9
University of Hartford College Now Program	10
Advanced Placement Program.....	10
Independent Study	10
Alternate Program.....	11
Special Education	11
Newington High School Community Service Program	11
Newington Fire Department Cadet Program	12
School Counseling Program	12
Career Education	12
Cooperative Work Experience	12
College Entrance Requirements	13
NCAA Eligibility Center	13
Technical/Vocational Training Opportunities	14
College/Post Secondary Information.....	15
Technical/Vocational Post Secondary Information.....	16
The Sixteen Connecticut Career Clusters.....	17

Course Description

Art.....	18
Career/Technical Education	22
Humanities.....	31
Mathematics.....	41
Music	44
Science	47
Wellness	51
World Language	53
Listing of Courses	56

On-Line Registration Instructions for Course Selection

Students and their families must go on-line through the school website to register for their courses for the next school year. The instructions to register on-line are listed below:

1. Go to the Newington High School Website
www.hs.npsct.org
2. Click on 2013-2014 Course Registration link which will be located on the main page.
3. Enter the user name and password. Both your user name and your password will be your student ID number.
4. Click on the Class Registration icon found in the tool bar towards the top of the page on the right.
5. Follow the instruction on the screen to complete your registration
6. Once you have made all of your selections, click the submit button.
7. Print two copies of the confirmation page.
8. Keep one copy for your records. Parents or guardians should sign the second copy and submit it your school counselor. Parent/guardian signature indicates that they have seen your course requests. Please note this is for course requests only. Final schedules are subject to change based on course availability and teacher recommendations.



Newington High School

Core Values and Beliefs

Newington High School, a community of learners, is committed to providing all students with high quality learning experiences by challenging and actively engaging them in their education in a safe, welcoming, and enriching environment. All students are expected to meet high academic and behavioral standards. These expectations are achieved through a dynamic partnership among students, staff, home, and community. In an increasingly technological and ever-changing world, Newington High School provides all students with knowledge, skills, and values needed to set goals and reach their full potential as life-long learners.

Expectations for Student Learning

Academic Expectations

Newington High School students will apply academic and technical knowledge and skills across all disciplines by:

- critically reading and comprehending a variety of written materials
- clearly expressing ideas in writing for a variety of purposes and audiences
- thinking critically and reasoning effectively to solve problems
- using oral language and listening skills to communicate effectively
- demonstrating information and communication technology literacy

Social and Civic Expectations

Newington High School students will develop self-responsibility that enables them to live a healthy and active lifestyle by:

- making decisions to achieve long and short term goals
- acting with respect toward self and others and practicing moral and ethical conduct
- developing skills and competencies for personal well-being and growth
- recognizing and valuing our commonalities and diversity for the common good
- contributing to the global community through responsible actions

Introduction

The curriculum at Newington High School provides varied programs for students to secure the type of education best suited to their particular needs, interests, and abilities. It is designed to prepare the student for further higher education or entry into the world of work. The choice of sound programs to meet individual requirements is of foremost importance. Wise planning will take into account the setting of realistic goals in terms of capabilities and interests. The acquisition of knowledge is but one element of a good education. Proper work habits, honesty, dependability, the ability to get along with others, and the development of positive citizenship traits are also essential components.

Suggestions For Good Program Planning

1. Plan to include subjects from several different subject areas. You may discover new interests and new aptitudes.
2. Plan a two or three year sequence in two or more subject areas. Your future career may require emphasis in one or more fields.
3. Plan for a well-rounded high school experience. Desirable personality characteristics and good work habits are part of learning. Some time for extracurricular activities is desirable, though credit toward a diploma is not earned in this way.
4. Consult others with your program planning. Your parents, teachers and school counselor can offer helpful advice. Information gained from aptitude and achievement tests is also useful.
5. Your past record, your abilities, your interests and your goals are of primary importance in determining what subjects you should select.
6. Select a program in keeping with your scholastic abilities and then strive for the best possible accomplishment. QUALITY is more important than QUANTITY in the final analysis.
7. Make the most of every day you are a member of the school. This is YOUR education. YOU receive the ultimate and final benefits which are most numerous and of permanent value.

4. One credit is earned for a year's work in a subject meeting daily. No additional credit will be granted to a student who repeats a course for which previous credit has been earned.
5. Wellness is required in Grades 9, 10, and 11. A student who presents a medical certificate indicating that he/she is unable to participate in wellness must fulfill the wellness credit requirement by taking an elective or through an individualized wellness activity. Wellness will count in the GPA.
6. In order to be considered a candidate for graduation, a student must have a minimum of 14 academic credits at the beginning of Grade 12, with a plan to complete the required number of credits by the end of the year.
7. Grade promotion depends on the number of credits earned. To be a sophomore, a student needs 4 credits; to be a junior, 9 credits; to be a senior, 14 credits must be earned.
8. Students who do not receive enough credits to advance to the next grade will be retained in the current grade. They will be placed in homerooms according to the grade in which they are retained. Students who are retained will not advance to the next grade at mid year with the exception of Juniors who earn enough credits to graduate that June. Students who are retained will be notified over the summer by the principal.
9. Beginning in the 2012-2013 school year, the Newington Board of Education Policy Instruction #6146 was adjusted to include Student Success Plans (SSP) as a requirement for all students in grades 6-12. The plans will be student driven and cover topics in three areas: academic, college/career exploration, and social/emotional/physical development. The purpose is to help students learn more about themselves, their strengths, and areas of interest so that students can set and monitor personal goals related to future planning. It will also provide students with some opportunities to gain real work experiences outside of the classroom. Each year, students will work on a piece of their SSP independently, through classes, in advisory, and with their school counselors. Students will document SSP work in the form of journal reflections, projects, and assessments that will be housed electronically in Naviance.

Credits For Graduation

1. A total of 21 credits is required for graduation.

Subject	NHS	Requirements	Colleges
English	4 cr.	½ in literature Sr. year	4+ credits
Math	3 cr.		4 credits
Social Studies	3 cr.	1 US History, .5 Government	3-4 credits
Science	2 cr.	1 Physical Science 1 Biological Science	3-4 credits Lab experience
World Lang	0		2-4 credits
Wellness	1.5 cr.	Grades 9, 10 & 11 (Health is required if Phys Ed is taken instead of Wellness)	
Arts/Voc	1 cr.	Art, Music, Business Ed, Tech., Family/ Consumer Science	Depending on school
Life Skills	Pass	Grade 12	
CAPT	Pass	Score of 4 on all sections	
Technology		Comp. App., Info. Process., AP Chemistry, Chemistry, Biology, Physics, AP Physics	
Speaking & Listening		Achieve goal on formal delivered speech in English 10-H, English 11 -OR- completion of a Public Speaking course	
Student Success Plans		To be completed over the course of Grades 9-12 in Advisory and through the School Counseling Program	

2. Students who pass Algebra I and/or the first year of a world language in eighth grade will not be given high school credit.
3. Course Load: The minimum course load each semester is five courses meeting daily.

Graduation - Basic Skills Assessment Plan

In addition to the required graduation credits, students are to demonstrate mastery of the basic skills as provided for in the Newington High School Basic Skills Assessment Plan. This is in compliance with PA-001-166, An Act Concerning High School Graduation and the Connecticut Academic Performance Test.

Basic Skills Requirements

In addition to the High School Requirements listed above a student must meet the following requirements:

Reading, Writing and Problem Solving: Meet goal (score of 4 or higher) in all four CAPT areas (Reading, Writing, Science and Mathematics) by the end of junior year; if not met, students will be required to take prescribed classes and demonstrate the appropriate level of achievement during the senior year.

Technology: Appropriately use technology by successfully passing one of the following courses: Computer Applications; Information Processing; Biology; Chemistry; AP Chemistry; Physics; and/or AP Physics.

Speaking/Listening: Demonstrate skills within English class by the end of the 11th grade by preparing and giving a speech and responding to questions on that speech. If not passed, students must take and pass a semester-long Public Speaking class during the senior year.

Educational/Career Planning: In coordination with a school counselor, annually develop and use an educational and career plan.

Placement Protocol for Entering Students without Standardized Test Scores

All new students registering for classes at Newington High School must show evidence of successful achievement on the Connecticut Mastery Test (CMT) and/or Connecticut Academic Performance Test (CAPT) or equivalent testing from other states. If there is no record of test results, the student must complete testing prior to the registration appointment with the school counselor in order to help the counselors place these students in the appropriate classes.

For new students in grades 9-11, students will complete the following tests prior to placing the student in courses. The packet containing these tests will be available in the guidance suite for immediate administration or for administration at a scheduled time prior to the student's registration appointment.

1. Nelson-Denny Degrees of Reading Power test (45 minutes)
2. Reading and responding to questions about a short story (45 minutes)
3. Reading and responding to a nonfiction selection (15 minutes)

For new students entering grade 12 without CAPT scores or equivalent tests from another state in Reading and Writing, the first two tests above will be given, but the third test will be replaced with the writing of a persuasive letter utilizing primary source documents (60 minutes) to assess writing skills.

The information from these tests will provide counselors and teachers with the student's reading levels and ability to read and write about fiction and nonfiction, the core of all academic classes at Newington High School. In addition, through this testing, seniors may demonstrate reading and writing skills at the desired level of achievement prescribed in the Basic Skills Assessment Plan, therefore removing the required enrollment in Practical Literacy and/or BSA Social Studies in the senior year.

Course Levels and Weighting

Newington High School strives to offer rigorous course work for all students. Classes are offered at three levels: AP/ECE, Honors and Academic. Each course level has a corresponding weight which is used to calculate GPA. The level/weight is indicated next to each title in the Program of Studies. Below are the descriptions:

Advanced Placement (AP)/Early College Experience (ECE)

Advanced Placement/Early College Experience courses require students to follow a standardized curriculum that is equivalent to an introductory college course. AP/ECE courses may allow students to receive college credit and/or be exempt from introductory college courses by either passing an externally prepared exam, or by earning a specific grade for the course. Students who are enrolled into these courses should possess the skills necessary to perform college level work during high school. AP/ECE courses demand a large time commitment on the part of students both in and out of school. Please see page 10 for a description of AP and ECE courses.

Students who want to enroll in an AP/ECE course need to have successfully completed any/all designated prerequisite courses, receiving a QPA of no less than 3.33.

Honors

Honors courses present a rapid-paced curriculum and offer an in-depth exploration of the course content. These courses offer a curriculum designed to challenge students who have demonstrated creativity, innovation and a high degree of proficiency.

Students enrolled in Honors courses should be independent, self-directed learners with exceptional communication skills and the ability analyze, synthesize and draw conclusions. Honors courses require a serious commitment of the student's time and effort, both in and out of the classroom.

Academic

Academic courses focus on the application of previously mastered skills and concepts, and the acquisition of advanced learning. Academic courses offer a curriculum designed to challenge students who have demonstrated the academic knowledge and background to meet the requirements of their grade level. Appropriate resources, levels of challenge and support prepare students for colleges, universities, and other post-secondary education and career opportunities. Reading, writing, listening, decision-making, critical thinking and problem solving skills are an integral part of all Academic course work, requiring students to allocate time beyond the classroom to complete assignments.

Quality Points				Descriptions
Grade	Course Level			
AP/ECE	*	**		* Honors ** Academic
A+	4.50	4.30	4.20	Excellent: mark of highest distinction earned by that very small proportion of students whose work is of the highest quality.
A	4.40	4.20	4.00	
A-	4.20	4.00	3.67	
B+	4.00	3.67	3.33	Above average: mark of distinction earned by those students who show a degree of excellence in completing high quality work punctually with accuracy and understanding.
B	3.67	3.33	3.00	
B-	3.33	3.00	2.67	
C+	3.00	2.67	2.33	Average: mark earned by those students who give to the course a reasonable amount of time, effort and attention, and who complete work with reasonable accuracy and understanding.
C	2.67	2.33	2.00	
C-	2.33	2.00	1.67	
D+	2.00	1.67	1.33	Below average: lowest passing grade and represents work performed in a barely acceptable manner. It indicates that the student would be seriously handicapped in carrying a more advanced course for which this course is a specific prerequisite.
D	1.67	1.33	1.00	
D-	1.33	1.00	0.67	
P	0.00	0.00	0.00	Credit allowed toward graduation for effort, cooperation and fulfillment of all obligations.
F	0.00	0.00	0.00	Failing
I	-	-	-	Incomplete: given only for work unfinished because of an excused absence. Incompletes not made up before the mid-term of the following grading period automatically become "F".

Grade Equivalent Table

A (90-99)	A+	97 – 99	C (70-79)	C+	77 – 79
	A	93 – 96		C	73 – 76
	A-	90 – 92		C-	70 – 72
B (80-89)	B+	87 – 89	D (60-69)	D+	67 – 69
	B	83 – 86		D	63 – 66
	B-	80 – 82		D-	60 – 62
			F =	<59	
			Passing =	60	

Honor Roll

The honor roll is published each marking period. Students who attain a weighted Grade Point Average of 3.67 are granted "High Honors;" students who attain a weighted Grade Point Average of 3.00 are granted "Honors."

To attain any form of honors, a student must have a weighted GPA of no less than 3.00 and no grade lower than a "C-" for the marking period.

The Honor Roll is determined on the basis of a minimum of five major courses. Pass/fail courses are not included in honor roll calculation.

Rank in Class

- Marks for all subjects for which unit credit or fractional unit credit is given are used in computing class rank, excluding summer school, internships, independent study, wellness and courses offered on a pass/fail basis.
- Credits for new registrants will be evaluated and included in GPA calculations. Honors weight will not be given for courses completed by new registrants at their previous school unless the same courses are offered at Newington High School.
- Rank in class is determined at the end of the junior year and at the end of the first semester in the middle of the senior year.
- Class rank will be reported using the decile system. This system will indicate the GPA range for each decile band.
- Numerical rank will be provided if colleges and scholarship organizations request it.
- A valedictorian and salutatorian will be named for each graduating class.

The valedictorian at Newington High School is that member of the graduating class who has achieved the highest Grade Point Average (GPA) and thus, is assigned the rank of number one in the class. The GPA is a cumulative average based on seven semesters of academic work (e.g., grade nine through first semester of senior year.)

The salutatorian at Newington High School is that member of the graduating class who has achieved the second highest Grade Point Average (GPA) and thus, is assigned the rank of number two in the class. The GPA is a cumulative average based on seven semesters of academic work (e.g., grade nine through first semester of senior year.)

A new registrant must be in attendance at Newington High School at least one year (sixth/seventh semesters) in order to qualify for valedictorian or salutatorian. Students who accelerate (complete four years of high school in three) are not ranked with the class. They receive an approximate rank based on four/five semesters and a letter of explanation is sent with college applications.

Program Selection

In January all students receive a form indicating the courses being offered for the next school year. Students must register in PowerSchool for their courses on-line at www.hs.npsct.org. The instructions for course registration are on Page 3 of this book. Proper selection of curriculum and subjects is very important and should be done with care, since changes requested at a later date may not always be possible.

Schedule Changes

- Prior to Opening of School**

Students will receive their schedules before the end of the year. They should be reviewed to make certain that they list the subjects chosen during the course selection process in January and that only one subject is listed for each period.

Since there are NO PROGRAM CHANGES during the summer or at the beginning of school, counselors are available during the month of May and before the final exam period begins in June to handle schedule errors and to make program adjustments. If some type of change is needed or desired, an effort will be made to accommodate the request within the constraints posed by the master schedule, class sizes and teacher loads.

- **After Opening of School**

There will be a 2 week DROPPERIOD following the opening of school. During this period, students may DROP a course provided that he/she carries the minimum number of academic credits and wellness, and meets the graduation requirements. The student-initiated drop form must be approved by the parent and the teacher. There will be no penalty for a course dropped within this two week period. Students may add additional courses during the Drop Period provided there is space in the class(es) of interest.

- **Withdrawing From A Course**

It is to be noted that when a student drops a course AFTER THE 2 WEEK DROP PERIOD a grade of "W" or "WF" will appear on the permanent record and report cards and no additional courses will be added. If a student drops a course after the FIFTH WEEK OF CLASS (Progress Report), a grade of "WF" will appear on the report card and permanent record. A "WF" grade will be counted as an "F" in the determination of Honor Roll for the marking period and in Class Rank. If the course is dropped by a senior who has already applied to colleges or other post-secondary programs, the institution(s) will be notified of the dropped course in writing. No student may drop a course if he or she does not maintain the 5 course per semester minimum. To drop a course, a student must submit the student-initiated drop form. A W/F, as a result of a drop, will impact structured study for the marking period following the drop.

- **Level Changes/Waivers**

A teacher may place a student in a higher level course after the start of the school year if it is determined by department protocol the current level is inappropriate. The department coordinator will contact the parent to discuss the change in schedule and teacher will submit a level change form to the child's school counselor.

Parents and students may initiate a level change. A waiver must be completed and returned to the student's counselor no later than the first full week of school. Waivers are granted on a space available basis. Once the level has been changed, students may not return to the lower level course that school year. Waivers are not permitted for AP courses.

Guidelines for Course Audit

1. A student must discuss the course audit with the teacher whose class is to be audited and agree to the expectations set by the teacher for auditing the class.
2. The class to be audited must be in addition to the regular course load that the student is carrying.
3. The audit will begin with the first day of school in September for a full year course and semester 1. The audit for a second semester course will begin on the first day of the second semester.
4. A student who wishes to audit a course that he/she is already enrolled in for credit must start the process of arranging for an audit by the FOURTH WEEK of class.
5. Students enrolled in a course for audit must fulfill obligations, that is, course work and attendance.

6. At the completion of the course, the class audited will be recorded on the student's record as an audit—there will be NO GRADE OR CREDIT RECEIVED. It will appear on the transcript with an AU.
7. Students wishing to drop a course being audited will follow the same procedure for dropping a regular course for credit.
8. Audit may also occur for some students with special circumstances, i.e. ESOL.

Early Release Requirements

Recognizing that many positive character traits can be learned or strengthened through maintaining regular employment, Newington High School offers the early release program to SENIORS who meet certain requirements. These requirements were developed to insure that students who participate in the early release program also meet academic priorities.

SENIORS may apply for early release AFTER PERIOD 5 to go to work if they meet **all** of the following criteria:

1. Graduation credits: Only seniors who have earned at least 14 credits at the conclusion of their junior year and who have a schedule providing them with at least 21 credits by the close of their senior year are eligible to apply for early release, and
2. Positive Academic & Citizenship Standing: Only seniors who
 - a. have no more than 2 grades below a C-
 - b. have no failing grades
 - c. are in good disciplinary standing with fewer than 3 referrals

Please be mindful that Block Scheduling may not permit early release on certain days.

Please Note: Seniors involved in early release must carry the mandatory minimum credits (5). Early release is NOT available to freshman, sophomores, or juniors. Seniors who do not maintain good academic or citizenship standing are subject to the revocation of early release privileges. Seniors may reapply once good academic and/or citizenship has been restored.

Course Offerings

A course may be withdrawn or enrollment may be restricted for any of the following reasons:

- a. low enrollment
- b. limited facilities
- c. availability of staff

Approaches for Acceleration

There are two ways that a student may accelerate his/her high school graduation. Both approaches require parental approval and a parent/student conference with the counselor. All arrangements must be finalized by June 1.

1. A grade 11 student who, at the end of the junior year, has successfully completed all academic requirements for graduation with the exception of the senior year credit in English, and who has been accepted by a fully accredited institution of higher learning, may fulfill the English requirement by taking an English course approved by the Principal of the high school. The financial responsibility for this course will be borne by the parent. Arrangements for participation in this program must be finalized by the end of the sophomore year.

2. A grade 12 student, under certain circumstances, is permitted to complete graduation credits in January of senior year for graduation in June. Arrangements for participation in this program must be finalized by June 1 of the junior year.

Approval to participate in this type of acceleration is NOT automatically granted. The decision of the Principal is based on:

- The student's academic record
- The specific goals/reasons of the student
- The plan of action for achieving the goals

If the plan includes college/technical school, etc., the student must apply during the fall of senior year.

If the plan includes full-time employment/military service, plans must be finalized by **the end of first** semester and be certified by a letter to the Principal.

Guidelines for Student

The student is responsible for the following:

1. Schedule a conference with the Counselor to discuss the appropriateness of the program for achieving goals.
2. Pick up an application in the Main School Counseling Office and review the application and procedures with the Counselor.
3. Complete the application and goals sheets and return both to the Counselor.
4. Have parent(s) contact the Counselor to arrange a conference with Counselor/parent(s)/student.

Summer School

Students may take coursework following a course failure or for program advancement - through the West Hartford Summer School program. Courses taken for recovery credit must be approved in advance by both the student's counselor and Principal. The West Hartford program is the only approved summer school program from which Newington High School will accept credit.

The summer school course load is one credit per summer. A maximum of 3 courses for credit recovery through summer school work will be accepted toward meeting graduation requirements. Marks for summer school courses are not used in computing GPA.

If students wish to receive credit from a program other than the West Hartford summer school, they must seek **prior** approval from the Principal. A **minimum** of 120 instructional hours is required to earn 1 credit.

Credits in summer school are awarded by semester. Grades for full year courses are averaged together for a final grade. Credit is awarded for an average above 60. If the average is below 60 but a passing grade was awarded for one semester, the .5 credit will be awarded. Semester courses will be awarded a .5 credit as stated on the summer school report card.

Special Programs

The following programs have been preapproved for the acceptance of credits granted through participation and completion of course work. To receive credit for any other program not listed here, prior written approval must be received from the Principal.

University Of Connecticut Early College Experience Program

Under the University's Early College Experience Program, outstanding high school students work under selected teachers in their own high school on an approved course of study for which they receive full college credit, also fulfilling requirements toward high school graduation. Students must meet the qualifications laid down by the high school department, complete the required application, and pay the necessary fees.

At the end of each semester, the instructor's grades are recorded at the University. Any student planning to attend the University of Connecticut can indicate his participation in the program in order to obtain credit and/or advanced placement. However, it is to be noted that recognition of grades for college credit, advanced placement or both, varies with other colleges and should be checked in each case. The following courses are offered in this program: Biology and Modern Western Traditions. When students complete these courses, they must obtain their transcripts directly from the Registrar at the University of Connecticut after July 1st.

Although **not required**, students generally take advantage of the opportunity to purchase their textbooks for AP/UCConn programs. This allows students to take notes and highlight sections in their personal book, and begin their professional resource library. Books are available at a discount rate for those who choose to buy them. All others will be issued a book in accordance with school policies.

University of Saint Joseph Challenge Program

The University of Saint Joseph Challenge Program offers tuition-free scholarships for one semester to qualified upper-level high school students. This program provides the opportunity for qualified young women and men to attend college while still in high school. Students enroll in a college course for which they receive academic credit upon successful completion of the semester's work. Over 200 students have enrolled in such diverse areas as Anthropology, Philosophy, French, Classics, Religious Studies, Spanish, Math, and Sociology. Applications are reviewed by a committee, and the counselors will be notified of a student's acceptance.

University of Hartford College Now Program

COLLEGE NOW is a University of Hartford program designed to provide outstanding high school seniors with the opportunity to enroll in one college course per semester on a tuition free basis. The program is quite selective and open only to students who meet the following criteria.

- Qualified high school seniors who have exhausted the college preparatory courses in their high schools and who are in the top 15% of their class.
- Students must have maintained grades of "A" and "B" consistently in their academic courses.
- Students must have achieved a minimum score of 1000 on the SAT or PSAT.

Students recommended for admission into the program by their school counselor must submit to the Center for Graduate and Adult Academic Services an **Application Form** along with a high school transcript and SAT or PSAT test scores. Students who have already been accepted into the program for a previous semester need not reapply. They must, however, obtain a new signed **Permission to Register** Form and bring it with them to register during the specified registration period.

Advanced Placement Program

The Advanced Placement (AP) Program is a program of credit by examinations for college-level studies pursued in secondary schools. The Advanced Placement courses are available to qualified academically oriented students in the tenth, eleventh and twelfth grades. Upon completion of an AP Course, a student is encouraged to take the nationally administered examination in May. Many of the colleges that AP candidates have attended give credit and/or advanced standing to students whose AP Examination grades are considered acceptable.

Advanced Placement courses offered are described in the subject area sections. To be eligible for an AP course, students must earn a B (3.33 QPA) for the Semester in the specified prerequisite course(s) at the time of registration. This grade standard must be maintained through the school year.

If a student wishes to take an AP class, but has not met the grade requirement, they may petition the department for entrance prior to the close of registration. The petition will be reviewed by the coordinator, with input from teachers. All relevant data will be reviewed.

If the petition is denied by the department, the student may appeal to the Principal. Provided all procedures were followed properly and the student's case has been considered with due diligence, there would be no basis to overturn the decision.

Students who are enrolled in AP courses are not permitted to drop without permission of the principal. All AP drops must be made by June 30.

Independent Study

This program is designed for the student who is broadly and deeply curious about a particular subject and can benefit from the experience of developing, organizing, and pursuing the successful completion of a project which he or she finds stimulating. It is the responsibility of the student to locate an advisor to assist in the course of study. The content of an independent study should be above and beyond school offerings.

The purpose of the program is to challenge and stimulate the individual student who wishes to pursue in depth, a topic of personal interest which is not included in the regular curriculum offered at Newington High School. Independent study gives the student an opportunity to research and reach their own conclusions on a topic of interest with the guidance of a cooperating teacher.

General Guidelines

1. The program will be limited to students who are in good standing academically. Participating students must have demonstrated better than average competency in the area in which they wish to pursue independent work.
2. Admission to the program is by application, initiated by the student, who will present an outline of the subject area he/she plans to investigate.
3. The project must receive the approval of the student's parents, a sponsoring teacher (whom the student selects) the student's counselor, and the School Counseling Coordinator.
4. The work is to be done outside the structure of regularly scheduled classes and will cover knowledge not included in the regular curriculum. Student aide projects will not be eligible for credit under this program.
5. Each student will be required to meet with the supporting teacher at least once a week to review their progress. This meeting must be recorded in the conference log and initialed by both the teacher and student.
6. Projects in their final form and/or project reports will be submitted to the School Counseling Coordinator for credit approval.
7. In general, students may not earn more than one credit in Independent Study in their program of studies at Newington High School. The student and sponsoring teacher will identify the amount of credit they feel the project merits on the project proposal. An independent study project may be completed for no academic credit if desired.
8. A grade of "P" will be given for a successfully completed project. A successfully completed project is defined as a project, which merits a letter grade of "C" or better. Passing grades are not included in GPA calculations.
9. Students participating in the individual study program may, if they so desire, be reassigned from regularly scheduled study halls.
10. It is recommended that teachers work with students on a one on one basis, however, there may be times when it could be beneficial to have a teacher work with two or more students simultaneously.
11. The assignments must be meaningful with reference to the project. Side benefits, such as learning library skills and using technology are important, but incidental.
12. Evaluation must be relevant and clearly understood by the student, the teacher, and the School Counseling Coordinator. A student may withdraw at any time without academic penalty by informing his/her participating teacher and the School Counseling Coordinator. Students may not drop courses to add independent study.

The Alternate Program

The Alternate Program at Newington High School is designed to assist and support students having difficulty achieving success in mainstream courses. The goal of the program is to stabilize a student through an individualized educational approach to his or her studies in grades nine through twelve. A four year sequence of courses is offered in mathematics, English, social studies, and science. In addition, a self-awareness program is an integral part of the course offerings.

Students enter the program through a formal application/intake process which is initiated by their counselor. A student entering the program must be assigned to the alternate homeroom, four or five academic courses within the program and must participate in the self-awareness course. Students that enter the program can remain for a maximum of four years.

Students in the Alternate Program may be eligible for early release to obtain work credit. Students must show evidence of employment (paystubs) to participate. Status of employment will be monitored by the teachers in the Alternate Program. Credit earned will be determined by the Alternate Program based on length of employment and feedback from the employer. Students may earn up to one credit per school year for work study.

Special Education Programs

Special Education programs at Newington High School are designed to meet the needs of students who have been identified through the Planning and Placement Team process as students needing specialized instruction. Individualized programs are designed at the Planning and Placement Team meeting to meet the needs of each student.

Student Ambassador Program

The purpose of this program is to assist transfer students as they assimilate to the Newington High School environment. The student ambassadors serve as hallway escorts, lunch buddies, and role models for new students as they transition to our school. Students are selected for this voluntary service program based upon the recommendation of their school counselor and their willingness to participate in the program. This is a non credit bearing activity.

Newington High School Community Service Program

The Newington High School Community Service Program is designed to promote student involvement in voluntary service to the community, and to recognize students for their willingness to serve. Students involved in the program will develop a sense of pride and commitment to voluntary service and experience the gratification and fulfillment that comes with the donation of one's time and talent for the good of others and the community.

General Guidelines

1. The program is open to all Newington High School students. Approval requires the submission of a completed application to their School Counselor prior to Progress Report distribution for each quarter. **NOTE:** Application must bear the signatures of the student, a parent, and the placement supervisor. NO service hours will be granted without the application first being approved.
2. **APPROVAL PROCESS:** Once the above signatures have been attained, the student must bring the completed application to their School Counselor for review. The application is then given to the House Principal who will determine if the placement and type of activity are appropriate for approval. (If NOT approved, the student has the option of appealing the decision to the High School Principal). **SUMMER:** Forms must be into their Counselor by the last day of the 4th quarter (before finals).
3. Permission is granted for the current semester (even if granted in the latter quarter). To continue beyond that semester, a student must complete an **Update Hours Form**. Service hours will accrue until submitted for credit.
4. Students will be required to keep a log of their hours and activities on the **Hours Log** form which can be obtained from their Counselor or House Principal. When an Hours Log is completed, it must be signed by the student as well as the supervisor from the placement. The Log must be submitted to the House Principal and approved before credit can be granted. To earn credit at the conclusion of the semester, all Log documents must be in by the last day of that semester. **SUMMER:** To earn credit during the summer, students looking to complete their graduation requirements must submit a completed Log to their House Principal by August 15th. All returning students have until the end of the first week of the fall semester to submit their Log.
5. **CREDIT:** A 1/4 of a credit can be earned for every 50 hours of service completed up to 200 hours of service for 1 full credit. Students can only earn 1 credit through this program for their entire High School career. No more than 1/4 credit may be earned in any quarter.
6. Students successfully completing their hours and submitting the appropriate documentation will have "Community Service" entered onto their transcript at the conclusion of that semester with the appropriate credit.
7. Students may be dropped from the program at any time for lack of adherence to their plan or if the intent of the program is not being served.

Newington Fire Department Cadet Program

The Newington Fire Department's Cadet Program is dedicated to educating the youth of Newington about the aspects of Fire Department operations. This purpose is accomplished through training, hands-on experience, and the support/observation of firefighters during everyday incidents. Cadets are not allowed to participate in any dangerous activities; rather, they are to function as support for other Fire Department personnel.

The Department offers the Fire Cadet training program to high school students. Applicants become eligible when they are currently enrolled in a secondary education institution (i.e. high school or vocational school), reside in Newington, and are between the ages of 16 and 18 years old. Participants must maintain passing grades on quarterly report cards and be of good moral character. Applicants must have written permission from a parent or guardian to enroll in the program.

Cadets may earn community service academic credit by accruing a minimum of 90 volunteer hours during the academic year. Forty-five hours must be spent on monthly Cadet activities including drills, cleanups, meetings, and field trips. The additional forty-five hours are to be completed through participation in regular department cleanups, training sessions, and fire responses.

To earn one-half credit, prospective Cadets must enroll in the program by September 15th. Those enrolling by January 15th can achieve one-quarter credit. The Captain in charge of the program will provide documentation to school administration attesting to the completion of time requirements by program participants.

Upon completion of the Cadet Program, participants will be eligible for placement in the Newington Fire Department.

School Counseling Program

School counseling is defined within the context of a comprehensive program intended to assist students with personal/social adjustment, school adjustment, school achievement, career development, decision-making and goal setting.

The comprehensive school counseling model includes four major components: the School Counseling curriculum which encompasses structured developmental guidance experiences presented systematically through groups (including classrooms) to promote growth of the psychological aspects of human development (e.g. self understanding, interpersonal relations, decision-making including, interpersonal relations, decision-making including career, goal setting and problem solving); individual planning which refers to the activities designed to help students monitor and direct their own learning and personal development. It includes individual advisement, placement and individual appraisal; responsive services which are reactions to immediate needs and concerns of individuals whether these concerns involve information, counseling, consultation, crisis intervention or referral; and program management activities which establish, maintain, and enhance the preceding three school counseling areas such as program development, materials development, parent programs, the testing program and community relations.

The School Counseling Coordinator is located in the Main School Counseling Office and the school counselors are assigned to one of three different house offices. There are two school counselors in each house office. As students progress, the school counselor remains responsible for the same students over a four year period. The Main School Counseling Office is located on the first floor across the corridor from the main office.

Career Education

Choosing one's field of work, one of the most important decisions of a lifetime, is as important to students who plan to go to college as it is to those who plan to go directly into the work force after high school. Both time and money can be saved by choosing a college and/or a college career pathway that leads to a satisfying field of work. This section of the **Program of Studies** is intended to direct parents and students to Newington High School courses or programs that are partially or wholly career-related.

The United States Office of Education and the Connecticut Department of Education recommend that all students graduating from high school acquire knowledge and experience from the following areas:

CAREER AWARENESS: Career awareness consists of a knowledge of one's values, goals, interests, aptitudes, abilities, skills, accomplishments, and experiences that suggest alternative directions for success and satisfaction in a career as well as knowledge of the spectrum of careers available and their employability. Decision making skills should be acquired to enable students to make realistic decisions about future careers.

CAREER EXPLORATION: Career exploration is the opportunity to sample occupations related to career goals by working in real situations in the community. These experiences enable students to make more realistic, experience-based career decisions.

SKILL DEVELOPMENT: Whether college-bound or work bound, every student should acquire at least one marketable skill before graduating from high school either through in-school classes or through out-of-school programs.

Cooperative Work Experience

Cooperative Work Experience (CWE), is a training program for seniors that provides for a combination of study in school with a job in industry or business. Work Experience is divided into two sections: Diversified Occupations for students with Technology, Business, Family and Consumer Sciences, Foods Management, and Health background; and Marketing Education for students interested in marketing and business management. **Each student will secure a job with a cooperating business or industry and will use this work situation as a training station.** Pre-apprentice program students do not have to be 18 in order to participate.

A student who wishes to enroll in a CWE program should qualify under the following criteria:

- Want to work immediately upon graduation OR want background information and skills for further industrial, technical, or business education.
- Have a reasonably good attendance record.
- Have a sincere desire to learn a trade or occupation.
- Have some background subject areas to reinforce an occupational choice.

Some occupational areas in which students might train include: accounting, data processing, auto mechanics, nurse aides, secretarial, carpentry, dental assistant, machine trades, graphics, plumbing, radio and T.V., general service trades, clerk, stockroom worker, and food service.

Cooperative training is a program of instruction designed to prepare students for entry jobs in the various industrial and business occupations and the skilled trades.

College Entrance Requirements

Generally, college requirements are stated in terms of a four-year high school program. It is advisable for students to begin an early study of college catalogues in order to assure their having the required subjects for entrance to the college of their choice. The school counselor aids the student in choosing a suitable school and determining the special requirements of the colleges within a university; for example, liberal arts, fine arts, engineering, and medicine may well have entirely different entrance requirements. Students are encouraged to use Naviance to obtain up to date college information.

Please be aware that beginning in 2015, the Connecticut State University System has revised its admission criteria. These schools include Central CT State University, Southern CT State University, Eastern CT State University, and Western CT State University. Students will now be required to complete the following course work to be considered for admission: **English** 4 years; **Math** 4 years including Algebra I, Geometry, Algebra II and a fourth year in an algebra intensive course such as Trigonometry or Probability; **Science** 3 years including one life and one physical science, and two laboratory courses; **STEM** 1 year elective studies in science, engineering, technology, or math; **Social Studies** 3 years including at least one year of US History and the equivalent of a half year in Civics or American Government; **World Language** 2 years of the same world language is required, however, 3 years are recommended; **Humanities** 1 year of coursework in humanities electives; **Arts** 1 year of coursework in the Arts; **Physical Education/Life Skills** 1 year of physical education and 2 years of life skills elective courses such as career/technical education, English as a Second Language, personal finance or nutrition and health.

NCAA Eligibility Center

Students planning to enroll as college freshmen who want to participate in **DIVISION I** or **DIVISION II** athletics, must be certified by the NCAA Eligibility Center. DIVISION III colleges and universities do not require students to be certified by the NCAA Eligibility Center because each college and universities set their own admissions standards and there are no initial-eligibility requirements in the division.

To begin the certification process, a student must register with the NCAA Eligibility Center at www.eligibilitycenter.org. In order for an official transcript to be forwarded to the NCAA Eligibility Center, a student must complete a **Transcript Release Form** and submit it to the Main School Counseling Office. The Transcript Request Form is available on the NCAA Eligibility Center website and the Main School Counseling Office. In addition, when registering for the SAT or ACT, student can ensure that the score is reported directly to the NCAA by inputting the NCAA Eligibility Center code of **9999**. The writing component of the SAT or ACT will not be used to determine your qualifier status.

The NCAA Eligibility Center will only use **approved courses** to certify your initial eligibility. The NCAA will evaluate a student's transcript and calculate a **Core-Course GPA**. No special values are given for "+" or "-" grades. For example, a B+ or B- is considered to be a B and worth 3 quality points. Please visit www.newingtonathletics.com or www.eligibilitycenter.org for an updated list of NCAA-approved and NCAA-denied courses at NHS. The table below indicates the minimum core course requirements.

Remember: meeting the NCAA academic requirements does not guarantee your admission into a college. You must apply for college admission.

NCAA Eligibility	Division I	Division II (2013 and After)
Core-Course Requirements	<ul style="list-style-type: none"> • 16 core courses-grades 9-12 • 4 Years of English • 3 Years of Math (Algebra I or higher) • 2 Years of Natural/Physical Science (1 year of lab if offered at school) • 1 Year of additional English, Math or Natural/Physical Science • 2 Years of Social Science • 4 Years of additional courses (from any area above, foreign language or comparative religion/philosophy) 	<ul style="list-style-type: none"> • 16 core courses-grades 9-12 • 3 Years of English • 2 Years of Math (Algebra I or higher) • 2 Years of Natural/Physical Science (1 year of lab if offered at school) • 3 Years of additional English, Math or Natural/Physical Science • 2 Years of Social Studies • 4 Years of additional courses (from any area above, foreign language or comparative religion/philosophy)
SAT/ACT Requirements	Sliding Scale SAT/ACT commensurate with GPA*	minimum 820 SAT (critical reading & math combined) minimum 68 ACT (sum score)
Minimum GPA	Sliding Scale SAT/ACT commensurate with GPA*	2.0 on a 4.0 scale in NCAA-approved courses

***Class of 2016:** NCAA implemented **new** academic rules and initial-eligibility requirements for students enrolling in college on or after August 1, 2016. For more information, visit the abovementioned websites.

Technical/Vocational Opportunities

Health Careers Collaborative

Academic Level

This course is open to eleventh and twelfth grade students from the high schools in the following districts: Glastonbury, Farmington, Hartford and Newington. Students attend their respective home schools to fulfill basic course requirements. The program is designed for students interested in acquiring skills and knowledge in the various Allied Health fields.

The course consists of two parts: the classroom component, which is offered at the hospital, offers a core curriculum on Allied Health careers; and the clinical component, which permits students to select four to six areas of concentration for the clinical experience. Students select their clinical experience from the following areas: Dental Clinician, Hospital Dietician, Hospital Engineering, Laboratory Technician, Medical Records, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Radiology, Radiation Therapy, Research Assistant, Respiratory Therapy, Recreation Therapy, Surgical Technician, Social Worker and Unit Clerk.

The program is conducted at local hospitals from 12:30 p.m. to 2:30 p.m. Transportation is provided to and from the hospital site. Entrance into the program is by application and prior approval of the student's school counselor and the Health Careers Collaborative Coordinator. Students who have completed course work toward the College Career Pathways Dual credit will receive priority in the application process.

2 Credits

Grades 11, 12

College Career Pathways Dual Credit

College Career Dual Credit is a program combining two years of high school with two years of college. It creates a career focus that allows students to direct their talents and interests. College Career Pathway programs provide a foundation of applied academics (courses incorporating hands-on experience and real-life applications) and the technical skills needed for current and future technical careers. Capital Community College Career credit will be awarded to students participating in the Occupational Child Care, Child Development, Preschool Program, Infant and Toddler, and Computer Applications and Advanced Computer Applications and Health Careers Collaborative courses. Manchester Community College Career credit will be awarded to students participating in the Culinary Careers Program. In order to qualify for these credits, students must complete a college application and earn a grade of 75 (C) or higher in the following academic courses: Special Topics in Public Speaking, Algebra II and Chemistry, with lab, as well as specified career/technical courses. When students complete this program, they are eligible to receive 12 college credits. They must obtain their transcripts directly from the Registrar at Capital Community College and/or Manchester Community College.

Junior/Senior Internship Program

This program is designed to link high school juniors and seniors with business and professional partners. Students selected for this program will intern at businesses in the community. Credit will be awarded according to the total amount of hours performed by the students as follows:

40 hours for 1/4 credit

80 hours for 1/2 credit

120 hours for 3/4 credit

160 hours for 1 credit

Students must have demonstrated good academic achievement, satisfactory social behavior, and good school attendance to be considered for this program. This is an excellent opportunity for students to be exposed to work situations that match their future career goals. Each intern will be required to attend work-related seminars, go through a selection process, and be evaluated by school staff and the employers. This program requires that transportation be provided by the student and possible early dismissal from school depending on the student's schedule and extracurricular activities. Interested students must consult with the Workforce/Development Specialist. Junior/Senior Internship may count as the mandatory fifth course providing the student has met all of his/her graduation requirements. Grades for this program are not used in computing GPA.

Job Shadowing Program

Job shadowing is an educational experience that gives students the opportunity to learn about career interests. People representing various businesses and professions throughout Hartford County and Connecticut allow students to visit their work sites for a day to talk with professionals in a chosen career field. These businesses provide students with valuable information including: nature of work, working conditions, required education and training, methods of advancement, earnings, job opportunities, and related career fields. Students interested in participating in this program should contact their school counselor.

College/Post Secondary Information

Admission requirements for colleges vary greatly, but general guidelines like those below can be very helpful for students in planning their program at Newington High School.

Highly Selective Colleges

English - 4 units
Mathematics - 4 units
Science - 3 units
Social Studies - 3 units
Foreign Language - 3 or 4 years of the same language
Fine Arts - Recommended
Extracurricular activities that indicate leadership and initiative
Top 5-10% of the class
Computer Competency

Very Competitive Colleges

English - 4 units
Mathematics - 3 or 4 units
Science - 3 units
Social Studies - 3 units
Foreign Language - 3 or 4 years of the same language
Fine Arts - Recommended
Extracurricular activities that indicate leadership and initiative
Top 25 % of the class
Computer Competency

Competitive Colleges

English - 4 units
Mathematics - 3 units
Science - 2 or 3 units
Social Studies - 2 units
Foreign Language - 2 years of the same language
Fine Arts - Recommended
Extracurricular activities that indicate leadership and initiative
Top 2/3 of the class
Computer Competency



Technical/Vocational Post Secondary Information

Many exciting career opportunities do not require a traditional four-year college degree. Changing technology and intense competition from other industrialized nations have increased the knowledge levels students will require if they are to reach their full potential in the occupations they enter as adults.

There are several levels of post-high school training students can consider if they do not wish to attend a four-year college or university yet wish to continue their education after high school.

Apprenticeship Programs

An apprenticeship is a job where the worker or apprentice learns a trade. The apprenticeship usually lasts about four years and consists of on-the-job training as well as classroom instruction. Training is administered and funded by a sponsor, and there are approximately 100,000 apprenticeship openings each year. Graduates are registered to receive certificates of completion from the U.S. Department of Labor or federally approved state apprentice agencies.

Certificate Programs

Certificate programs are designed primarily to assist students in securing employment and to emphasize skills required for that employment. Courses are designed for persons who do not seek a degree but wish to develop skills in a specialty area. Students may take courses at community colleges or specialty vocational schools which offer a number of programs.

Associate Degree Programs

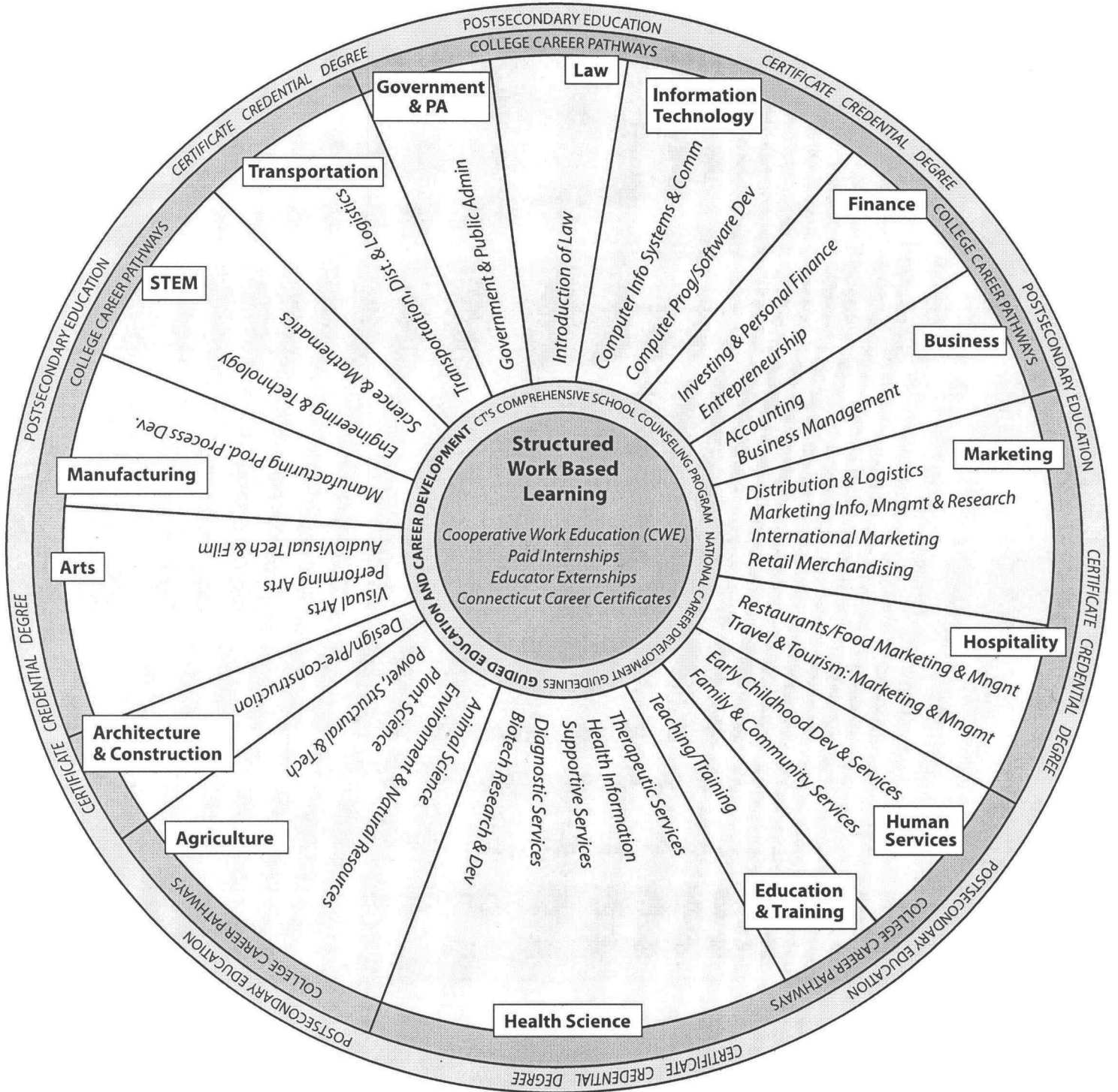
Associate degree programs are usually two years in length and are offered at community or junior colleges. Students may enroll in a terminal program which grants an associate degree or a transfer program which allows students to continue their education at a four-year college or university. There are many opportunities for students in both traditional course offerings and in specialized technical areas. Students completing these programs are eligible for many entry level occupations which offer growth opportunities.

Technical Education Programs

There are numerous opportunities available for students who wish to pursue technical training in order to compete in an increasingly complex vocational environment. Technical education programs prepare students for a variety of occupations requiring scientific and technical knowledge. These programs train students for entry level positions in rapidly growing fields with excellent growth potential. The Connecticut Community Technical Colleges offer a wide variety of courses and programs for students interested in this type of post-high school planning.

Students wishing additional information regarding any of the above mentioned programs should contact their counselor or the Workforce Development Specialist.

The Connecticut Career Pathways Initiative



Art Education

Experience for Today: Thinking Skills for Tomorrow

“Some painters transform the sun into a yellow spot. Others transform a yellow spot into the sun.” -
Pablo Picasso

Foundation/Apprentice Courses

*Drawing I	*Digital Media Foundation	Ceramics
Drawing II	*Photography I	Jewelry/Metal Design
Creative Drawing	Photography II	Sculpture/3-D Design
*Painting Media I	*Digital Graphic Design I	
Painting Media II	Digital Graphic Design II	
*Cartooning/Intro to Animation		

*Courses suggested for grade 9 students.

Master/Extended Learning Courses

Portfolio Preparation
Multimedia Art History
Digital Animation/Film
Advanced Placement (AP) Studio Art/2D Design

Art Education Prepares Students for Mastery of 21st Century Skills

Business leaders and visionary thinkers concerned about preparation of students for the future know that the ability to be creative – a key 21st Century Skill – is native to the arts and is one of the primary processes learned through arts education. The arts promote work habits that cultivate curiosity, imagination, creativity, and evaluation skills. Students who possess these skills are better able to tolerate ambiguity, explore new realms of possibility, express their own thoughts and feelings and understand the perspectives of others. Furthermore, these examples suggest ways that study of the arts can help produce globally aware, collaborative, and responsible citizens.

Communications in today’s interconnected world increasingly emphasize multimedia, and the arts are the media. For personal as well as professional success, students must therefore learn to critically interpret media messages, and to convey their own ideas through the medium of artistic form. Many courses in art explore the rich array of artistic media and tools by incorporating technology. All of those media, both traditional and new, offer powerful opportunities to cultivate 21st Century Skills and to articulate human expression.

Students’ capacity to create and express themselves through the arts is one of the central qualities that make them human, as well as a basis for success in the 21st century.

Art

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Art offerings.

What can I do with a major in Art?

Art, Museums

- Administrator, Curator, Publications, Sales

Art Sales

- Auction House, Galleries, Department Stores

Retailing

- Fashion Coordinator, Buyer, Display

Fashion, Textile and Interior Design

Visual Arts

- Cartoonist
- Crafts person (weaver, glass blower, potter)
- Fashion Designer
- Graphic Designer
- Illustrator
- Painter
- Sculptor
- Textile Designer
- Advertising Designer
- Art Director/Broadcast
- Production Artist
- Art Therapist
- Exhibit Designer
- Puppet Designer
- Set Designer

Education

- Teacher

Media Productions/Design & Photography

- Animator
- Design & Production
- Video Production
- Costume Designer
- Director (Video/TV, Film Audio, Theater)
- Set Designer
- Stage Manager
- Commercial Photographer
- Fashion Photographer
- Forensic Photographer
- Industrial Photographer
- News Photographer
- Photojournalist
- Photo Technician
- Photo Editor
- Graphic & Interactive Communication
- Print Production
- Web Designer
- Game Art & Design
- Art Director
- Film Production Manager
- Storyboard Artist
- Technical Animator
- Media Director
- Digital Film Maker
- Interior/Exterior Design
- Motion Graphics Animator
- 3D Character Sculptor
- 3D Lighting Director

Drawing I

Academic Level

This foundation course provides opportunity for students to explore the introductory techniques and concepts of drawing. The course is designed to provide the environment for student-centered opportunities for creating images. Graphic media such as pencils, pen, conte crayon, and charcoal will be incorporated into art works that challenge the student to create personal and original solutions to various drawing concepts and techniques. This course is also recommended as an introductory course in art.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Drawing II

Academic Level

Drawing II will allow the student to use skills learned in Drawing I for the purpose of self-expression. New skills will continue to be taught with more time given to the study of imaginative ways of creating art including assignments in perspective, value, and rendering. Work from this course could serve as the beginning of a student's portfolio.

1/2 Credit

1 Semester

Prerequisite: Drawing I

Grades 9, 10, 11, 12

Creative Drawing

Academic Level

Drawing is a fundamental form of art. This course takes the student beyond representation into the realm of creative expression. Media such as: pen & ink, oil pastel, etc. will be used to explore realistic and abstract expression. Work from this course could serve as the beginning of a student's portfolio preparation.

1/2 Credit

1 Semester

Prerequisite: Drawing I

Grades 9, 10, 11, 12

Painting Media I

Academic Level

Painting I is an introductory course for anyone who would like to learn the art of painting. Major styles of painting and the work of important artists will be used as the basis of projects. Art appreciation will be incorporated into the course work. The characteristics of a variety of paint media will be explored.

1/2 credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Painting Media II

Academic Level

Painting II continues the explorations begun in the previous course. More advanced techniques and projects will challenge the students technically and aesthetically. Various media will provide greater opportunities for self-expression. Work from this course could serve as the beginning of a student's portfolio preparation.

1/2 Credit

1 Semester

Prerequisite: Painting Media I

Grades 9, 10, 11, 12

Foundations of Digital Media & Photography

Academic Level

Computers and other digital tools have revolutionized the visual and performing arts. This introductory course will explore the many ways that computer and digital design applications can be used to produce original works of art. Using software and digital tools such as: Adobe Creative Suite, drawing/pen tablets, and digital SLR cameras; students will explore drawing, painting, illustration, photography and text formatting. Students will work on projects that will revolve around a context of various movements within both art and music. The course is a preparatory course for the more advanced digital art courses and will provide a strong foundation for performance within those courses.

1/2 credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

But, this course is a prerequisite for most digital courses

Digital Graphic Design I **Academic Level**

Students will work on projects that will result in brand development and create logos, corporate identities, and advertisement campaigns. Students will learn to identify those visual and psychological elements that are presenting successful advertising. Students will create an awareness of spatial composition using the elements and principles of design, while connecting concept and meaning to visually cohesive designs using Adobe Illustrator and Photoshop.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Digital Graphic Design II **Academic Level**

Students will apply the principles of Digital Graphic Design I and be challenged with more advanced concepts on both technical and conceptual levels. Work from this course could serve as the beginning of a student's portfolio preparation. Students will work on projects that will result in: music posters, book cover design, multi-page article layouts and more. Students will study the psychology persuasion through the analysis of contemporary influences such as social networking, modern artists, current advertising and how the elements and principles of design are applied to such venues.

1/2 credit 1 Semester
Grades 9, 10, 11, 12
Prerequisite: Digital Graphic Design I

Cartooning/Intro to Animation **Academic Level**

The art of cartooning and animation has delighted people of all ages for decades. Cartooning and animation concepts and skills have significant applications in both traditional and contemporary electronic media. The two art forms complement each other by embracing common concepts, techniques, media and technology. In this course students learn how to develop the characters, settings and story needed to create the elements for cartooning. After developing a set of characters and story, students will employ those skills and concepts in the creation of original comic strips, political cartoons, graphic novels and animations. A significant portion of time will be devoted to preparing and animating student work using several different computer animation programs.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12
No Prerequisite

Photography I **Academic Level**

Students will explore the distinct form of art in image making. Through the new media of digital photography, students will learn to professionally operate a digital SLR camera, how to operate professional studio equipment, and create digital files in Adobe Photoshop. The various units involve portraiture, fashion, commercial products, fine art and outdoor space. The works of many influential artists will be examined and interpreted visually through photography. Students will learn to communicate personal and social concepts through a new visual language and how to constructively discuss them through critique.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Prerequisite: Foundations of Digital Media & Photography or Digital Graphic Design I

Photography II **Academic Level**

This semester long course will explore photography on a deeper conceptual level. Students will explore their interests and focus on theme and the idea of conveying a message. Students will refine their voice and style as visual artists, and become more proficient in Adobe Photoshop and other digital software, as they explore more advanced technique and process.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12
Prerequisite - Photography I

Ceramics **Academic Level**

Students will explore clay as an expressive art material. A variety of hand building, pottery wheel, and glazing techniques will be introduced and utilized in creating pottery, and other decorative clay projects.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12
No Prerequisite

Jewelry/Metal Design **Academic Level**

Students can experience the excitement of designing and shaping metal into items such as rings, bracelets, pendants, and earrings. Basic processes of construction and decoration in sheet metal and wire will be introduced. They include sawing, piercing, soldering, forming, forging, and polishing.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12
No Prerequisite

Sculpture/3D Design **Academic Level**

This studio course explores the media, tools, techniques and artists of 3-dimensional design and sculptural expression. Students will use professional sculpture materials such as paper, soapstone, wood, clay, plaster, found objects and wire to design and create personal sculptural statements. The skills and concepts necessary for the creation of sculptural forms will be studied through student investigation and research into design problems and the development original student ideas. The study of three dimensional forms also leads to greater understanding of the built environment. Work from this course could serve as the beginning of a student's portfolio preparation.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12
No Prerequisite

Multi-Media Art History **Academic Level**

Discover how works of art and artists were influenced by historical events and society. From the Ancient Greeks to the 20th Century, artists have had an impact on culture. Students will gain an understanding of art history, through "hands-on" projects, on-line tours, field trips, readings and class discussion. Two-dimensional and 3-dimensional artwork will be created using varied art techniques in media such as paint, clay, paper, and wire. The projects will correspond to the period and style being studied.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Suggested Prerequisite: Successful completion of two or more of the following courses: Cartooning/Intro to Animation, Creative Drawing, Drawing, Foundation of Digital Media & Photography, Digital Graphic Design, Painting, Photography, Sculpture, or teacher recommendation.

Advanced Placement (AP Studio Art/2D Design)

AP/ECE Level

The Advanced Placement Studio Art course follows the College Board's Advanced Placement (AP) Studio Art curriculum. Students may select from one of the three concentrations.

- (0040) 2-D Design Portfolio: digital imaging, graphic design, photography
- (0041) 3-D Design Portfolio: sculpture, architectural models, jewelry, metal work, ceramics
- (0042) Drawing Portfolio: drawing, painting, mixed media, rendering realistic and abstract forms

Students will complete and submit a portfolio of their work, demonstrating quality (excellence in original works), concentration (in-depth, thematic & personal commitment to a particular artistic concern) and breadth (variety of artistic experience). Successful students may earn college credit and/or advanced placement credit depending upon the individual college involved and the quality of their submitted AP Portfolio.

1 Credit

Full Year

Prerequisite: Teacher Recommendation and Advanced Work in Concentration Area

Grade 12

Portfolio Preparation

Academic Level

Portfolio Preparation is a semester course for highly motivated juniors who are considering Advanced Placement (AP) Studio Art senior year or for seniors building an art portfolio for college. This studio course will further develop skills and understanding of a variety of 2-dimensional or 3-dimensional media and techniques reinforcing the art elements and principals of design. Students will complete six to ten quality pieces of original work which follows the College Board's Curriculum for 2-Design, 3-Design or Drawing portfolios.

1/2 Credit

1 Semester

Suggested Prerequisite: Successful completion of two or more of the following courses:

Grade 11, 12

Cartooning/Intro to Animation, Creative Drawing, Drawing, Digital Media Foundation, Digital Graphic Design, Painting, Photography, Sculpture, or teacher recommendation.

Digital Animation/Film I

Academic Level

Students will learn about digital animation and digital movie production software and hardware through the completion of multiple digital animation and movie projects. Students will learn about film industry careers while they develop and apply creative thinking, digital media literacy, and movie making skills through the participation of a mock production company and digital movie productions. Students will develop and apply transferable "soft skills" such as collaboration, communication, leadership, creativity, and project management skills while acting as a member of a production team. In the first semester, students work as individuals to complete units that explore and encourage the development of skills in digital animation and movie making. This comprehensive instructional strategy mirrors digital media and film industry project work and results in the development of valuable film industry production and management career skills.

1/2 Credit

1 Semester

Grades 10, 11, 12

Suggested Prerequisite: Successful completion of two or more of the following courses: Cartooning/Intro to Animation, Creative Drawing, Drawing, Foundation of Digital Media & Photography, Digital Graphic Design, Painting, Photography, Sculpture, or teacher recommendation.

Digital Animation/Film II

Academic Level

Students will learn about digital animation and digital movie production software and hardware through the completion of multiple digital animation and movie projects. Students will learn about film industry careers while they develop and apply creative thinking, digital media literacy, and movie making skills through the participation of a mock production company and digital movie productions. Students will develop and apply transferable "soft skills" such as collaboration, communication, leadership, creativity, and project management skills while acting as a member of a production team. In the second semester, students select specific areas of interest and form a production company to simulate a real world environment. After the formation of the company, students will select further three units (from a choice of five) and produce content to submit to the Connecticut Student Film Festival.

1/2 Credit

1 Semester

Grades 10, 11, 12

Suggested Prerequisite: Successful completion of two or more of the following courses: Cartooning/Intro to Animation, Creative Drawing, Drawing, Foundation of Digital Media & Photography, Digital Graphic Design, Painting, Photography, Sculpture, or teacher recommendation.



Career/Technical Education Knowledge and Skills for The 21st Century

Career/Technical Education Courses provide life-long knowledge and skills:

- Academic/Technical
- Writing, Speaking, and Listening
- Decision Making
- Construction/Manufacturing Technology
- Technology
- Critical Thinking
- Problem Solving
- Marketing, Hospitality/Management, and Entrepreneurship
- Financial Literacy
- Engineering/Architecture Design
- Creativity
- Information Processing
- Food Production, Nutrition, and Culinary Arts
- Child Development
- Legal Rights and Responsibilities
- Postsecondary and Career Pathways
- Responsible Consumerism
- Working Collaboratively
- Citizenship
- Website Development
- Graphic Communication and Design
- STEM

Career/Technical Education also provides **career pathway and student success planning activities**:

- Examining career and postsecondary interests and aptitudes
- Investigating career pathways
- Learning how to find and apply for a job
- Learning how to write a resume
- Developing job interviewing skills
- Exploring careers through online resources
- Actual on the job training
- Internships/Job Shadows
- Developing 21st Century Skills

Career/Technical Education Courses provide students with **College/Career Academic/Technical Knowledge and Skills for success in the 21st Century**

Career/Technical Education

Business • Family and Consumer Sciences • Technology

Knowledge and Skills for Today and Tomorrow

Courses in Business

- Automated Accounting I
- Automated Accounting II
- Marketing I/Work Practicum
- Marketing II/Work Practicum
- * Study Skills
- Business Principles and Management/E-Commerce
- * Computer Applications/College/Career Dual Credit
- * Advanced Computer Applications/College/Career Dual Credit
- Web Design I
- * Information Processing
- * Advanced Information Processing
- Business Law
- Co-op Work Experience
- Co-op Work Practicum
- Personal Finance
- Financial Planning
- International Business
- * Introduction to Business
- * Hospitality and Tourism
- * Graphics and Design I
- Graphics and Design II

Courses in Family and Consumer Sciences

- * Family Life
- Early Child Development and the NHS
- Preschool/College/Career Dual Credit
- * Hospitality and Tourism
- * Food/Hospitality Essentials/Culinary I
- * Healthy Cuisine/Culinary I
- Baking and Pastry Arts/Culinary II
- Culinary III/College/Career Dual Credit
- Hospitality and Management
- Occupational Child Care and Cooperative
- Work Study/College/Career Dual Credit
- Infant and Toddler Development
- and the NHS Infant/Toddler Center/College/Career Dual Credit
- Co-op Work Experience
- Co-op Work Practicum

Courses in Technology

- * Energy Systems
- * Engineering Design and Construction
- Architecture Drawing and Design
- * Graphics and Design I
- * Graphics and Design II
- Web Design I
- Home Construction
- Construction Trades
- Carpentry
- General Contracting
- * Robotics
- CAD
- 3 Plane Modeling and Drawing
- Nanotechnology
- Co-op Work Experience
- Co-op Work Practicum

* Courses recommended for students entering Grade 9.

Business

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Business Education offerings.

Careers that can be followed with a major in Business are:

Accountant	Sales Support Personnel	Computer Hardware Technician
Cost Accounter	Real Estate Agent	Computer Operator
Auditor	Retail Merchandising	Computer Programmer/Systems Tester
Tax Accounter	Broker	Teacher/CWE Coordinator
Systems Analysis Associate	Small-Business Owner	Corporate Financial Manager
Management Services Advisor	Business Management	Banker
CPA	Entrepreneurship	Insurance Agent
Business Education/Computer Teacher	Administrative Assistant	Investment & Financial Agent/Representative
Advertising and Promotion Associate	Clerk	Financial Services/Sales Representative
Marketing Manager	Loan Support Processor	Human Resources Manager
Marketing Researcher	Operations Specialist	Small Business Entrepreneur
International Marketing	Receptionist	International Business Manager
Information Systems Manager	Bank Associate	Productivity Manager
Customer Service Representative	Client Server Technician	

Automated Accounting I

Academic Level

This course is designed to provide instruction in the fundamental accounting concepts and techniques of the sole proprietorship and corporate form of business. Students will become familiar with accounting careers, terminology, concepts, principles, and practices by means of drills and realistic practice materials.

Computer-based accounting is presented using an accounting software program. A summary project in which each student assumes the role of company accountant is presented at the end of the course.

1 Credit

No Prerequisite

Grades 10, 11, 12

Automated Accounting II

Academic Level

This course is designed to give the advanced student the opportunity to apply the basic concepts and principles of first-year accounting to a variety of advanced online accounting systems. An in-depth study of partnership, corporate, and cost accounting is also covered. Several accounting projects using the microcomputer will be completed during the course. A thorough review of Automated Accounting I is stressed at the beginning of the year.

1 Credit

Prerequisite: Automated Accounting I

Grades 11, 12

Personal Finance

Academic Level

This course will enable students to understand the basic principles of personal finance in order to make informed financial decisions, become financially independent, and meet the challenges of a global society in which they will hold jobs, pay taxes, support themselves and families, develop enterprises, and uphold their civic duties. Emphasis will focus on developing a basic understanding of financial institutions, the use of credit, and investment options.

1/2 Credit

No Prerequisite

1 Semester

Grades 10, 11, 12

Financial Planning

Academic Level

Financial Planning is a sequential course in the financial literacy program. This course will enable students to understand and explore investment products, including the Stock Market, mutual funds, bonds, and other types of investments. Students will analyze risks involved that can be reduced through various types of insurance and will explore wills and estate planning. Students will also become familiar with the IRS and state tax codes as well as taxes paid on the local level.

1/2 Credit

Prerequisite: C or better in Personal Finance Grades 10, 11, 12

1 Semester

Business Law

Academic Level

Students will develop a basic understanding of their individual rights, obligations, and responsibilities under the law in handling business transactions. Students will explore civil law, the criminal justice process, crime and punishment, and contract law as they relate to the Federal and State court systems.

The course involves studying rules of law and how those rules apply to factual, real-case situations. The students will also participate in a classroom mock trial to further their understanding of law and complete projects using various computer applications.

1/2 Credit

No Prerequisite

1 Semester

Grades 10, 11, 12

Computer Applications/College Career Dual Credit

Academic Level

Students will use computers as a personal and business tool. Software for word processing, database, spreadsheet, telecommunications, and graphics will be used. Multimedia and digital tool applications will also be explored. This course is an excellent companion to Information Processing. Successful completion allows students to obtain their Performance Graduation requirement in the area of technology.

1/2 Credit

No Prerequisite

1 Semester

Grades 9, 10, 11, 12

Advanced Computer Applications

College Career Dual Credit

Academic Level

This course will provide an opportunity for students to further enhance and utilize the skills learned in Computer Applications. Students will complete individualized projects incorporating telecommunications, desktop publishing, data manipulation, and multimedia software packages. Students who complete Computer Applications and Advanced Computer Applications are eligible to earn three college credits through Capital Community Technical College.

1/2 Credit

1 Semester

Prerequisite: Computer Applications

Grades 9, 10, 11, 12

Information Processing

Academic Level

Students will develop mastery of Microsoft Word 2010. Students will learn to use the Ribbon to locate commands, the Program Window controls, File Tabs, the Office Help, and customize the Quick Access Toolbar. They will format, key and create documents that integrate a variety of academic and technical skills and software applications.

Successful completion allows students to obtain their performance graduation requirement in the area of technology.

****Strongly recommended for all incoming freshmen.**

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Advanced Information Processing

Academic Level

This course is designed to expand knowledge of the advanced features of Microsoft Office 2010. Students will create, format, and edit a variety of documents and perform telecommunications skills related to career and postsecondary preparation. Students will focus on academic/technical skill-based applications that provide knowledge in office management fields and are critical for success in the majority of technological occupations in the 21st Century.

1/2 Credit

1 Semester

Prerequisite: Information Processing

Grades 9, 10, 11, 12

Business Principles and Management/E-Commerce

Academic Level

Business Principles and Management provides insight into the characteristics, organization, and operation of a business. This course introduces contemporary issues as well as routine factors that affect business operations, including the environment of business, business ownership, finance, production, marketing, human resources, government regulations, planning, and taxation.

Students will engage in a technology-based driven curriculum that will allow them to learn how business concepts apply to the electronic world of e-commerce, develop and manage global enterprises, integrate creatively, analyze, organize, utilize a variety of electronic business models, and complete a comprehensive e-commerce business project.

1/2 Credit

1 Semester

No Prerequisite

Grades 11, 12

Marketing I/Work Experience

Academic Level

This course prepares students for careers in marketing and management by providing unique and meaningful occupation-oriented education. The major areas studied are retail business organizations, consumer buying motives, product information and fashion trends, sales promotion, advertising and selling activities, and store operations and control. Classroom activities are enhanced through guest speakers and computer activities.

Seniors enrolling in Marketing I may also earn work credit by enrolling in this course.

Early release privileges are available for students employed in part-time jobs. Credit is earned for both the classroom and work phase of the course.

1 Credit Classroom

1 Credit Work Practicum

Grades 11, 12

No Prerequisite

Marketing II/Work Experience

Academic Level

This advanced course in marketing provides the student with the opportunity to increase his/her knowledge in the field of marketing and management through classroom instruction and on-the-job training. Emphasis is on the organization and operation of business and the skills and attitudes necessary for seeking and maintaining successful employment. Students prepare a job seeking Career/College Portfolio. Other areas covered include Global Marketing, Sports Marketing and Travel and Tourism.

Early release privileges are available for students employed in part-time jobs. Credit is earned for both the classroom and work phase of the course.

1 Credit Classroom

1 Credit Work Practicum

Grade 12

Prerequisite: Marketing I

***Any senior who does not have enough credit to graduate with his class and must return to school to fulfill graduation requirements or is on accelerated graduation may elect Marketing/CWE work experience during the fall semester as a half-year course.

Cooperative Work Experience

Academic Level

Work Experience is offered to qualified 12th grade students. The program is divided into two parts. The first part is class instruction, in which students develop attitudes, ideas, and skills related to all types of occupations. The second part is on-the-job training experience with teacher-employer supervision in a career of the student's choice. Classroom activities are enhanced through guest speakers, field trips, and computer activities. Early release privileges are available for this purpose. Credit is given for both the classroom and work phase of the course.

1 Credit Classroom

1 Semester

1 Credit Work Practicum

Grade 12

Cooperative Work Experience:

Diversified Occupations

Academic Level

Any senior who does not have enough credit to graduate with his class and must return to school to fulfill graduation requirements may select CWE/DO during the fall semester only as a half-year course. If for any reason the student completes a full year, he/she may complete the course for full credit.

1/2 Credit Classroom

1 Semester

1/2 Credit Work Practicum

Grade 12

Hospitality and Tourism**Academic Level**

This course explores two of the most diverse and global businesses, hospitality and tourism. Topics will include hospitality and tourism business and markets and exploring careers in marketing, hospitality and tourism. This course emphasizes the application of management level decision-making skills in hotel/lodging, human resources, food and beverage, and travel and tourism operations. This course will allow students to investigate trends and technology in the hospitality industry while developing customer service skills. Student will study the impact of these industries on social, environmental, economic, and consumer factors. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1/2 Credit

1 Semester
Grades 9, 10, 11, 12**Study Skills****Academic Level**

This 1/2-year course is designed to help students master study skills for taking notes rapidly and efficiently for success in all subject areas. Strategies and techniques for note taking, listening, reading, preparing for tests, outlining, researching, organizing, studying, previewing, and utilizing computer applications will be presented. Information Processing is an excellent companion course.

1/2 Credit

No Prerequisite

1 Semester
Grades 9, 10, 11, 12**International Business****Academic Level**

This course will enable students to understand an expanding global economy, gain the ability to analyze world economic trends and their impact on financial decisions with a reasonable degree of accuracy, and ensure that students graduate with the ability to use knowledge and skills effectively in global organizations. Emphasis will focus on the student's role as a global citizen, connections to a multicultural world, and relationships that exist between governments, consumers, and international companies.

1/2 Credit

No Prerequisite

1 Semester
Grades 10, 11, 12**Introduction to Business****Academic Level**

This course will introduce students to the concepts and skills required in today's marketplace. Practical applications will help students learn about the business world and how to make business decisions in a global economy. Basic personal financial management and career exploration in the Business and Finance Career Cluster will be explored.

1/2 Credit

1 Semester
Grades 9, 10, 11**Graphics and Design I****Academic Level**

This course is designed to provide students with a fundamental understanding of the graphic communications and design world. They will learn how to create aesthetically pleasing designs, how to work with consumers, digital graphics, and integrate their own interests and career pathways with the resources of a technological society. Page layout, photo editing, graphic production and electronic imaging will be explored using current industry standard software applications.

1/2 Credit

Prerequisite: None

1 Semester
Grades 9, 10, 11, 12**Graphics and Design II****Academic Level**

This course will provide students with experiences in creative problem solving and the practical implementation of solutions across multiple areas of graphic communications. Knowledge and skills in digital design, layout procedures, and imaging will be enhanced through experiences that simulate a career pathway in the graphic design industry.

1/2 Credit

Prerequisite: Graphics and Design I

1 Semester
Grades 9, 10, 11, 12**Web Design I****Academic Level**

This course will enable students to learn the basics of designing and developing a website and gain an understanding of careers within the Information Technology Pathway. Design issues specific to web-based presentations, web page layout, effective navigations, and use of graphics, fonts, and color as well as critically evaluating website quality will be areas of concentration.

1/2 Credit

Prerequisite: Graphics and Design I - B or better

Graphics and Design II - B or better

1 Semester
Grades 10, 11, 12

Family and Consumer Sciences

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Family and Consumer Science offerings.

Careers that can be followed with a major in FACS are:

Baker/Pastry Chef	Restaurant Owner	Child Care Worker
Executive Chef	Dietician	Early Childhood Educator
Food Preparation Worker	Teacher	Parent Educator
Line Cook	Nutritionist	Teacher's Aide
Maitre de	Food Services Manager	Child Psychologist
Banquet Services/Caterer	Events Manager/Planner	Speech/Language Pathologist
Conventions/Service Manage		

Hospitality and Tourism Academic Level

This course explores two of the most diverse and global businesses, hospitality and tourism. Topics will include hospitality and tourism business and markets and exploring careers in marketing, hospitality and tourism. This course emphasizes the application of management level decision-making skills in hotel/lodging, human resources, food and beverage, and travel and tourism operations. This course will allow students to investigate trends and technology in the hospitality industry while developing customer service skills. Student will study the impact of these industries on social, environmental, economic, and consumer factors. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Food/Hospitality Essentials/Culinary I Academic Level

This course provides an opportunity for students to develop knowledge and skills in food preparation through a variety of cooperative and independent learning activities. Students will gain knowledge and experience of basic nutrition and food preparation principles through classroom instruction and lab experience. Topics covered will include food hospitality career exploration, food safety and sanitation, baked goods, meal planning, and consumer and health issues related to food and nutrition. Students will also utilize technology applications to study the elements of food hospitality, nutrition, and healthy eating habits. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Healthy Cuisine/Culinary I Academic Level

This course provides the student with an opportunity to explore nutrition through food preparation and lab activities. The importance of food safety and sanitation along with basic preparation skills will be covered. Menu and meal planning will occur based on healthy food choices and optimal nutritional value of foods. An emphasis will be placed on the prevention of disease through nutrition and lifestyle choices and developing attitudes of wellness. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1/2 Credit 1 Semester
Grades 9, 10, 11, 12

Baking and Pastry Arts/Culinary II Academic Level

This course will allow students to attain the knowledge and skills needed by bakers who work independently or in food industry settings. Food industry-based baking and pastry items will be the focus. Students will prepare cookies, cakes, pastries, breads, and specialty desserts within a commercial kitchen environment. Classroom learning will focus on health and wellness and career exploration. Credit is earned for both the classroom and after school or evening work related to culinary events. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1/2 credit 1 Semester
Grades 9, 10, 11, 12
Prerequisite: A Culinary I course

Culinary III/College Career Dual Credit Academic Level

This course is designed to create a complete foundation and understanding of Culinary Careers leading to postsecondary education or a food hospitality service career. Students will examine and discuss the hospitality and food service industry and the role of the modern kitchen. They will also demonstrate and practice food safety and sanitation, use professional kitchen equipment, practice cooking methods, techniques and food preparations, apply front of the house techniques and methods of operation of a dining room, and identify and examine the role of Garde Manger. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning. This course allows students to earn college/career dual credits from Manchester Community College and enroll in tuition free classes while a student at Newington High School.

1 1/4 Credit Double Period 1 Semester
Grades 11, 12
Prerequisite: A Culinary I course

Hospitality and Management Academic Level

This course is designed for students who want to continue their education at the postsecondary level and/or enter a career pathway within the hospitality, food production and food service industries. It is designed to refine hands on production of fundamentals in the commercial kitchen, practices required for commercial food service operations management, front of the house techniques, methods of operation of a dining room, Garde Manger, and develop and understand the necessity for leadership skills, identifying and practicing menu planning principles, purchasing and receiving, cost control, and marketing functions in quality and food service operations and management. Students will also identify skills, certifications, and experience required for careers in the hospitality and food service industries. Credit is earned for in-house dining room activities and after school and evening work-related culinary events. Areas of specialization, related occupations, and postsecondary education within the Hospitality and Tourism Career Cluster will be identified and integrated into classroom learning.

1 1/4 Credit Double Period 1 Semester
Required Prerequisite: Culinary Careers Grades 11, 12

Early Child Development and the Newington High School Preschool/College Career Dual Credit Academic Level

This course deals with the practical aspects of child rearing. Students are provided with the opportunity to work with preschool children in a nursery school at Newington High School. They will be able to plan and implement the age-appropriate activities for the preschoolers. This course offers an overview of the physical, social, emotional, and intellectual development of the child from three to five years old. It also offers an understanding of the careers in the field of child development.

This course is part of the College Career Pathway Program. When successfully completed, it is part of a two-course program where students will be able to earn three college credits through Capital Community Technical College.

1/2 Credit 1 Semester
Prior Approval of Instructor Grades 10, 11, 12

Infant and Toddler Development and the NHS Infant/Toddler Center/College Career Dual Credit Academic Level

This course explores the practical aspects of raising a child from 24-36 months old. Students work with infants and toddlers in the NHS Infant/Toddler Center. They learn to plan and implement age-appropriate activities, interact with parents, observe, collect data, and analyze infant and toddler development and behaviors. It also examines the social, emotional, physical, and intellectual development of infants and toddlers as well as career opportunities in child development areas.

This course is part of the College Career Pathway Program. When successfully completed, it is part of a two-course program where students will be able to earn three college credits through Capital Community Technical College.

1/2 Credit 1 Semester
Prior Approval of Instructor Grades 10, 11, 12

Occupational Child Care and Cooperative Work Study College Career Dual Credit Academic Level

This course will provide students with an opportunity to work and interact with kindergarten-age children. Students will gain practical knowledge in childcare and the teaching of young children. Students will be given an out of school assignment.

This course is part of the College Career Pathways Program. When successfully completed, it is part of a two-course program where students will be able to earn three college credits through Capital Community Technical College. These courses fulfill the Technology requirement for the College Career Pathways Program.

1 1/4 Credit 1 Semester
Prerequisite: Early Child Development and Grades 11, 12
prior approval of instructor

Family Life Academic Level

This course concentrates on those factors relating to parenthood, the birth of the child and the understanding of child development. Topics include: relationships, factors to consider before having children, genetics, human reproduction, family planning, costs associated with children, prenatal care, postnatal care, and development. The course will also provide an overview of the physical, social, emotional, and intellectual development of the child from birth to age one.

1/2 Credit 1 Semester
No Prerequisite Grades 9, 10, 11, 12

Technology Education and Engineering

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Technical Education offerings.

Careers that can be fulfilled with a major in Technical Education are:

Skilled Craft Apprentice	Web Page Designer	Manufacturer's Representative
Carpenter	Mechanical Engineer	Construction Inspector
Drafter/CAD Operator	Electrical Engineer	Building Manager
Concrete Worker; Mason	Structural Engineer	Construction Supervisor/Manager
Electrician	Teacher	Developer
Instructor/Educator	Architect	Facility Manager
Plumber	Safety Professional	Industrial Designer
Roofer	Field Engineer	Construction Engineer
Appraiser	Marketing Engineer	Industrial Engineering Technician
Cost Estimator	Graphic Designer	Civil Engineer
Inspector/Code Enforcement	Manufacturing Engineer	
Quality Control Manager	Architectural Engineer	
Technician	Construction Superintendent	
Design/Pre-construction	Electrical Inspector	
Engineering Designer	Materials Engineer	

Graphics and Design I

Academic Level

This course is designed to provide students with a fundamental understanding of the graphic communications and design world. They will learn how to create aesthetically pleasing designs, how to work with consumers, digital graphics, and integrate their own interests and career pathways with the resources of a technological society. Page layout, photo editing, graphic production and electronic imaging will be explored using current industry standard software applications.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Graphics and Design II

Academic Level

This course will provide students with experiences in creative problem solving and the practical implementation of solutions across multiple areas of graphic communications. Knowledge and skills in digital design, layout procedures, and imaging will be enhanced through experiences that simulate a career pathway in the graphic design industry.

1/2 Credit

1 Semester

Prerequisite: Graphics and Design I

Grades 9, 10, 11, 12

Web Design I

Academic Level

This course will enable students to learn the basics of designing and developing a website and gain an understanding of careers within the Information Technology Pathway. Design issues specific to web-based presentations, web page layout, effective navigations, and use of graphics, fonts, and color as well as critically evaluating website quality will be areas of concentration.

1/2 Credit

1 Semester

Prerequisite: Graphics and Design I—B or better

Graphics and Design II—B or better

Grades 10, 11, 12

Engineering Design & Construction

Academic Level

This is an exploratory and foundation course for students interested in pursuing any of the pathways within the STEM Career Cluster. Students will develop knowledge of basic engineering concepts, design specifications and technology applications. Project-based activities will focus on academic as well as technical skill sets. Areas of specialization, related occupations, and postsecondary education will be identified and integrated into classroom learning.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11

Home Construction

Academic Level

This course focuses on residential and/or recreational construction. Students will learn about the tools, materials, equipment and methods used in the light construction industry; structural analysis and design, as well as presentation and working drawings. Students will also estimate materials and labor costs and acquire knowledge of industry standards, including building codes, health and safety mandates and energy conservation strategies. Teams of students will design and construct modular, scale-model wood framed houses. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit

1 Semester

Grades 10, 11, 12

Construction Trades **Academic Level**

This course covers the fundamentals encompassed in the building trades. Students will learn basic electrical wiring, plumbing, masonry, roofing and wall finishes. Students will be required to interpret written plans and schematics and complete work according to code specifications. Students will also be required to understand terminology and employ the tools of the trade. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit **1 Semester**
Prerequisite: B or better average in Grades 10, 11, 12
any Technology Education & Engineering Course

Carpentry **Academic Level**

This course will provide students with the skills necessary to cut, shape, combine, bend and finish materials using hand and machine tools. Students will learn to interpret drawings, create templates and fabricate objects according to outlined specifications. Teams of students will design and build custom cabinetry. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit **1 Semester**
Prerequisite: Any Technology Education Grades 10, 11, 12
& Engineering Course

General Contracting **Academic Level**

This course is designed to introduce students to the business/management aspect of construction. Students will learn the means and methods used in the execution of a construction project in accordance with various contract documents. This will include contract agreements, including budget, the general and special conditions and the plans and specifications of the project as prepared by a design professional such as an architect. Students will also learn to make provisions for the supplying of all material, labor, equipment, (engineering vehicles and tools) and services necessary for the construction of various projects. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit **1 Semester**
Prerequisite: Engineering Design & Grades 10, 11, 12
Construction and a second course in
the Architecture and Construction Pathway

Robotics **Academic Level**

This course will introduce the basic concepts in robotics including coordinate transformations, sensors, and path planning with a focus on mobile robots and illustrations of current state of the art research and applications. Course information will be linked to lab experiments where students will build and test increasingly more complex VEX-based mobile robots. In addition, students will receive instruction and lab experiences in robotic principles and areas of specialization, related occupations, and postsecondary education within the STEM Career Cluster

1/2 Credit **1 Semester**
Grades 10, 11, 12

Energy Systems **Academic Level**

This course is designed to provide students with knowledge of energy systems and their alternatives. Students will receive instruction and lab experiences centered on problem solving, design solutions for 21st Century needs and areas of specialization, related occupations, and postsecondary education within the STEM Career Cluster.

1/2 Credit **1 Semester**
Grades 9, 10, 11, 12

CAD **Academic Level**

This course introduces students to mechanical design and the drafting process. Using Computer Aided Drafting software students will be introduced to basic layout, isometric and orthographic projections, section views, and dimensioning. Students will learn skills necessary to fully describe designs so that final working drawings will be sufficient to build or manufacture the design. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit **1 Semester**
Grades 10, 11, 12

3 Plane Modeling and Drawing **Academic Level**

This course provides students with additional skills and problem solving using CAD software. Areas of exploration will include 3 dimensional modeling and threads, fasteners, architecture, mechanical, electrical, and civil engineering. Areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Career Cluster will be identified and integrated into classroom learning.

1/2 Credit **1 Semester**
Prerequisite: CAD Grades 10, 11, 12

Architectural Drawing and Design **Academic Level**

This course introduces students to the basic terminology, concepts, and principles of architectural design. Emphasis is placed on house designs, floor plans, elevations (interior and exterior), foundations, and reading blueprints. Students will identify components related to the design process; prepare residential floor plans, elevation drawings, and work collaboratively to design a single-level home and custom scale model. A Computer Aided Design and Drafting (CAD) system will be used for drawing and construction designs. Students will also explore and identify areas of specialization, related occupations, and postsecondary education within the Architecture and Construction Pathway.

1/2 Credit **1 Semester**
Grades 10, 11, 12

Nanotechnology **Academic Level**

This interdisciplinary STEM Career Cluster course will enable students to gain an understanding of rapidly advancing areas of science and technology that deal with the improvement of a certain process, procedure or product via an extremely small scale. It will provide students with a broad understanding of basic sciences, engineering sciences, and information sciences in relation to the enormous potential and impact nanotechnology has to influence the way people live in the 21st century.

1/2 Credit **1 Semester**
Grades 11, 12

Humanities

English * Social Studies

Courses in English

Honors English 9
Academic English 9

Honors English 10
Academic English 10

AP/ECE English Language & Composition
Honors English 11
Academic English 11

AP/UCONN English Literature & Composition

American Female Authors
American Studies
American Voices
British Literature II
Communications and Mass Media
Creative Writing
Discovery of Self in Literature
Drama
Journalism
Literary Spectrum
Mark Twain's America
Nobel Prize Authors
Poetry
Practical Literacy
Public Speaking
Shakespeare
Special Topics in Public Speaking

Courses in Social Studies

AP Modern Western Traditions/UCONN History 1400
AP United States History
AP Psychology
Basic Skills Assessment Social Studies
Current Issues
Economics
Political Science
Psychology
Sociology

Honors United States History
Academic United States History
American Government and Citizenship
Contemporary World History
Honors World Civilizations
Academic World Civilizations

Interdisciplinary Courses

American Studies

Supplemental Courses

ESOL American Government and Citizenship
Beginning ESOL
Intermediate ESOL
Advanced ESOL

Reading Workshop
Mastery Reading
Literacy Workshop

English

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated into all English offerings.

What can I do with a major in English?

Advertising

Creative Writer
Account Services
Media
Research

Technical Writing

Writing and Editing

Banking

Credit Lending
Systems
Operations
Trusts

Radio and Television

News
Programming/Production
Sales and Advertising

Book, Magazine, and Newspaper Publishing

Editorial
Production
Sales/Marketing, Public Relations
Production
Circulation
Publicity
Textbooks
Editing
Reporting

Education

Teaching

Law

Corporate and/or Government Practice

Paralegal Profession

Information Gathering-Processing
Management

At the heart of the English program at Newington High School is the belief that appropriate and effective use of language is critical to living in today's world. English is the language in which most activity is conducted, not only in high school but in our society; therefore, English instruction is core to the secondary school curriculum. Developing skill in reading, writing, speaking, listening, viewing and critical thinking helps prepare students for success in school and for life beyond high school.

The sequence of courses in English throughout the four years of high school develops the student's ability to:

- use reading strategies to comprehend, interpret, evaluate and appreciate written material;
- use language arts skills to derive meaning from written texts and such audio-visual materials as music, film, television and art;
- read and respond to a variety of texts, demonstrating an understanding of the text and its philosophical, literary and historical context;
- read for a variety of purposes: to understand the text, self and cultures; to acquire information; and for enjoyment;
- understand and appreciate the literature of various cultures (our own and that of other countries) through noted authors in a variety of literary periods and genres;
- adjust the conventions, structures and vocabulary of written and spoken English to communicate ideas clearly;
- write, using the writing process and other strategies appropriately, to communicate with different audiences for a variety of purposes;
- create, critique and discuss literature and media;
- use information literacy skills to gather, evaluate and synthesize information from a variety of technological and information sources to create and communicate knowledge;
- recognize and respect the diversity of cultures depicted in the world's languages and literature; and
- use reading, writing, speaking, listening and viewing for lifelong learning, enjoyment, exchange of ideas, and career pursuits.

Course Sequence and Requirements

The Newington High School English Department offers a four-year sequence of courses to meet the needs of all students in the area of language arts. The program consists of a combination of full-year and semester-length courses to provide students at all levels of academic proficiency with a challenging and stimulating curriculum designed to develop skills in English, foster an appreciation of reading and literature, and satisfy the **graduation requirement of four credits in English**.

All students will be enrolled in full year courses during the ninth, tenth, and eleventh grades, followed by two semester-long electives in the senior year. **Students are required to take English 9, 10 and 11 in sequence; successful completion of the previous year's course is required prior to enrollment in the subsequent course. If a student merits graduation with his/her class, students who have shown improvement may be given permission to enroll in 11th grade English and senior elective English courses at the same time in the senior year.**



GRADE 9 COURSES

Upon the recommendation of their 8th grade teachers and school counselors, all 9th grade students will be enrolled in an appropriate level of English 9, offered at the Honors and Academic levels.

English instruction in grade 9 for all students focuses on a survey of the major literary genres, vocabulary acquisition and practice, basic writing instruction, and speaking and study skills. These foundation skills will prepare students for more in-depth study in subsequent years. Students will study short stories, novels, drama, poetry, mythology and nonfiction as distinct genres with conventional elements. Vocabulary instruction includes basic word lists, word parts and forms, and integrated vocabulary from the literature studied. Writing instruction focuses on a basic review of grammatical principles, mechanics and the writing process as students generate compositions of varying lengths. The writing program for both levels focuses on the process of writing as function of purpose, genre and audience and provides initial preparation for the Response to Literature, Reading for Information, and Editing and Revising tests of the Connecticut Academic Performance Test. Information literacy skills are developed in conjunction with the library/media specialists, providing instruction in use of multiple resources, including print resources, the Internet and databases, culminating in researched projects. Initial practice and instruction in effective public speaking begins the development of skill in this area to help students meet the graduation requirement in Speaking and Listening. Course materials used to enhance skill development are selected in each level based on reading difficulty, student and teacher interests, and literary merit.

Honors English 9

Honors Level

Emphasis in Honors English 9 is placed on understanding and appreciating literature, the improvement of oral and written expression, and the development of effective reading, vocabulary and study skills for independent work. Extensive reading and discussion of literature focuses on moving students beyond basic comprehension to a greater awareness of the choices authors make in creating a literary work, using conventional elements in each genre: the short story, drama, the novel, mythology, nonfiction, and Shakespearean plays. Students learn to use a critical approach to literature at an introductory level.

1 Credit

Year
Grade 9

Prerequisite: Recommendation of 8th grade teachers

Academic English 9

Academic Level

Students in Academic English 9 are provided with a comprehensive review of grammatical skills, a strong vocabulary component, and exposure to various literary genres. The writing program in the Academic level stresses paragraph development, organization of details, revision, and application of grammatical skills as students develop essay writing skills in a variety of modes, with a focus on the persuasive essay. Students develop reading strategies to handle more complex texts and progress to developing literary analysis skills to comprehend and appreciate literature. Information literacy skills are introduced and developed through carefully structured library research activities, producing written reports and oral presentations, often incorporating technology.

1 Credit

Year
Grade 9

Prerequisite: Recommendation of 8th grade teachers/

GRADE 10 COURSES

All students will be placed into the appropriate level of English in grade 10 based on the recommendation of their 9th grade English teachers. English is offered on two levels in grade 10: Honors, and Academic.

English instruction in grade 10 for all students is a four-faceted approach to language skills. In all levels, students are provided with extensive review, instruction and practice in vocabulary skills, including word parts and working with words in context. Instruction and practice in the finer points of the mechanics and usage in the English language is provided to enhance the extensive writing program. Writing focuses on refinement of the essay and initial literary critical writing in preparation for the Response to Literature, Interdisciplinary Writing and Editing and Revising tests of the Connecticut Academic Performance Test, taken in March. Students practice information literacy skills, evaluating potential resources and synthesizing information into a formal research paper and basic literary-critical papers. Reading of American literature of various genres develops comprehension and literary analysis skills, while fostering an understanding of the development of American literature as it parallels and reflects the historical periods in the American past and present. Class presentations, class discussion and group projects develop effective speaking and listening skills. Initial assessment of formal speeches gives students an understanding of their own skills in order to meet the graduation requirement in Speaking and Listening.

Honors English 10

Honors Level

Students in Honors English read selected works by American authors as they reflect the chronological periods of American literary development, focusing on reading comprehension and study of the genres and styles of the literature as it reflects the historical and philosophical events of each time period. Increasingly complex literary terminology is introduced and discussed, such as style, tone, diction, allusion and parody. The course includes a challenging writing component grounded in the process of research in literary and informational text, emphasizing persuasive and argumentative writing.

1 Credit

Year
Grade 10

Prerequisite: Passing grade in English 9

Academic English 10

Academic Level

Literature study at the academic level emphasizes using reading comprehension strategies while studying American literature. Students are encouraged, through structured activities, to examine, discuss and write about the relevance of selected literary works by classic American authors to contemporary American society. Emphasis is placed on the development of American literature through specific literary periods with identifiable styles, ideas and conventions reflected in the literature. Writing instruction focuses on the effective organization and use of persuasive and rhetorical techniques in the essay form. Student activities are structured to provide a guide through the research process, moving from the traditional research paper to literary-critical writing. A structured review of mechanics and usage is an integral part of the writing program, with lessons and units developed in response to student needs.

1 Credit

Year
Grade 10

Prerequisite: Passing grade in English 9

GRADE 11 COURSES

All students will be placed into appropriate levels of English 11 (AP/ECE, Honors and Academic) based on the final grade in English 10 and the recommendation of their 10th grade English teachers. Students seeking to enroll in the Advanced Placement course must meet the criteria outlined in the beginning of this booklet.

English instruction in grade 11 for all students is focused on an examination of themes as they appear in the literature of various world cultures. Students will read literature in a variety of genres to develop comprehension and literary analysis skills, while fostering an understanding of how different cultures and context affect an author's treatment of a specific theme. In all levels, students are provided with extensive review, instruction and practice in vocabulary skills, especially roots, prefixes and suffixes and sentence completion exercises to prepare for the SAT Critical Reading test most students take in the spring of their junior year. Students also are given information and opportunities to practice writing the SAT Writing prompt. Instruction and practice in the finer points of the mechanics and usage in the English language is provided to enhance the extensive writing program. Writing focuses on refinement of the essay and literary critical writing. Students practice information literacy skills, synthesizing information into formal research papers and literary-critical papers. Class presentations, class discussion and group projects develop effective speaking and listening skills. Students will be formally assessed in public speaking to determine whether or not they have met the graduation requirement in Speaking and Listening. Students will explore the college application process, developing drafts of application essays for use when applying for post-secondary education.

AP English Language

AP/ECE Level

AP English Language is the second course in the three-year sequence of honors courses in English. This course is a seminar in the study of significant works of major British authors, beginning with the Anglo-Saxon period, and continuing through the Medieval period, the Renaissance, the Victorian Era and modern times. Composition is of both the critical and documented research types. In addition, students are required to present and critique literary reports as part of classroom procedure. Information and practice in SAT test-taking methods and extensive vocabulary development are also major components of the course. Among the literary works studied in the course are *Beowulf*, *The Canterbury Tales*, *Silas Marner*, *Othello*, *Gulliver's Travels*, *She Stoops to Conquer*, *Lord of the Flies*, and *1984*. Finally, students will be provided with rhetorical strategies and practice opportunities for taking the AP Exam in Language and Composition.

1 Credit

Year
Grade 11

Prerequisite courses: 3.33 QPA in Pre-AP English 10 or Honors English 10

Honors English 11

Honors Level

The literature component traces recurring themes as the literature of England and other world cultures has developed. Possible themes that may be examined include: the search for meaning, our heroic roots, social justice, fate and free will, and the foundations of philosophy.

1 Credit

Prerequisite: Passing grade in English 10

Year
Grade 11

Academic English 11

Academic Level

The focus of this course is on the development of writing, speaking and literary analysis skills. Using a combination of literature from Great Britain and the world, this course explores four of these themes commonly treated by authors in a variety of cultures: social justice and morality, the heroic journey, the human experience, war and conflict, and the natural world.

1 Credit

Prerequisite: Passing grade in English 10

Year
Grade 11

GRADE 12 COURSES

Students who want the challenge of Advanced Placement work should select the AP/UConn English Literature course as their course of study. Students in the other two levels (Honors and Academic) will elect two appropriately-leveled, semester-length courses during their senior year to complete the final credit of their four-credit graduation requirement in English. There is a variety of elective course options from which to choose, allowing students to work in their interest areas. At least one of the two elective courses must be a literature course.

AP/UConn English Literature & Composition

AP/ECE Level

In this course students will read, analyze, discuss, and write about dense, challenging literature from a variety of eras and genres. Emphasis will be on close analytical reading of all forms of literature, and on the steps necessary for the completion of a number of thesis-driven essays. Students can expect a number of critical/analytical papers, some of which will involve advanced research. Literature will be organized thematically according to the philosophical concepts of fate and free will, moral ambiguity, and the relationship between the self and society, in addition to a unit exploring comic and satiric challenges to convention. Students will also study the five predominant critical approaches to literature and apply techniques of the various schools of literary criticism to some of the classic works of Western literature.

1 Credit

Prerequisite: 3.33 QPA in AP English Language or Honors English 11

Year
Grade 12

ELECTIVE COURSES

(Seniors select TWO; one must be a literature course.)

American Female Authors **Academic Level**

This course focuses on the works of some of the finest writers in the history of American literature – all of whom happen to be women. Students will read the works of such greats as Wharton, Chopin, Cather, Dickinson, Morrison, Walker, and Angelou and write compositions focusing on interpretation, analysis, and literary criticism. In addition, field studies at the Wharton, Dickinson and Stowe homes may be offered, along with guest speakers from area universities.

1/2 Credit

Literature course

Semester

Grade 12

American Studies **Honors Level**

This course combines the disciplines of American history and American literature to give students a deeper appreciation and understanding of the American experience. The course will explore American art, music, architecture, technology, and popular culture to enrich the students' comprehension of historical events and literary achievements of Americans over time. This course examines the experience of American groups and individuals in order to explore how the American Dream was conceived and has evolved. Students will read and discuss primary and secondary source materials that cover many aspects of the ever-changing American experience and will participate in small and large group discourse and debate.

1/2 Credit English and 1/2 credit Social Studies

Literature course

Semester - double period

Grade 12

American Voices **Academic Level**

This course explores the diversification of the American culture by introducing students to key historical, cultural and literary events in our history through the experiences, eye-witness accounts, and memories of those individuals who experienced them first-hand. The course includes thematic units that establish the historical, cultural, social, and political contexts of the changing voices of America through primary source documents, short stories, novels, memoirs, essays, and poetry. Students engage in discussions and debate about current issues and policies facing American society today.

1/2 Credit

Literature course

Semester

Grade 12

British Literature II: Late Seventeenth Century to Present **Honors Level**

This survey of British literature will cover the seventeenth century to the present day period. The emphasis of the course will be the literary trends as reflected by the major writers of each literary period from the late seventeenth century to the present. In addition, the course will show how the literature parallels and reflects the history of England. Authors to be studied include: Pope, Swift, Gray, Burns, Blake, Wordsworth, Byron, Shelley, Keats, Tennyson, Orwell, Huxley, and Golding. Special emphasis will be placed on careful and detailed readings of Victorian and modern novels.

1/2 Credit

Literature course

Semester

Grade 12

Communications and Mass Media **Academic Level**

The goals of the course are to teach students how to access information, analyze and evaluate its credibility, and then apply what is learned in original projects related to advertising, print media, film, radio and television. The course requires writing, reading, discussion and visual/listening skills. Independent projects and activities are an integral component of this course. This course is NOT approved by the NCAA.

1/2 Credit

Semester

Grade 12

Creative Writing **Academic Level**

This course is designed for self-motivated students with a genuine interest in writing. The course provides students with the opportunity to develop writing skills and to refine individual style. Students are exposed to a variety of literary forms as models for their own work. Instruction is provided in the discipline of writing, while students are allowed the freedom to explore and experiment with their original compositions. Writing exercises range from the simple to the complex, with emphasis upon writing as a process. Both teacher and students respond to and evaluate the works generated by the class. Students are encouraged to submit their work to the literary magazine.

1/2 Credit

Semester

Grade 12

Discovery of the Self in Literature **Academic Level**

This course includes the study of popular young adult literature as a reflection of real life. Works are selected which include fictional teenage characters to help students identify with the issues facing these characters. Novellas, short story collections and novels will be used to promote class discussion and writing on issues of conformity, individuality, and development of personal values. A series of writing assignments, a research project, and several visual presentations are included in course requirements. This course is NOT approved by the NCAA.

1/2 Credit

Literature course

Semester

Grade 12

Drama **Academic Level**

This course focuses on the study of the history of drama, literary elements and genres of drama. Students will learn how and why drama developed from its earliest roots in ancient Greece to today's most contemporary drama. Students will read and study significant drama that has contributed to various cultures since the Greeks. Drama from noted playwrights may include: Sophocles, Ibsen, Glaspell, Williams, Miller and Wilson will be read and studied, as well as selected scenes and monologues.

1/2 Credit

Literature course

Semester

Grade 12

Journalism**Academic Level**

The primary emphasis in this course is on teaching students the skills needed to produce effective news writing. Instruction in basic journalistic processes and techniques is provided, as well as helping students to develop their own style. Students will produce such works as news articles, editorials, features, text for mock broadcasts, and writing in other forms of suitable journalistic style. Students will have primary responsibility for the production of the student newspaper, working in the computer lab to write, edit and layout the student newspaper. Students must be competent writers to enroll in the course.

1/2 Credit

Semester

Grade 10, 11, or 12

Note: Enrollment as a sophomore or junior does not fulfill English requirements for grades 10, 11, or 12.

Mark Twain's America**Honors Level**

This course is designed to offer the student insight into the writings of Mark Twain, focusing on his style, various genres and his place in literary history. Students will explore Twain's contributions as an American humorist by reading various satirical essays, short stories, and novels. Works to be read include Tom Sawyer, A Connecticut Yankee in King Arthur's Court, and The Mysterious Stranger, as well as critical essays. Works from Twain's contemporaries will be read for comparison. Compositions are both critical and creative in nature, including research papers and presentations.

1/2 Credit

Semester

Literature course

Grade 12

Nobel Prize Authors**Honors Level**

A number of authors have won Nobel Prizes for literature. In this course, the student will read and discuss award-winning literature which displays a deep understanding of humanity in relation to the struggle against nature and class societies in an attempt to find meaning in life. In addition, students will write compositions in which they develop a critical stance based upon their own analysis as well as their understanding and application of literary criticism. After an introduction to Alfred Nobel, the Nobel Prize for Literature, and sample readings from present and past international Nobel Prize winners, authors such as Ernest Hemingway, William Faulkner, John Steinbeck, Eugene O'Neill and Toni Morrison will be studied.

1/2 Credit

Semester

Literature course

Grade 12

Poetry**Academic Level**

This course studies poetry as a unique genre of literature. Students will read, analyze and write poems in a variety of forms and types to understand and appreciate poetry as an art form. Students will learn the fundamental elements of poetry through close reading of poems, class discussion and writing practice. Instruction and practice focuses on the terminology, conventions, technical aspects and forms of poetry and the ways that poets use these elements to create meaning and effects. Poetry selections range from song lyrics to ballads to more sophisticated forms of poetry such as elegy and ode. Interested students need not have common knowledge of poetry.

1/2 Credit

Semester

Literature course

Grade 12

Practical Literacy**Academic Level**

The focus of this course is the comprehension of reading material commonly encountered in recreational reading, a review of grammar and usage principles to enhance writing skills, and writing in response to literature, both to analyze and to respond through connections. Students will read high-interest fiction selections and extensive contemporary nonfiction articles for comprehension and reader response. Activities that simulate society's reading and writing needs will be routine. The course is required for grade 12 students who have not yet met the district goals in reading on the CAPT Reading Across the Disciplines test.

1/2 Credit

Semester

Literature course

Grade 12

Public Speaking**Academic Level**

This course explores the art of oral communication through basic principles which include techniques of organization, as well as elements of style, purpose, poise, preparation and delivery. This course provides various opportunities for students to present their ideas, beliefs, and creativity to an audience. Students will have responsibilities as both speakers and members of an audience, accountable for both roles. Students will also be responsible for selecting topics, researching information, and writing, rehearsing, and delivering several original speeches of varying length and purpose during the semester. This course is required for all students who have not yet met the graduation requirement in Speaking and Listening and who will graduate in 2014. Successful completion of this course also allows students to meet the College Career Pathways requirement in public speaking.

1/2 Credit

Semester

Grade 12

Shakespeare**Honors Level**

William Shakespeare has often been called the greatest of authors, "not of an age, but for all time." In this course, students will study the genres for which the artist is famous: drama and poetry. Students will read a variety of plays: tragedy, comedy, and history. The focus of the course will be reading and interpreting the complex figurative elements of Shakespeare's writing which contribute to meaning and dramatic effect. In addition, students will explore aspects of dramatic performance, with particular emphasis on acting and staging, as these impact the communication of message and humor. Attending live theatre and film study will also play a part in this course. Students will also read and analyze Shakespeare's sonnets and lyric poetry to interpret and unlock the mysteries inherent in these literary pieces. Research and literary critical writing are routine, and opportunities for creative and performance-based projects will be offered.

1/2 Credit
Literature course

Semester
Grade 12

Special Topics in Public Speaking**Academic Level**

This course also explores the art of oral communication through extended practice in the basic speaking and listening principles mastered by students in previous grades. Students will be given the opportunity to further practice and refine their skills in speech preparation and delivery through multiple forms and types of speeches requiring research in the preparation stage as well as poise and presence in deliver and their own style of writing and delivery. This course is only available to students who have met the Speaking and Listening requirement for graduation and who are motivated to improve their level of skill in this area. Successful completion of this course allows students to meet the College Career Pathways requirement in public speaking.

SUPPLEMENTAL COURSES TO ENHANCE ENGLISH SKILLS:

The following courses supplement the English program at Newington High School. Students may elect these courses to improve skills, or, in some cases, students will be registered for these courses to assist with specific skills needs.

English ESOL (English for Speakers of Other Languages)**Academic Level**

This course is designed to teach non-English speaking students to become competent in conversational English. The program includes both social English and academic English and incorporates a variety of oral and written experiences. The students are encouraged to grow in both confidence and proficiency in understanding and communicating in English.

1 Credit for 2 class periods

Year

Grades 9, 10, 11, 12

Maximum (2) Credits in ESOL to fulfill English requirements

Intermediate ESOL**Academic Level**

This course is designed to teach non-English speaking students to become competent in reading in English. The course emphasizes academic English, helping students to understand the basic language structures of the English language to facilitate reading and basic writing.

1 Credit

Year

Grades 9, 10, 11, 12

Maximum (2) Credits in ESOL to fulfill English requirements

Advanced ESOL**Academic Level**

This course is designed to teach non-English speaking students to become competent in written English. The program focuses on the academic reading and writing in English to help students become successful in content area classes. The students are encouraged to grow in both confidence and proficiency in understanding, speaking, reading, writing, and communicating English. Students typically enroll in this course and academic courses in various subjects.

1 Credit

Year

Grades 9, 10, 11, 12

Maximum (2) Credits in ESOL to fulfill English requirements

Reading Workshop**Academic Level**

This course is primarily designed for grade 9 students who need additional support to improve reading skills. Students are placed into this program based upon teacher recommendation and their performance on reading tests and/or the Connecticut Mastery Test. The focus of the course is to help students improve reading speed and comprehension, to refine vocabulary and critical thinking skills, and to develop study and test-taking techniques. Students learn and practice reading strategies to help them read for information and pleasure. This course does NOT fulfill the requirements for English credit.

1/2 Credit

Semester

Grade 9

Mastery Reading**Academic Level**

This course is designed for students who, based on their assessments in English and Social Studies in grade 9, will likely not meet the district goals in CAPT Reading Across the Disciplines and/or Writing Across the Disciplines. Students meet in small classes to build reading assessed on the tests, such as identifying the main idea of fiction and nonfiction texts, identifying and using details from the text for support of ideas, making inferences, and responding to texts with connections and explanation. Persuasive writing skills, such as taking a critical stance or position, framing and supporting arguments, and writing effective introductions and conclusions, are also reinforced in writing activities. The emphasis is on reading literary texts and nonfiction selections in science, social studies and wellness, as well as explorations of social issues through nonfiction articles for analysis and response. Mastery of these skills will also help students to succeed in their academic classes. This course does not fulfill the requirement for English or Social Studies credit.

1/2 Credit

Twice/wk for 1 Year

Grade 10

Literacy Workshop**Academic Level**

This interdisciplinary course is for students who did not meet the district's desired level of performance on the CAPT Reading and/or Writing tests in the tenth grade and who need additional assistance in basic reading and writing skills. The focus of the course is on reading nonfiction articles to generate expository and persuasive essays by developing the ability to recognize arguments and supportive evidence in the readings and utilize them to support a thesis. Students will engage in activities to help them learn to write and speak persuasively on topics of interest to citizens today. Students will also practice reading fiction in order to determine the author's purposes, craft and meaning. Students enrolled in this course are expected to retake the CAPAT Reading or Writing tests in March, followed by in-class assessments that will determine the current performance level and allow students another avenue to meet the district's graduation requirement.

1/2 Credit

Twice/wk for 1 Year

Grade 11

Social Studies

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Social Studies offerings.

What can I do with a major in Social Studies?

Administration	Government Services & Agencies	Politics
Advocacy	Human Services	Public Policy
Broadcasting	Intelligence, Foreign Service	Regulatory and Law Enforcement
Community Relations	Law	Research
Corporate and Government Practice	Peace Corps	Teaching
		Technical Writing

Note: Three credits in social studies are required for graduation from Newington High School.

One of these credits must be in United States History.

One half credit must be in one of the following Government and Citizenship courses:

- American Government and Citizenship
- Political Science

GRADE 12 COURSES

AP/ECE Modern Western Traditions/UCONN History 1400

This course examines the history of Western civilization beginning with the Renaissance through the post-World War II era. A heavy emphasis on the concepts, ideas and events that have shaped our current outlook on the world organizes the course. A wide variety of supplemental resources, including primary source documents and world literature enrich the experience. Students may earn college credit and/or advanced placement credit for successful completion of the course, depending on the requirements of the individual college the student may attend.

1 Credit Year
Grade 12

Prerequisites: UConn approval if seeking UConn credit
3.33 GPA in AP or Honors US History

Advanced Placement Psychology AP/ECE Level

This course explores the systematic and scientific study of psychology from its history and principles to the modern day ethics and methodology. Students read a variety of supplemental, contemporary works from various psychologists and think critically while applying these perspectives to analyze human behavior. In addition, due to the scientific nature of the course, a strong background in biology and statistical mathematics is essential.

1 Credit Grades 11, 12

Prerequisites: 3.33 QPA in AP or Honors US History

Advanced Placement United States History AP/ECE Level

This course explores American history from the colonial period to the present in chronological sequence. Students will examine common and recurring themes in American history over time as our history has developed. Students are expected to read and extract important conceptual information from text independently and engage in thought-provoking discourse during class sessions. Extensive use of contemporary, supplemental materials enriches the discussion and the understanding of the concepts and principles that have shaped and changed our nation since its inception.

1 Credit Year
Grades 11, 12

Prerequisites: 3.33 average QPA in Contemporary
World History and American Government and
Citizenship, and 3.33 in Honors English 11

American Studies Honors Level

This course combines the disciplines of American history and American literature to give students a deeper appreciation and understanding of the American experience. The course will explore American art, music, architecture, technology, and popular culture to enrich the students' comprehension of historical events and literary achievements of Americans over time. This course examines the experience of American groups and individuals in order to explore how the American Dream was conceived and has evolved. Students will read and discuss primary and secondary source materials that cover many aspects of the ever-changing American experience and will participate in small and large group discourse and debate.

Semester - Double Period
1/2 Credit Social Studies and Grade 12
1/2 Credit English

Basic Skills Assessment Social Studies Academic Level

This course allows students to explore controversial issues in American society, placing significant emphasis on persuasive writing. Students will gather and analyze information from a variety of sources to develop and support a position on contemporary topics.

1/2 Credit Semester
Placement based on CAPT scores Grade 12

Current Issues**Academic Level**

This course undertakes the study of contemporary issues in the world today. Topics covered include both domestic and international issues by themes, such as poverty and crime, and as they arise currently. Magazines and online resources serve as the primary texts in the course, along with active research by the students. Discussion centers on the ways in which individuals, groups and institutions interact.

1/2 Credit

Semester

Prerequisite: None

Grade 12

Economics**Honors Level**

This course promotes an understanding of the major features and problems of the U.S. economy with an emphasis on financial literacy. The focus is on economic issues and covers a number of personal finance areas, including credit cards, student loans, college costs, investments and the stock market. Broader units include: business, banks, labor laws and unions, government spending and taxes, and the global economy.

1/2 Credit

Semester

Grade 12

Political Science**Honors Level**

Political Science uses data to analyze how and why decisions are made and how power is executed. Students explore concepts such as legitimate and corrupt systems of government, sources of political power, ideology, political parties, and influence throughout the institutions of national governments. Students conduct in-depth studies of campaigns and elections, voting behavior, interest groups, and the media, and gain practical experience and insights by conducting their own public opinion polling, interacting with candidates for state and local office, touring the State Capitol, and devising solutions to a variety of current political problems. This course fulfills the graduation requirement in Civics.

1/2 Credit

Semester

Grade 12

Psychology**Academic Level**

This course focuses on the scientific study of human behavior as individuals and as social beings. Thematic units address the study of what psychology is and the role it plays in your body functions your mental health, how you interact with the environment, and the decisions you make. Work fosters an understanding of human conduct and its consequences.

1/2 Credit

Semester

Grade 12

Sociology**Academic Level**

Sociology is concerned with the study of human behavior and society's influence on individuals. Students examine the role institutions and other groups have on the behavior of the individual. The behavior and interactions of social groups and other organizations is also studied. Students investigate the impact of family, education, religion, politics and the economy on the individual. The effect of race, ethnicity, gender and socioeconomic status on groups and their individuals is also examined, as well as deviance and how society controls deviants.

1/2 Credit

Semester

Grade 12

GRADE 11 COURSES**Advanced Placement United States History AP/ECE Level**

This rigorous course explores American history from the colonial period to the present in chronological sequence. Students will examine common and recurring themes in American history over time as our history has developed. Students are expected to read and extract important conceptual information from text independently and engage in thought-provoking discourse during class sessions. Extensive use of contemporary, supplemental materials enriches the discussion and the understanding of the concepts and principles that have shaped and changed our nation since its inception.

1 Credit

Year

Grades 11, 12

Prerequisites: 3.33 average QPA in Contemporary

World History and American Government and Citizenship, and 3.33 in Honors English 10

Advanced Placement Psychology AP/ECE Level**AP/ECE Level**

This rigorous course explores the systematic and scientific study of psychology from its history and principles to the modern day ethics and methodology. Students read a variety of supplemental, contemporary works from various psychologists and think critically while applying these perspectives to analyze human behavior. In addition, due to the scientific nature of the course, a strong background in biology and statistical mathematics is essential.

1 Credit

Year

Grades 11, 12

Prerequisites: 3.33 QPA in AP or Honors US History OR

3.33 average QPA in Contemporary World History and American Government and Citizenship, AND 3.33 in Honors English 10

United States History**Honors or Academic Level**

The United States history courses chronologically survey American history from the administration of George Washington to the present. Thematic units address the building of the nation, territorial expansion, the Civil War, Imperialism, Progressivism and the events of the 20th and 21st century. The focus of the course is to foster student understanding of the relationship between the events of the past and the actions of today.

1 Credit

Grade 11

Mathematics

There are many areas in which mathematicians can find exciting careers. Mathematicians have an opportunity to make lasting contributions to society by helping to solve problems in such diverse fields as business and finance, industry, medicine, management, economics, government, construction, technology and design, social and behavioral sciences, and education. Graduates of post-secondary schools, community colleges, technical schools, as well as colleges and universities, can qualify for a broad range of positions in math-related fields within the Connecticut Career clusters and their pathways.

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Mathematic offerings.

What can I do with a career in Mathematics?

Accounting	Machinist
Actuarial Analyst	Manufacturing Engineer
Actuary	Management
Aeronautics	Marketing
Agricultural Economist	Masonry
Applied Mathematics	Mechanical Engineer
Architect	Medicine
Astronomer	Meteorologist
Automotive Service Technology	Military
Banking	Navigator
Biomedical Engineer	Nuclear Engineer
Budget Analyst	Opinion Researcher
Carpentry	Petroleum Engineer
Chemical Engineer	Physicist
Civil Engineer	Psychologist
Computer Applications Engineer	Public Accounting
Computer Consulting	Public Relations
Computer Science	Plumbing
Construction	Printing
Culinary Arts	Product Manager
Data Processing	Quality Control Manager
Drafting	Research Analyst
Economist	Retail Buying
Electrical Engineer	Retail Store Manager
Electronics	Sales
Entertainment Industry	Securities
Epidemiology	Seismologist
Fashion	Software/Hardware Engineer
Finance	Statistician
Financial Manager	Structural Engineer
Food Management	Surveyor
Geologist	Systems Analyst
Geophysicist	Teacher
Industrial Engineer	Technology
Insurance	Welding
Interior Design	
Landscape Architect	
Landscaping	

Algebra I**Honors or Academic Level**

This course develops the algebraic thinking skills necessary for students to succeed in advanced mathematics courses. With an emphasis on the concept of a function, students will develop problem solving strategies throughout the course. Units of study are aligned to the Connecticut Standards and include (1) patterns (2) linear equations and inequalities (3) functions (4) linear functions (5) scatter plots and trend lines (6) systems of linear equations and (7) introduction to exponential functions.

1 Credit

Full Year

Prerequisite: Grade 8 Math

Geometry**Honors or Academic Level**

This course examines two and three dimensional geometric figures and their properties. Connections between algebra and geometry are enhanced so students are able to make sense of the world around them. Units of study are aligned to the Connecticut Standards and include (1) transformations and the coordinate plane (2) congruence, proof and constructions (3) polygons (4) similarity, proof and trigonometry (5) circles and other conic sections (6) three dimensional geometry and (7) applications of probability.

1 Credit

Full Year

Prerequisite: Algebra I

Algebra II**Honors or Academic Level**

This course continues to develop the concept of a function. Units of study are aligned to the Connecticut Standards and include (1) inverse functions (2) polynomial functions (3) rational expressions and functions (4) trigonometric functions (5) exponential and logarithmic functions and (6) inferential statistics.

1 Credit

Full Year

Prerequisite: Geometry

Please note the following:

Students who take Geometry-Honors and Algebra II-Honors concurrently, must maintain a B- or better average in both courses throughout the entire year. If this average is not maintained, the student will be required to drop Algebra II-Honors.

Pre-Calculus**Honors or Academic Level**

This course is a prerequisite for taking Calculus and provides an excellent background for students planning to take a rigorous calculus course in college. Units of study include (1) trigonometric functions (2) exponential functions (3) logarithmic functions and (4) limits. The binomial theorem, proof by induction and limits are additional topics.

1 Credit

Full Year

Prerequisite: Algebra II

AP Calculus BC**AP Level**

This Advanced Placement course presupposes a general knowledge of functions, analytic geometry, the unit circle, logarithms and limits. Derivatives and their applications are covered during the first semester. The second semester is devoted to integrals and their applications. This course also covers polynomial approximation and series, the applications of parametric, polar, and vector functions. The remainder of the course is devoted to seminar topics and preparation for the final project. Graphing calculators are an integral part of this course.

1 Credit

Full Year

Prerequisites: 3.33 QPA in Pre-Calculus - Honors

AP Calculus AB**AP Level**

This Advanced Placement course presupposes a general knowledge of functions, analytic geometry, the unit circle, logarithms and limits. Derivatives and their applications are covered during the first semester. The second semester is devoted to integrals and their applications. The remainder of the course is devoted to seminar topics and preparation for the final project. Graphing calculators are an integral part of this course.

1 Credit

Full Year

Prerequisites: 3.33 QPA in Pre-Calculus

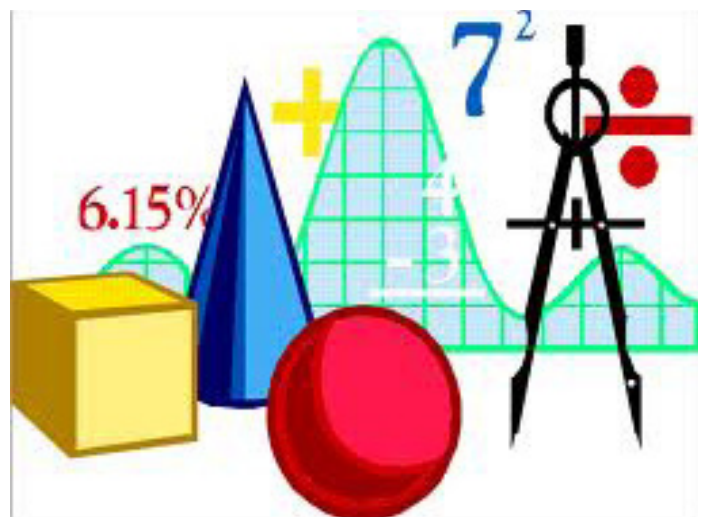
Calculus**Academic Level**

This course is designed for those students who have successfully completed Pre-Calculus and wish to challenge themselves in mathematics, but do not qualify for the Advanced Placement program. The material covered in this course is similar to that covered in AP Calculus, but not to the same depth or breadth. This course provides an opportunity to complete a four-year college preparatory sequence in mathematics during high school.

1 Credit

Full Year

Prerequisite: Pre-Calculus



AP Statistics**AP Level**

This honors course, for college bound students, provides valuable background for students who plan careers in business, government, education, or technology, as well as careers in social, biological, or physical sciences. There is an array of topics covered which range from exploring and analyzing data using graphical and numerical techniques to using probability as a tool for anticipating what the distribution of data should look like under a given model. Some specific topics included in this course are displaying, describing, and comparing different types of distributions, creating statistical designs in order to collect data, hypothesis testing, Chi-Squared and T-tests, and the interpretation and evaluation of the validity of statistical inference. The remainder of the course is devoted to seminar topics and preparation for the final exam. Graphing calculators are an integral part of this course.

1 Credit

Full Year

Prerequisite: 3.33 QPA in Algebra II-1 or Algebra II-2

Introduction to Computer Science**Academic Level**

Introduction to Computer Science will develop your problem-solving skills by having you analyze problems from different perspectives, design algorithms to solve problems, then design and write programs in Scratch, Jeroo, and Java to implement computer-based solutions. Instruction will begin with Scratch and then Jeroo, two GUI-based application development environments, to quickly and intuitively introduce you to fundamental programming constructs and object-oriented concepts. The remainder of the year will be spent programming in Java. An important focus of the Java component of the course will be on developing essential object-oriented programming vocabulary and the technical aspects of programming in this language. Warm up activities, class work, homework, and project assignments will achieve a balance between practice and practical application of both current and new concepts and skills. There will be continuity throughout the course among the following topics: algorithm development; data types, variables, and constants; mathematical, relational, and boolean operations and expressions; sequential, conditional, and iterative statements; input and output methods; and robust design, documentation, and structured programming practices.

1 Credit

Full Year

Prerequisite: Geometry-1, Geometry-2; C or better Algebra II-2

AP Computer Science A**AP Level**

This course emphasizes object oriented methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first semester course in computer science. The course will cover the writing of logically structured, well documented programs in the Java programming language. It also includes an introductory study of data structures and abstraction.

1 Credit

Full Year

Prerequisite: 3.33 QPA in Geometry-1

or Algebra II-1 or Introduction to Computer Science

Discrete Math**Academic Level**

This course reinforces basic math skills as well as algebra skills through the study of topics such as SAT preparation, college placement exam preparation, voting, weighted voting systems, fair division, apportionment, spiral growth in nature, population growth, symmetry, fractal shapes, collecting statistical data, descriptive statistics, chance probabilities and odds, normal distributions, Euler Circuits, the Traveling Salesman Problem, scheduling and networks. These topics highlight applicability, accessibility, modernity and aesthetics in mathematics.

1 Credit

Full Year

Prerequisite: Algebra II-2 or Algebra II-3

Music

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Music offerings.

What can I do with a major in Music?

Accompanist	Music Store Manager
Arranger	Music Therapist
Audio Engineer/Mixer, Operator	Music/Vocal Teacher
Band/Symphony Orchestra Conductor	Musical Theater Director
Business Manager	Musician
Choral Director	Program Director
Choreographer	Promoter
Composer	Singer, Dancer
Critic	Sound Effects Technician
Entertainer	Studio Engineer
Instrument Designer	Television Music Director
Librettist	Theatrical Variety Agent

Women's Chorus

Academic Level

This is a 9-12 women's ensemble. This group will explore soprano, mezzo-soprano, and alto vocal literature in sacred, secular, and popular genres. Vocal technique and score reading will be addressed. Some solo and small group opportunities are available as well as the chance to audition for Regional and All-State ensembles. This group performs several concerts per year. All incoming freshmen women are to join Women's Chorus.

1 Credit

Full Year

Grades 9, 10, 11, 12

Prerequisite: Recommendation of middle school director, or high school director

Men's Chorus

Academic Level

This is a 9-12 men's ensemble. This group will explore tenor baritone and bass vocal literature in sacred, secular, and popular genres. Vocal technique and score reading will be addressed. Some solo and small group opportunities are available as well as the chance to audition for Regional and All-State ensembles. This group performs several concerts per year. All incoming freshmen men are to join Men's Chorus.

1 Credit

Full Year

Grades 9, 10, 11, 12

Prerequisite: Recommendation of middle school choral director, or high school choral director

Symphonic Band

Academic Level

This ensemble performs major works of wind band literature. There is a strong emphasis on instrumental technique and ensemble playing. Some solo and small group opportunities are available as well as the chance to audition for Regional and All-State ensembles. This group performs several concerts per year. In addition, students in Symphonic Band are required to participate in Marching Band (please see Marching Band offering in the Music section of this book). Students wishing to audition for Jazz Band must participate in either Symphonic Band, Wind Ensemble or have permission of the director.

1 Credit

Full Year

Grades 9, 10, 11, 12

Prerequisite: Recommendation of middle school director or high school director

Wind Ensemble

Academic Level

This ensemble is a sectional extension of Symphonic Band. It is for the mature, advanced instrumental student. The group performs major works of wind band literature. There is a strong emphasis on instrumental technique and ensemble playing. Students are strongly encouraged to audition for Regional ensembles and other honor band experiences. This group performs several concerts per year. In addition, students in Wind Ensemble are required to participate in Marching Band (please see Marching Band offering in the Music section of this book). Students wishing to audition for Jazz Band must participate in either Symphonic Band, Wind Ensemble, or have permission of the director.

1 Credit

Full Year

Grades 10, 11, 12

Prerequisite: Audition and/or recommendation of teacher

Orchestra

Academic Level

This ensemble performs major works of string orchestra literature. There is a strong emphasis on instrumental technique and ensemble playing. Some solo and small group opportunities are available as well as the chance to audition for Regional and All-State ensembles. This group performs several concerts per year. Students wishing to audition for Chamber Orchestra must participate in Orchestra or have permission of the director.

1 Credit

Full Year

Grades 9, 10, 11, 12

Prerequisite: Recommendation of middle school director or high school director

Symphonic/Chorus Combo **Academic Level**

This course is offered to students who are interested in taking both band and choir. Students alternate days between the Symphonic Band and the Chorus allowing students to continue working on both instrumental and vocal skills.

Note: Please see the descriptions for Symphonic Band and Men's/Women's Chorus for further course information.

1 Credit Full Year
(.5 Symphonic Band, .5 Chorus) Grades 9, 10, 11, 12
Prerequisite: Recommendation of middle school director or high school director

Orchestra/Women's Choir Combo **Academic Level**

This course is offered to students who are interested in taking both Orchestra and Choir. Students alternate days between the ensembles allowing students to continue working on both instrumental and vocal skills.

1 Credit Full Year
(.5 Orchestra, .5 Concert Choir) Grades 9, 10, 11, 12
Prerequisite: Recommendation of middle school director or high school director

Chamber Choir **Academic Level**

This course is for the advanced vocal student. The ensemble will perform sacred and secular classical works, as well as jazz and popular music. There is a strong emphasis on vocal technique and ensemble blend. Some solo and small group opportunities are available as well as the chance to audition for Regional and All-State ensembles. This group performs several concerts per year. Students are required to participate in numerous holiday and other performances after school.

1 Credit Full Year
Prerequisite: Audition Grades 10, 11, 12

Music Theory I **Academic Level**

This course provides a basic understanding of the elements of music. Clefs, scales, intervals, and melodic rhythmic concepts are covered. Ear training, notation, and music literacy are integral components of the class. By the end of this course, students will be able to write and read basic music notation.

1/2 Credit 1 Semester
No prerequisite Grades 9, 10, 11, 12

Music Theory II **Academic Level**

This course is a continuation of Music Theory I. Therefore, Music Theory I is a prerequisite for Music Theory II. It will expand a student's vocabulary and understanding of music through the analysis of harmonic and melodic structure as well as more advanced melodic and rhythmic techniques. This course will prepare students for AP Theory and college entrance exams for music majors. By the end of this course, students will be able to compose, arrange, and read music in 4 different parts as well as arrange a piece for multiple instruments or voices.

1/2 Credit 1 Semester
Prerequisite: Music Theory I or Grades 9, 10, 11, 12
permission of instructor.

Music History **Academic Level**

This course is an overview of the history and development of western music from Ancient Greece through the modern era. The class includes discussions of historical, cultural, and artistic developments, making connections between the three. We study in detail the major composers of each era and discover how their music differs from that of other periods. There is a great deal of listening to music. This course is recommended for those who would like to learn more about western civilization's cultural development or anyone interested in pursuing a post-high school music degree.

1/2 Credit 1 Semester
No Prerequisite Grades 9, 10, 11, 12

AP Music Theory **AP/ECE Level**

This course is an advanced music theory course equivalent to a first year college course in music theory. Music Theory II is a prerequisite for AP Music Theory. Students will be able to recognize, understand, read and write musical notation, have a basic understanding of the rudiments of music terminology. Students must have performance skills in voice or an instrument as a prerequisite. Emphasis is on harmonic analysis, basic composition, historical style, dictation, and basic keyboard harmony. Students are required to take the AP Music Theory exam in the spring. By taking the AP Music Theory exam, students may be awarded either college credit or advanced placement dependent upon the individual college.

1 Credit Full Year
Prerequisite: Recommendation by a Grades 9, 10, 11, 12
Music teacher.

American Music Studies **Academic Level**

This course is an overview of Hip Hop Rock, a historical and musical examination of the roots of American music from the Pilgrims to the development of ragtime, Jazz, Swing, the Big Band Era, Early Rock 'n' Roll, Rock and beyond. Students will explore, respond, research, and listen to the many styles of American Music. Students will recognize links between historical events and the music that was created.

1/2 Credit 1 Semester
No Prerequisite Grades 9, 10, 11, 12

Piano Keyboard **Academic Level**

This class is opened to all students wanting to play the piano. From beginners to accomplished players, students will have the opportunity to learn how to play the piano or receive additional coaching and support on repertoire that they are working on with their private teacher. Students will receive individual instruction and progress at their own speed in an electronic keyboard classroom. Students will also have the opportunity to play an acoustic upright and grand pianos.

1/2 Credit 1 Semester
No Prerequisite Grades 9, 10, 11, 12

Music Technology I

Academic Level

An introductory course that starts students with the basic principles of music technology. Students will learn the history of MIDI and how it developed. Students will study basic sequencing techniques using Sony software. The students will also learn basic recording principles using looping, and overdubbing while creating their own compositions. As a final project, their compositions will be recorded onto Compact Disc using studio software and shared with classmates.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Music Technology II

Academic Level

This course will further the student's knowledge of MIDI sequencing and digital sound recording. Students will also learn to use Finale music notation software to print sheet music, scores, and original compositions. Participants will learn how to input music using an electronic keyboard and computer and to print out scores and parts. This will be a one-semester course.

1/2 Credit

1 Semester

Prerequisite: Completion of Music Technology I

Grades 9, 10, 11, 12

Musical Theater Workshop

Academic Level

This course is designed for students interested in furthering their skills in musical theater performance. Content involves acting, singing, and dancing. Students will work on individual performances, ensemble presentations, and audition preparation.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12

Acting

Academic Level

This course is for those interested in acting on the stage and screen. Content will involve improvisation, character development and scene study. Students will work on monologues, ensemble presentations and audition preparation.

1/2 Credit

1 Semester

No Prerequisite

Grades 9, 10, 11, 12



Marching Band

All students in Symphonic Band and Wind Ensemble are required to participate in Marching Band. This ensemble performs at home football games, several parades, and may participate in marching band competition. One evening practice per week in September and October, and an occasional weekend practice/performance are required. Also, an annual Band Camp is held prior to the school year to teach basic marching technique, learn music for September performances, assign instruments, become acquainted with the program, and to have some fun! A full schedule will be mailed home over the summer and may be available on the school website in early July.

Marching Band also includes a Color Guard (flags, rifles, dance, etc.) for which both band members and anyone from the student body may audition.

Instrumental and Vocal Music Lessons

This is an opportunity for music students to be able to have more concentrated instruction on their instrument.

The first half of the period will be spent working on assignments with the instructor and/or independently. The second half of the period, the instructor will work with all students together in an ensemble setting. This time will be spent reinforcing the concepts covered during that week.

This is open to music students only and would take the place of a traditional study hall. Students will not receive credit for music lessons. However, it will fulfill the tutorial* requirement for band and orchestra students.

*All band and orchestra students must meet with the instructor for a tutorial at least once per quarter. Basic instrument performance skills and concepts are taught, reinforced, and assessed during this time.

Other Music Activities

In addition to the credit courses listed above, the Music Department offers students opportunity for participation in the following non-credit activities: Chamber Orchestra, Vocal and Instrumental Ensembles, Jazz Ensemble, Jazz Combo, Annual

Musical Production and Color Guard. These groups are scheduled by the department. Further information is available from the music instructors.

Jazz Band

Auditions for Jazz Band take place in the fall. See the high school director for times. Students wishing to audition for Jazz Band must be members of the Symphonic Band, or have permission of the director. Exceptions may be made for non-Band instruments like guitar, piano, and bass.

Chamber Orchestra

Auditions for Chamber Orchestra take place in the fall. See the high school director for times. Students wishing to audition for Chamber Orchestra must be members of the Orchestra, or have permission of the director.

Color Guard

Color Guard is a section of the Marching Band that does work with flags, rifles, and dance. Color Guard rehearses with the Marching Band in addition to some summer practices and extra after school practices during the fall. See the high school Band director for more information.

Science

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Science offerings.

What can I do with a major in Science?

Aeronautical Scientist
Aerospace Engineer
Agricultural Engineer
Anesthesiologist
Bacteriologist
Biochemist
Chemical Engineer
Chemical Laboratory Technician
Chemist
Civil, Electrical Engineer
Dentist
Ecologist
Electrical Engineer
Environmental Control Officer
Food and Drug Inspector
Forensic Scientist
Forester
Geologist
Geophysicist
Licensed Practical Nurse
Registered Nurse
Advanced Practical Nurse
Manufacturing/Mechanical Engineer

Marine Ecologist
Mathematician
Medical Laboratory Technician
Metallurgist
Meteorologist
Nuclear Engineer
Nutritionist
Oceanographer
Optometrist
Pathologist
Pharmacist
Physician
Physical Therapist
Physicist
Podiatrist
Psychiatrist
Regulatory Affairs Specialist
Respiratory Therapist
Soil Conservationist
Surgeon
Surveyor
Teacher
Technicians
Veterinarian

The Newington High School Science Department offers a comprehensive sequence of courses to meet the needs of all students in the area of Science. The program consists of a combination of full year and semester length courses to provide students at all levels of academic proficiency with a challenging and stimulating curriculum designed to satisfy graduation and college entrance requirements.

Two credits in science are required for graduation from Newington High School. (See Credits for Graduation, page 4). It is required that one credit each should be taken in both biological sciences and in physical sciences. Students planning on further formal education after high school should take one or more of the laboratory sciences.

Biology

Honors or Academic Level

This course that includes an in depth study of the cell, genetics, evolution, and ecology. Laboratory work will include a series of required CAPT activities designed to reinforce student learning and State of Connecticut CAPT expectations. Course work may include direct instruction of note taking as well as student participation in scientific experiments, projects, oral reports, and research papers. Honor students should have a strong ability and interest in science. Topics are enriched and covered in greater depth.

1 Credit

Grades 9, 10, 11, 12

8th grade teacher recommendation for Grade 9 (Honors only)

AP Biology (AP) (UConn Biology 1107 & 1108)

A college level course designed to provide a foundation for more advanced university courses in biology and related sciences. Topics include molecular and cell biology, genetics, diversity of organisms, plant biology, animal physiology and behavior, ecology and evolution. Students should be prepared to spend extra time both in and outside the laboratory on collection and research. The program is conducted in conjunction with the University of Connecticut which grants eight college credits to a student who successfully completes the program with a minimum grade of C. By taking the advanced placement exam students may be awarded either college credit or advanced placement depending upon the individual college involved.

1.25 Credit

Grades 10, 11, 12

6 Per./wk.

Prerequisite: 3.33 QPA in Biology Honors and Honors Chemistry
University of Connecticut Approval for those seeking UConn credit.

Grade 10 students may elect this course after demonstrating successful completion of Biology Honors and with permission from their instructor, department coordinator.

Botany

Academic Level

Botany is a semester course designed for students who have successfully completed Biology and that have an interest in plants and/or careers based on plants.

Botany is the study of plants, as such; this course will cover the biology of plants and their place the earth's environment. The course will build on the principles of biology and physical science. Students will be involved with topics such as classification, plant cells and tissue, seedless plants, seeded plants, plants and people, food plants, medical plants, plants and the economy, and plant interactions. The greenhouse will provide a hands on laboratory environment in which students are expected to be active participants.

1/2 Credit

1 Semester
Grades 10,11,12

Prerequisite: Successful completion of Biology

Chemistry

Honors or Academic Level

This course is designed to provide the student with an overview of chemistry for the 21st century. The course is built around unifying principles, that allow each student to develop the skills necessary to assess chemically related systems. Both a theoretical and experimental framework will be developed throughout the year. The theoretical framework developed in this course will be grounded in direct observation and inferences that are related to those observations. Descriptive chemistry will be introduced throughout the year as it applies to theoretical rationale or laboratory experiences. The laboratory work involves quantitative measurements illustrating properties of different chemical systems and qualitative analysis that investigate the nature of chemical systems. In the laboratory, students will gain experience with traditional laboratory exercises and be provided with opportunities to carry out novel investigation. Throughout the course, students are provided opportunities to access information, work collaborative and develop critical thinking and problem solving skills. Many of the topics covered in Honors Chemistry parallel the topics in Academic Chemistry. Successful completion of either Chemistry course allows students to earn college careers pathways dual credit in the Occupational Child Care, Allied Health, or Advanced Computer Applications Programs. **Successful completion of either course allows students to obtain their Performance Graduation requirement in the area of technology.**

1 Credit

Grades 10, 11, 12

Prerequisite: Have completed Honors or Academic Biology

Strongly Recommended: Completion or concurrent enrollment in Algebra II.

Matter and Changes

Academic Level

Matter and Changes is an inquiry-based, semester course that provides students with a basic understanding of matter and the changes it undergoes as it relates to technical and industrial careers. Matter and Changes is designed to provide a foundation for learning chemical processes that are used today and are being developed for the future. The course involves gaining knowledge of the properties of metals and chemicals that are relevant in numerous careers. Matter and Changes includes such topics as: chemical reactions, electrochemistry, and chromatography as they relate to real world situations. The course explores different technology to assist in designing methods to solve problems. Lab work will focus on acquiring an understanding of the material and presenting both qualitative and quantitative data.

1/2 Credit

5 Per./wk.

Prerequisite: Successful completion of Biology

1 Semester
Grade 11, 12

AP Chemistry

AP/ECE Level

This course is designed to provide a foundation for more advanced college level courses in Chemistry and related sciences. This topics include atomic theory, chemical and physical behavior of gases, liquids, solids, and solutions, periodic trends, kinetics and thermodynamic properties of chemical systems. The laboratory work involves quantitative measurements illustrating the laws of chemical change, equilibrium in solutions and qualitative reaction of cations and anions. Students should be well grounded in Algebra. While this course will encompass all of the topics tested on the AP Chemistry exam, additional time will need to be devoted by the student outside of class to prepare for this exam. By taking the advanced placement exam, students may be awarded either college credit or advanced placement depending upon the individual college involved and the score obtained. **Successful completion allows students to obtain their Performance Graduation requirements in the area of technology.**

1.25 Credit

Grades 10, 11, 12

6 Per wk

Prerequisites: 3.33 QPA in Honors Biology, Algebra I, Honors Geometry I and Honors Algebra II or must be taken concurrently

Current Issues in Science

Academic Level

(Basic Skills Assessment Plan - Science BSAP course)

This semester course is designed for Grade 12 students who need to meet the Science Basic Skills Assessment Plan for graduation. The course focuses on developing scientific inquiry, literacy, and numeracy skills necessary for future success in the 21st century workplace. These skills will be developed through the study of current scientific issues and their impact on the world. Some of these issues include energy production, medicine, the environment and biodiversity. Projects, activities, and media research will be major components of the course.

1/2 Credit

1 Semester
Grade 12 BSAP students only

AP Environmental Science**AP/ECE Level**

AP Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Emphasis throughout the course will be on identifying and analyzing both natural and human impacts on the environment and the examination of potential solutions and alternative approaches to safeguarding our global resources through sustainable practices. Environmental aspects of biology, chemistry, geology, physics, economics, as well as the socio-political and ethical implications will be studied. Students are prepared for the Advanced Placement Environmental Science Examination, taken in May. By taking the exam, students may be awarded either college credit or advanced placement depending upon the individual college involved and the score obtained. Successful completion allows students to obtain their performance graduation requirement in the areas of technology.

1.25 Credits

6 Periods per week

Prerequisites: 3.33 QPA in Biology and Chemistry

Environmental Science**Academic Level**

This course is designed to examine the principles of ecology and human impact on our planet. Topics include water and land pollution, ecotourism, global warming, endangered and invasive species, waste disposal and recycling. Projects, activities and media research will be the major components of this course.

1/2 Credit

1 Semester

Grades 11, 12

Prerequisite: Honors or Academic Biology

Human Anatomy and Physiology**Academic Level**

Human Anatomy and Physiology is a semester course designed for students who want to further their knowledge of the structure and function of the organ systems in the human body. It builds on many of the concepts learned in biology and allows students to apply those principles to authentic life situations as they study the human body. Students will learn more advanced laboratory skills and techniques. Dissection with dignity is an integral part of the laboratory experience as students observe and relate the biological levels of organization to develop critical thinking skills. Human Anatomy and Physiology will help prepare students to take more advanced courses in the medical and health related fields.

1/2 Credit

1 Semester

Grades 11, 12

Prerequisite: Honors or Academic Biology

Marine Biology**Academic Level**

This is a course for students interested in marine systems. Students will investigate the various components of marine ecosystems through lectures, laboratory activities, field work and individual research projects. Field sites will include the estuary, salt marsh, sandy beach, and rocky shore. Additional sites may be included if the scope of student research so demands. Classes will be scheduled for six periods a week, including a double laboratory period.

1/2 Credit

1 Semester

Grades 11, 12

Prerequisite: Honors or Academic Biology

Recommended: Honors or Academic Chemistry

Nanotechnology**Academic Level**

This interdisciplinary course will enable students to gain an understanding of rapidly advancing areas of science and technology that deal with the improvement of a certain process, procedure or product via an extremely small scale. It will provide students with a broad understanding of basic sciences, engineering sciences, and information sciences in relation to the enormous potential and impact nanotechnology has to influence the way people live in the 21st century.

1/2 Credit

1 Semester

Grades 11, 12

Physical Science**Honors or Academic Level**

Physical Science provides students with a broad survey of the important principles of chemistry and physics. Throughout the program, students will be exposed to a variety of hands-on learning activities designed to develop critical thinking skills, decision-making skills as well as cooperative learning and basic research skills. The course has no formal laboratory component; however, emphasis is placed on developing the experimental process as outlined by the state expectations for successful completion of the CAPT test in science. All students will be required to complete a series of formal CAPT Laboratory experiences designed to reinforce major concepts and laboratory expectations. Embedded Tasks of the Connecticut Core Science Curriculum Framework are included in the course. Proper usage of laboratory equipment and safety protocol is an important component of each student's experience.

1 Credit

Grade 9



Advanced Placement (AP) Physics**AP/ECE Level**

AP Physics is a first year Physics course that provides highly motivated students the opportunity to not only understand nature through a set of Physical laws, but also to understand the application of those laws in the real world. As a first year Physics course, students that have successfully completed College Preparatory Physics are not allowed to enroll in AP Physics. Course work prepares students who plan to major in the health professions, environmental, earth, and social sciences, and particularly technical fields such as engineering. Students will learn to develop 21st century skills, particularly problem solving and critical thinking, which is the major emphasis of the coursework, with some time applying those skills in the laboratory. Topics will include cutting edge research areas, such as electronics, quantum mechanics, and nuclear and atomic theory. **Successful completion allows students to obtain their Performance Graduation requirement in the area of technology.**

1.25 Credit

Grade 12

6 Per wk

Prerequisite: 3.33 QPA in Pre-Calculus

Honors Physics**Honors Level**

Physics explains nature through a set of physical laws. These laws can explain various colors of the rainbow, the physics of sports, the way a musical instrument works and the way nuclear reactions take place. Technological advances are results of applications of the laws of physics. Students will be better able to answer the difficult questions that technology poses our society. Students will learn to develop 21st century skills, particularly problem solving and critical thinking, which is the major emphasis of the coursework, with some time applying those skills in the laboratory. Topics will include cutting edge research areas, such as electronics, quantum mechanics, and nuclear and atomic theory. Students will also partake in research projects where they will be tasked with an engineering challenge, where they will have to put those 21st century skills to the test. **Successful completion allows students to obtain their Performance Graduation requirement in the area of technology.**

1 Credit

Grades 11, 12

Highly Recommended: Concurrent enrollment in Trigonometry or higher mathematics.

Academic Physics**Academic Level**

Physics allows students to make connections with what they see in nature. The rules of nature explain why the earth is round, why the oceans and sky are blue, and why sunsets are red. Similarities between baseballs and satellites, automobile crashes and roller coasters, light and sound waves will be discussed. The curriculum is designed for an inquiry based experience. Students will partake in many activities designed to stimulate classroom discussions. The class will focus on developing 21st century skills, particularly problem solving and critical thinking, which is the major emphasis of the coursework, with some time applying those skills in the real world as well as occasional lab experiences. Students will conduct engineering research projects, including designing, building, and analyzing their own roller coaster. The topics will be taught with mathematics as a guide to critical thinking.

1 Credit

Grades 11, 12

Forensic Science**Academic Level**

This one-semester course is the integration and authentic application of basic biological, physical and technological principles. The criminal justice system has been greatly impacted by recent advancements in scientific methods and applications to solve crimes. Students will use inquiry, problem solving and critical thinking skill to gain greater understanding of the science behind crime detection. Topics of study will include DNA analysis, hair, fiber and glass analysis, fingerprinting, bloodstain patterns and ballistics. Students should have a strong interest in laboratory work particularly data collection and analysis. Students will also learn about career opportunities related to forensic science.

1/2 credit

1 Semester

Grades 11, 12

Prerequisite: Successful completion of Biology and Chemistry or Matter and Changes

Wellness Education

The Connecticut Career Clusters, their pathways, and 21st Century skills are integrated in Wellness Education offerings.

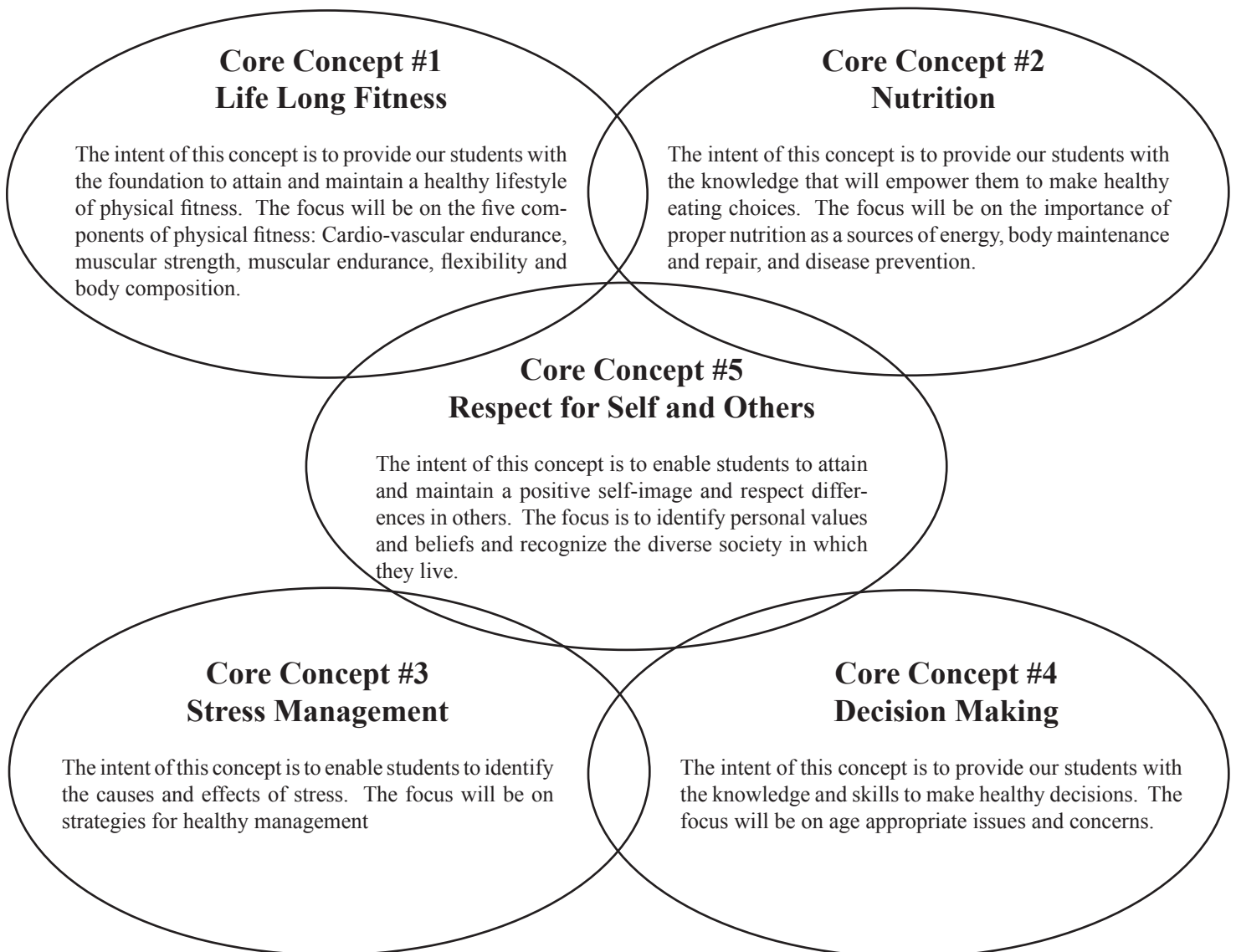
What can I do with a major in Wellness Education?

Wellness Education Teacher/Administrator	Personal Trainer
Physical Education Teacher/Administrator	Fitness Instructor
Public Health Educator/Administrator	Recreation Leader
Athletic Administrator	Sports Medicine
Athletic Coach	Physical Therapist
Athletic Trainer	
Fitness Instructor	

Philosophy

The philosophy of Newington High School Wellness Education Curriculum is to carry the Five Core Concepts throughout each student's three-year program.

The Five Core Concepts of Wellness Education



Wellness Department Guidelines

- All students are required to dress appropriately for Wellness Education class with a change of clothing and appropriate footwear (sneakers).
- Students will not take more than one semester of Wellness Education in any given year unless needed to fulfill graduation requirements due to transferring from another school or for a medical exemption.
- Students who are medically excused for an extended period of time must provide a physicians note.
- Alternative activities or assignments will be provided for those students who are excused by a physician from certain activities or class work.
- Students who are not able to participate in class on a particular day within a unit, will have to the end of that same unit to make up the class work or class activity.
- Students who are absent from class will have two weeks to make up the activity or class assignment.
- Students, who have not attended class at the beginning of a semester for a period extending beyond the first progress report, will have to be rescheduled for Wellness Education the following semester.

Wellness I

The focus is to transition from physical education and health education to an all-inclusive program in Wellness Education.

1/2 Credit

Academic Level

1 Semester

Grade 9

Wellness II

The focus is to guide students to recognize their own wellness behaviors and become aware of healthy lifestyle changes.

1/2 Credit

Prerequisite: Wellness I

Academic Level

1 Semester

Grade 10

Wellness III

The focus is to prepare students for the transitions from the more structured lifestyle of high school to one of greater independence and personal responsibility with respect to their wellness choices.

1/2 Credit

Prerequisites: Wellness I and Wellness II

Academic Level

1 Semester

Grades 11, 12

Health

This course is offered to transfer students who have not taken Wellness Education. Students will study health and how the areas of Physical, Social and Mental Health affect their daily life. Topics covered may be stress, nutrition, maturation, infectious diseases, and substance abuse. Emphasis will be placed on student involvement. Skills in decision making and problem solving will be stressed. Required for Graduation.

1/2 Credit

No Prerequisite

Academic Level

1 Semester

Grades 11, 12



World Language

The World Language courses fit into the Connecticut Career clusters and their pathways because they are an important adjunct skill to any professional or technical career, complementing and enhancing this training.

What can I do with a major in World Languages?

Advertising
Art Conservator
Broadcasting
Chef
Customs Official
Foreign Correspondent
Foreign Services Officer
Foreign Student Advisor
Immigration Official
Import/Export agent
Intelligence Agent
International Business

International Finance
International Law
Interpreter
Journalist
Language Researcher
Linguist
Medical Profession
Multinational Lobbyist
Peace Corps
Public Relations Specialist
Writer
Teacher
Translator
Travel Agent

Note: Although a number of colleges have a minimum entrance requirement of two years of a world language, many prefer three or four years of concentration. Eighth graders may satisfy this requirement, in part, by successfully completing French I or Spanish I in middle school and by continuing the second year of the same language in high school, with the recommendation of the middle school teacher.

A grade below “C-” in a language course indicates that the student would be seriously handicapped in a more advanced course for which this course is a prerequisite. Therefore, students in any world language course who receive a grade below “C-” will be counseled to repeat the course, or start another language. Students who choose to repeat a course will not receive credit for the repeated course, and the grade from the first course will be used for the calculation of grade point average. Additionally, students may only repeat a course in the same language once.

The World Language Department currently offers a four-year sequence of language study. In addition, students who have successfully completed the Spanish or French program at the middle school have the opportunity to complete a fifth year of language study at the high school. Classical language study in Latin includes Latin Poetry and Latin Prose offered in alternate years for the third and fourth years of study. A proficiency-oriented approach in the study of French, Italian, and Spanish culminates with the Advanced Placement program in French and Spanish.

French I Academic Level

French I is an introductory course which emphasizes the four basic skills of listening comprehension, speaking, reading and writing through a proficiency-oriented approach. The course includes elementary grammar, thematic vocabulary, geography of France and other French speaking countries, and cultural topics.
1 Credit
No Prerequisite Grades 9, 10, 11, 12

French II Honors or Academic Level

French II continues the development of the four basic skills within a communicative context. Proficiency is stressed by means of more advanced work in composition and conversation.
1 Credit
Prerequisite: French I Grades 9, 10, 11, 12

French III Honors or Academic Level

Third year French continues the communicative approach of the first and second year programs. Greater proficiency is stressed through more intensive work in grammar, written and oral expression, supplemental readings, and discussion.
1 Credit
Prerequisite: French II Grades 10, 11, 12

French IV Honors Level

Fourth year French continues the development of the four basic skills of listening comprehension, speaking, reading and writing. The reading includes short stories, poetry, drama and excerpts from contemporary periodicals. Classes are conducted mainly in French.
1 Credit
Prerequisite: French III Grades 11, 12

French V - Advanced Placement AP/ECE Level

French V is a full year course designed to provide advanced and highly motivated students the opportunity to continue the development of the four language skill areas. The course is organized to adhere to the College Board Advanced Placement Language Program guidelines for French language study and focuses on refining the use of grammatical structure in communicative settings and on developing reading and writing skills using authentic materials such as short stories, newspaper and magazine articles, television and radio clips, movies, videos, and Internet resources. The course will prepare students for the Advanced Placement French Language examination which may provide students the opportunity to receive credit and/or advanced standing at many colleges and universities nationwide. In addition to the college level workload during the school year, there is also a required summer reading and writing assignment. Classes are conducted in French.
1 Credit
Prerequisite: 3.33 QPA in French IV Grade 12

Spanish I **Academic Level**
Spanish I is an introductory course which emphasizes the four basic skills of listening comprehension, speaking, reading and writing through a proficiency-oriented approach. The course includes elementary grammar, thematic vocabulary, geography of Spain and other Spanish speaking countries, and cultural topics.
1 Credit
No Prerequisite Grades 9, 10, 11, 12

Spanish II **Honors or Academic Level**
Spanish II continues the development of the four basic skills within a communicative context. Proficiency is stressed by means of more advanced work in composition and conversation.
1 Credit
Prerequisite: Spanish I Grades 9, 10, 11, 12

Spanish III **Honors or Academic Level**
Third year Spanish continues the communicative approach of the first and second year programs. Greater proficiency is stressed through more intensive work in grammar, written and oral expression, supplemental readings, and discussion.
1 Credit
Prerequisite: Spanish II Grades 10, 11, 12

Spanish IV **Honors Level**
Fourth year Spanish continues the development of the four basic skills of listening comprehension, speaking, reading and writing. The course features greater emphasis on composition and conversation through selected readings and the study of advanced structure. Classes are conducted mainly in Spanish.
1 Credit
Prerequisite: Spanish III Grades 11, 12

Spanish V - Advanced Placement **AP/ECE Level**
Spanish V is a full year course designed to provide advanced and highly motivated students the opportunity to continue the development of the four language skill areas. The course is organized to adhere to the College Board Advanced Placement Language Program guidelines for Spanish language study and focuses on refining the use of grammatical structure in communicative settings and on developing reading and writing skills using authentic materials such as short stories, newspaper and magazine articles, television and radio clips, movies, videos and Internet resources. The course will prepare students for the Advanced Placement Spanish Language examination which may provide students with the opportunity to receive credit and/or advanced standing at many colleges and universities nationwide. In addition to the college level workload during the school year, there is also a required summer reading and writing assignment. Classes are conducted in Spanish.
1 Credit Grade 12
Prerequisite: 3.33 QPA in Spanish IV

Italian I **Academic Level**
Italian I is an introductory course which emphasizes the four basic skills of listening comprehension, speaking, reading and writing through a proficiency oriented approach. The course includes elementary grammar, thematic vocabulary, geography of Italy, and cultural topics.
1 Credit
No Prerequisite Grades 9, 10, 11, 12

Italian II **Honors or Academic Level**
Italian II continues the development of the four basic skills within a communicative context. Proficiency is stressed by means of more advanced work in composition and conversation.
1 Credit
Prerequisite: Italian I Grades 10, 11, 12

Italian III **Academic Level**
Third year Italian continues the communicative approach of the first and second year programs. Greater proficiency is stressed through more intensive work in grammar, written and oral expression, supplemental readings, and discussion.
1 Credit
Prerequisite: Italian II Grades 11, 12

Italian III **Honors Level**
Honors Level will cover, in greater breadth and depth, the same core material as in Academic Level, and will feature additional topics. The students will be expected to convey their thoughts in a more sophisticated manner in both oral and written communication.
1 Credit
Prerequisite: Italian II Grades 11, 12

Italian IV **Honors Level**
Fourth year Italian continues the development of the four basic skills of listening comprehension, speaking, reading and writing. Readings include short stories and selections from classic and modern Italian literature. Classes are conducted in Italian.
1 Credit
Prerequisite: Italian III Grade 12

Latin I**Academic Level**

First year Latin stresses vocabulary, inflections, and rules of syntax in preparation for the further study of Latin. The course emphasizes the importance of English derivatives from Latin root words. It also includes an introduction to Roman civilization and culture.

1 Credit

No Prerequisite

Grades 9, 10, 11, 12

Latin II**Honors or Academic Level**

Latin II continues the development of the principles of grammar and vocabulary. English vocabulary is increased through the continued study of Latin roots. Special emphasis is placed on the cultural heritage of the Romans and their impact on modern civilization. Reading skills are developed through translations of Greek and Roman myths, and adapted selections from such authors as Livy, Caesar, Ovid and Plautus.

1 Credit

Prerequisite: Latin I

Grades 10, 11, 12

Latin III/IV - Prose**Honors Level**

Latin Prose is a full year course offered in alternate years. It continues the development of the basic skills and reviews material acquired in Latin I and II. The students will acquire historical, political and economic background concerning the last days of the Roman Republic before reading Cicero's Orations and other speeches and essays. The students will increase their proficiency through these selections and works by such authors as Sallust, Pliny and Apuleius. In addition, students will explore Roman rhetorical and grammatical figures of speech and their influence on world literature.

1 Credit

Prerequisite: Latin II

Academic Year: 2014-2015

Grades 11, 12

Latin III/IV - Poetry**Honors Level**

Latin Poetry is a full year course offered in alternate years. It enables the student to acquire an advanced Latin vocabulary and to strengthen his/her knowledge of linguistic form and grammatical structure. Themes of Latin poetry will be explored through the study of selected poems with emphasis on Vergil's Aeneid, and selected works of such authors as Catullus, Horace, and Ovid. In addition, students will explore Roman rhetorical and grammatical figures of speech and their influence on world literature.

1 Credit

Prerequisite: Latin II

Academic Year: 2013-2014

Grades 11, 12



Courses

Art

Advanced Placement (Studio Art/2D Design)
Cartooning/Intro to Animation
Ceramics
Creative Drawing
Digital Animation/Film I
Digital Animation/Film II
Digital Graphic Design I
Digital Graphic Design II
Drawing I
Drawing II
Foundations of Digital Media & Photography
Jewelry/Metal Design
Multi-Media Art History
Painting Media I
Painting Media II
Photography I
Photography II
Portfolio Preparation
Sculpture/3D Design

Career/Technical Education and Engineering

3 Plane Modeling and Drawing
Advanced Computer Applications/College Career Dual Credit
Advanced Information Processing
Architectural Drawing & Design
Automated Accounting I
Automated Accounting II
Baking and Pastry Arts/Culinary II
Business Law
Business Principles and Management/
E-Commerce
CAD
Carpentry
Computer Applications/College Career Dual Credit
Construction Trades
Cooperative Work Experience
Culinary III/College Career Dual Credit
Early Child Dev. & NHS Preschool/College Career Dual Credit
Energy Systems
Engineering Design & Construction
Family Life
Financial Planning
Food/Hospitality Essentials /Culinary I
General Contracting
Graphics and Design I
Graphics and Design II
Healthy Cuisine/Culinary I
Home Construction
Hospitality & Management
Hospitality & Tourism
Infant & Toddler Development and the NHS
Infant/Toddler Center/College Career Dual Credit
Information Processing
International Business
Introduction to Business
Marketing I/Work Experience
Marketing II/Work Experience
Nanotechnology
Occup. Child Care Coop. Work Study/ College Career Dual Credit
Personal Finance
Robotics
Study Skills
Web Design I

English

American Female Authors
American Studies
American Voices
AP English Language
AP/UConn English Literature & Composition
British Literature II
Communications and Mass Media
Creative Writing
Discovery of the Self in Literature
Drama
English 9
English 10
English 11
English for Speakers of Other Languages
Journalism
Mark Twain's America
Nobel Prize Authors
Poetry
Practical Literacy
Public Speaking
Shakespeare
Special Topics in Public Speaking

Mathematics

Algebra I
Algebra II
AP Calculus AB
AP Calculus BC
AP Computer Science
AP Statistics
Calculus
Discrete Math
Geometry
Introduction to Computer Science
Pre-Calculus

Music

Acting
American Music Studies
AP Music Theory
Chamber Choir
Instrumental and Vocal Music Lessons
Marching Band
Men's Chorus
Music History
Music Technology I
Music Technology II
Music Theory I
Music Theory II
Musical Theater Workshop
Orchestra
Orchestra/Women's Choir Combo
Other Music Activities (Not weighted)
Piano Keyboard
Symphonic Band
Symphonic/Chorus Combo
Wind Ensemble
Women's Chorus

Reading

Literacy Workshop
Mastery Reading
Reading Workshop

Science

AP Biology/UConn
AP Chemistry
AP Environmental Science*
AP Physics
Biology
Botany
Chemistry
Current Issues in Science
Environmental Science
Forensic Science
Human Anatomy and Physiology
Marine Biology
Matter and Changes
Nanotechnology
Physical Science
Physics

Social Studies

American Government & Citizenship*
American Studies
AP Psychology
AP United States History
AP/ECE Modern Western Traditions/
UCONN History 1400
Basic Skills Assessment Social Studies
Contemporary World History*
Current Issues
Economics
ESOL American Government & Citizenship
Political Science
Psychology
Sociology
United States History*
World Civilizations

Wellness Education

Health
Wellness Education I
Wellness Education II
Wellness Education III

World Languages

French I
French II
French III
French IV
French V AP
Italian I
Italian II
Italian III
Italian IV
Latin I
Latin II
Latin III/IV Poetry
Latin III/IV Prose
Spanish I
Spanish II
Spanish III
Spanish IV
Spanish V AP

*Pending Board Approval

NOTICE

It is the policy of the Newington Board of Education that no person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against under any program, including employment, because of race, color, religious creed, sex, age, national origin, ancestry, marital status, sexual orientation, mental retardation and past/present history of mental disorder, learning disability and physical disability.

Contact Dr. William C. Collins, Superintendent of Schools at 860-665-8610 at the Newington Town Hall, 131 Cedar Street, Newington, if you have questions or concerns or believe that you or others are being discriminated against.