Norwalk Public Schools

Program of Studies

2024 – 2025

Brien McMahon High School

Center for Global Studies

Norwalk High School

P-TECH Norwalk

Future Ready Programs


NORWALK
Public Schools

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Table of Contents

Introduction 5
NPS School Choice 6
Course Selection Process 7
NCAA Athletes Eligibility 8
College Experience Coursework 9
Credit Requirements for Graduation 10
Capstone Experience and Mastery Based Assessment 13
Testing Information 14
Course Descriptions 15
Brien McMahon High School and Norwalk High School 15
English 16
Social Studies 24
Digital Media and Communication Academy at NHS 31
Fine Arts 33
Music 39
World Languages 44
Mathematics 52
Computer Science and Technology Information 57
Science 61
Physical Education & Health Education 73
Business 75
Family and Consumer Science 79
JROTC / Aerospace (Air Force) NHS ONLY 80
JROTC / Naval Science (NAVY) BMHS 81
IB DP and CP Core (BMHS ONLY) 83
Multilingual Learner (MLL) Education 85
Specialized Education 89
Center for Global Studies 93
Admissions 94
CGS Required Courses 96
Course Descriptions 97
Literature Courses 97
Social Studies Courses 99
World Languages Courses 103
Math Courses 106
Fine Arts Courses 109
Science Courses 112
Physical Education and Wellness / Health Education and Safety 114
Specialized Education 115
Enrichment Opportunities 115
P-Tech Norwalk 116
Course Descriptions 118
Business 118
Computer Science and Technology 120

English 124
Health Education and Safety 126
JROTC 127
Mathematics 128
Multilingual Learner (MLL) Education 131
Music 135
Physical Education and Wellness 139
Science 140
Social Studies 142
Fine Arts 144
World Languages 147
Future Ready Programs **151**
Career Pathways within Norwalk Public Schools **157**
Connecticut State Seal of Biliteracy **170**
Out of District Special Programs 171
Online Learning 173

Introduction

Vision Statement of Norwalk Public Schools

Norwalk is the most successful City school system in Connecticut. Norwalk students will exceed State average achievement while high-need students have the smallest achievement gap. Student needs and interests are met through a wide range of school and program choices that promote diversity and broaden achievement. All students are taught by exemplary educators in nurturing, safe, and attractive schools. Students read on grade level by the end of grade three, leave eighth grade equipped to do rigorous high school work, and graduate from high school ready for college.

Goals of the Norwalk Public Schools

- Close the gaps between Norwalk student achievement and State average student achievement in Reading (ELA), Math, Science, and the graduation rate (4 and 5 years) during the life of the Strategic Operating Plan.
- Reduce the achievement gap of Norwalk's high-need students – Special Education, Multilingual Learners, and low-income students - relative to high-need students in the State. Norwalk will have the smallest achievement gap of any City in the State.
- Create more educationally robust parental choices that meet diverse student needs and interests.
- Develop exemplary teachers and school leaders; fill the majority of school and district leadership positions through succession planning and development of staff within the district.
- Ensure safe and attractive schools that support educational programs of the Plan and a nurturing, inclusive learning environment with positive behavior interventions and supports at every school.
- Develop external partnerships and district operating systems necessary to achieve equity and support the District's strategic priorities in the most cost-effective manner.



NPS School Choice

Norwalk has two comprehensive and two specialized high schools. Each of the comprehensive high schools has academies within the school. Each academy is a smaller learning community within a school with multiple pathways within it. These academies have cohorts of students that travel together in a special sequence of courses and share a group of teachers. The academies may include an integrated curriculum including counseling, partnerships with an industry and secondary education, as well as an advisory group consisting of various stakeholders to guide the overall program.

Each specialized high school and academy is open to a specific number of students each year. Students seeking enrollment in a specialized high school or academy outside of their home district need to apply during the regular course selection process – slots are limited. These continue to be developed as the district grows and establishes new partnerships. As a result, students and families are presented with the opportunity for choices of programs that promote diversity and will broaden achievement.

Students must submit an application by the published deadline to be eligible for the following Schools and Academies.

Center for Global Studies	Marine Science (BMHS Academy)	Digital Media and Communications Academy (NHS)
P-TECH Norwalk	McMahon Medical Pathway (BMHS)	International Baccalaureate 11 & 12 (BMHS)
Twilight Academy	Virtual Academy	

Course Selection Process

The course selection process is a significant component of the school-home partnership and while course selection is the primary responsibility of the student and their parents/guardians, there will be numerous opportunities to consult with, make use of the broad experience and professional background of our faculty, and school counseling staff.

Students have the opportunity to explore the diverse course offerings through our Program of Studies, which will enable them to be best prepared for college or employment upon completion of their senior year.

Prerequisite work, feedback, and recommendations are always considered in supporting course selection to maximize our students' learning goals. Below, is a suggested timeline that high schools and middle school will follow while completing this exciting planning phase. Please check with your own school for specific dates.

Date	Action	Description
February	Program of Studies Booklet Distribution	Students and parents review course offerings and prerequisites.
February	Teacher Recommendation	Teachers confer with students during class and input their recommendations into Power School for the upcoming year. Recommendations are based on current performance.
February/March	School Counselor Meetings	Students participate in scheduled meetings with the school counseling department to review all course requests.
February/March	Student Course Request Window	Students submit course requests via the Course Selection 2024-2025
April/May	Course Requests	Parents and students can view course requests through the Power School Portal. Inquiries from students and parents regarding course selections can be directed via email or phone calls to the classroom teacher, school counselor or department chair.
May	Placement and Prerequisites	Prerequisites are indicated by department and/or course where necessary. Placement into grade nine academic courses is based on teacher recommendation.

During the second semester of each school year, extensive plans and procedures are instituted in preparation for the following year. None is more important than scheduling. It is imperative that both parents and students exercise careful planning prior to making course selections.

School counselors will provide all materials and offer advice prior to the announced deadlines. Please review the Program of Studies carefully and consult with a counselor on questions or concerns in making decisions. When all courses have been selected, counselors will send requests via email to the student and parent or guardian. Once submitted, the final requests constitute the basis for all further planning.

Schedules will only be modified if one of the following occurs:

1. If there is a course conflict or the printed schedule is incorrect.
2. If a schedule is incomplete or there are insufficient credits for graduation.
3. As a result of a course failed in June or successful completion of a course in summer school.

When conflicts arise, students must be prepared to make alternative choices in order to resolve them. Decisions need to be made carefully and thoughtfully.

COURSE CHANGES AND THE PERMANENT RECORD

Course changes are rare and are made only for academic reasons with administrative approval when the struggling student has worked to address the issue with the teacher.

1. An approved change after 10 school days in a semester course will result in a "W" on the student's transcript. An approved change or drop after 20 school days in a full-year course will result in a "W" on the student's transcript.
2. Any approved course change or drop after the first quarter of a semester course will be recorded as a "WF" on the student's transcript. Any approved course change after the first quarter of a full-year course will be recorded as a "WF" on the student's transcript.
3. When a student transfers to another level (same subject), the current grade transfers with the student. If he or she transfers from an AP or Honors level course, the transferred grade will not be weighted. The AP or Honors level course will not be reflected on the transcript.

NCAA Athletes Eligibility

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at eligibilitycenter.org. If you want to play Division III sports or you aren't sure where you want to compete, start by creating a Profile Page at eligibilitycenter.org.

ACADEMIC REQUIREMENTS: To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA. For full information regarding the requirements, please see the brochure below: http://www.ncaapublications.com/productdownloads/EB17.pdf

CORE COURSES: Only courses that appear on your high school's list of NCAA core courses will count toward the 16 core-course requirement; visit www.eligibilitycenter.org/courselist for a full list of your high school's approved core courses.

NCAA	These courses are NCAA eligible.

College Experience Coursework

Advanced Placement (AP), ECE UConn, International Baccalaureate Programs (IB), Project Lead the Way (PLTW), P-Tech

The courses listed are **some** of the rigorous academic classes available to students who are interested in the opportunity to pursue challenging college-level work in high school. These courses offer exciting and stimulating course work through a college experience while at the four Norwalk Public High Schools. Through these college-level courses, students can earn college credit and/or advanced standing while also distinguishing themselves in the college admission process. The courses can help students acquire the skills and habits necessary to be successful in post-secondary education.

ENGLISH	MATH	World Languages	PLTW
AP Language & Composition	AP Calculus AB	AP Italian	Honors Computer Science Essentials
AP Literature & Composition	AP Calculus BC	AP French IB and ECE	Honors Computer Science Principles
	AP Computer Science A	AP Spanish IB and ECE	Honors Intro to Engineering Design
SOCIAL STUDIES	AP Statistics	AP Spanish Language	Honors Principles of Engineering
AP Macroeconomics		AP Spanish Literature and Culture	Honors Digital Electronics
AP European History	**SCIENCE**		Honors Human Body Systems
AP Psychology	AP Biology	**ELECTIVES**	Honors Medical Interventions
AP US Government	AP Chemistry	AP Computer Science Principles	
AP US History, ECE	AP Environmental Science	AP Studio Art	
	AP Physics I		

MMP (BMHS)	IB (BMHS)	IB (BMHS)	P-TECH
UConn Medical Terminology	IB Literature and Language	IB Math Analysis and Approach	Web Development
Honors Principles of Biomedical Science	IB Business Management	IB Math Applications and Interpretations	Intro to Programming
Honors Human Body Systems	IB Environmental Science	IB Music	Object Oriented Programming
Honors Medical Interventions	IB Economics	IB Film	Database Development I
EMT Certification, ECE	IB Global Politics	IB Visual Arts	Operating Systems
	IB History	IB French	XML for WWW
	IB Sports ,Exercise and Health Science	IB Italian	Intro to Engineering
	IB Physics	IB Spanish	Database Development II
	IB Marine Science		Mobile Devices I
			Mobile Devices II

Credit Requirements for Graduation

Norwalk Public Schools requires that students fulfill the following requirements in order to graduate. Students must complete credit requirements.

Class of 2025, 2026, 2027 & 2028 (25 credit requirement)	
Humanities (English, Social Studies, Fine Arts, World Languages)	**10.0 Total**
4.0 English	
1.5 Social Studies (1.0 World History recommended)	
1.0 US History	
0.5 Civics (or American Government or Constitution)	
1.0 Fine Arts (Art, Music, Theatre, Dance)	
2.0 World Languages	
STEM (Science, Technology, Engineering, Math)	**9.0 Total**
4.0 Math (may include Algebra 1, Geometry, Algebra 2, Statistics, or other math courses)	
1.0 Biology/Life Science (lab)	
1.0 Chemistry/Physical Science/Earth Science (lab)	
1.0 Other Science	
2.0 STEM Related Course (including 0.5 Digital Literacy Requirement*)	
Physical Education and Wellness; Health and Safety	**2.0 Total**
1.0 Physical Education	
1.0 Health and Safety	
Related Courses	**3.0 Total**
3.0 Pathway Related Courses (including 0.5 Financial Literacy Requirement for Class of 2027+*)	
Capstone Requirement	**1.0 Total**
1.0 Capstone Experience	
25.0 Total Credits Required for Graduation	

Seniors must take 6.0 credits with Capstone credit and must pass a minimum of 5 credits in grade 12 to be eligible for graduation.

***Digital Literacy is the ability to find, evaluate, utilize, share, and create content using information technologies and the internet. Students must complete at least 0.5 credit in one of the following courses to demonstrate proficiency in Digital Literacy prior to graduation.**

- **Business:** Computer Applications, Web Page Design, Computer Construction and Repair, CISCO Networking 1, Honors CISCO Networking 2, Honors Computer Science Essentials (PLTW), Honors Computer Science Principles (PLTW) & Video Game Design. CompTIA Fundamental, CompTIA Core 1, CompTIA Core 2.
- **Computer Science:** Computer Science 1, Computer Science 2, Exploring Computer Science, AP Computer Science Principles, AP Computer Science A, Introduction to Java, Software Design and Integration 1 & Conceptual Engineering Milestones
- **Engineering (Science)**: Computer Applications for Marine Science Studies, All Project Lead the Way (PLTW) Courses *not including those in the MHA*; or another approved course.
- **PLTW:** CompTIA IT Fundamentals, CompTIA Core 1, CompTIA Core 2 & IT Internship
- **NCC:** NCC GRA 151 - Graphic Design I: Skills and Principles, NCC GRA 252 - Graphic Design II: Process and Presentation, NCC GRA 231 - Digital Imaging: Adobe Photoshop, NCC GRA 241 - Digital Page Design: Adobe InDesign, & All NCC CST and CSC course

***Financial Literacy is the ability to understand and effectively use various financial skills, including personal finance management, budgeting, and investing. Students in the Class of 2027 and beyond must complete at least 0.5 credit in one of the following courses to demonstrate proficiency in Financial Literacy prior to graduation.**

- **Business:** Principles of Personal Finance, Personal Finance, Principles of Financial Literacy, Financial Literacy, Principles of Investing, Money Wise-Future Ready, and Financial Math (Edgenuity)
- **Math:** Money Math

Credit System

All subjects at the high school level are assigned units of credit values based on the Carnegie Unit System. The number of class sessions and the amount of preparation necessary to achieve a satisfactory standard of performance determine these values. They are equivalent to those assigned by other secondary schools. Every course taken in grades 9, 10, 11, and 12 becomes part of the student's official high school record. *This record of credits and grades earned determines a student's average, rank in class, and qualifications for graduation.*

Starting with the Class of 2023, students successfully completing Algebra 1, Geometry and/or World Languages in grade 8, will count towards the high school graduation requirement. However, courses completed in middle school are not included in the high school cumulative grade point average.

Grading Procedures

This chart shows the letter grades and how grade point averages (GPA) are calculated for academic performance in Advanced Placement, IB, and honors classes.

Grade	Value	Unit Weight	Honors	AP/IB
A	(93-100)	4.00	4.50	5.00
A-	(90-92)	3.70	4.20	4.70
B+	(87-89)	3.30	3.80	4.30
B	(83-86)	3.00	3.50	4.00
B-	(80-82)	2.70	3.20	3.70
C+	(77-79)	2.30	2.80	3.30
C	(73-76)	2.00	2.50	3.00
C-	(70-72)	1.70	2.20	2.70
D+	(67-69)	1.30	1.80	2.30
D	(63-66)	1.00	1.50	2.00
D-	(60-62)	0.70	1.20	1.70
F	(0-59)	0.00	0.00	0.00

Example:

Course	Grade	GPA
EN0036GAE5 English 3	B+	3.30
EN0039HAE5 Honors English 3	B+	3.80
EN0040ACE5 AP/IB English Language	B+	4.30

Plan of Study Class of 2025 - 2026

Scholar Name:		Date:	

25 CREDIT REQUIREMENTS	Min CR	Grade 9	Grade 10	Grade 11	Grade 12	T CR
HIGH SCHOOL REQUIREMENTS						
English	4					
Social Studies	1.5					
US History	1					
Civics	.5					
Fine Arts	1					
World Language	2					
Total						
Humanities Credits	**10**					
Math	4					
Science	3					
STEM Elective ***Digital Literacy Requirement***	2					
Total						
STEM Credits	**9**					
Physical Education	1					
Health Education	1					
Total						
PE & Health Credits	**2**					
Related Courses	3					
Capstone Experience	1					
Total	**4**					
TOTALS						

Plan of Study Class of 2027+

Scholar Name:		Date:	

25 CREDIT REQUIREMENTS	Min CR	Grade 9	Grade 10	Grade 11	Grade 12	T CR
HIGH SCHOOL REQUIREMENTS						
English	4					
Social Studies	1.5					
US History	1					
Civics	.5					
Fine Arts	1					
World Language	2					
Total						
Humanities Credits	**10**					
Math	4					
Science	3					
STEM Elective ***Digital Literacy Requirement***	2					
Total						
STEM Credits	**9**					
Physical Education	1					
Health Education	1					
Total						
PE & Health Credits	**2**					
Related Courses ***Financial Literacy Requirement***	3					
Capstone Experience	1					
Total	**4**					
TOTALS						

Capstone Experience and Mastery Based Assessment

Beginning with the Class of 2023, all students must successfully complete a Capstone Experience, which will count as their mastery-based diploma assessment prior to graduation. This Experience is a culmination of a student's learning in a particular area over the course of three or four years. Students will select specific courses, academic programs, and learning opportunities that align with their interests. NPS graduates connect learning to a real-world application while developing the attributes needed for success after high school.

General Overview

The Capstone is a culminating experience that provides students with the opportunity to:

- independently develop essential skills and knowledge in an area of talent or interest.
- demonstrate learning, growth, and progress toward proficiency or mastery through a public presentation of a selected genre of study (problem-solving, internship, research-based, creative/performance).
- utilize a Skills21 platform to store evidence, reflect on learning, and present information.
- be assigned a Capstone advisor to guide completion of required tasks.
- award one credit (pass/fail) for high school graduation (State Graduation Requirement).

Each Capstone must include the following required components:

Proposal

- Find Your Passions activity available to brainstorm areas of focus for Capstone project.
- Submit proposal for Capstone project

Ongoing reflection

- 3-5 required reflections (can be done in writing, video journaling, voice memos, etc)
- Advisor check-ins for progress and completion

Research & Product

- Can include, but not limited to one of the following: internship with specific evidence (mentor will provide examples); research paper (ethnography, oral history, lab-based research, etc), performance or exhibition (music, dance, art, film, theatre); creative writing (fiction, creative nonfiction, stage or film scripts, poetry collection); event or showcase dedicated to solving a problem (community service event, STEM-based prototype, design prototype or model, economic model).
- Products evaluated by Capstone advisors

Exhibition/Presentation

- Modes of presentation with scoring (Audience of peers, parent/guardian, and/or faculty)
- Includes portfolio containing all of the components of the Capstone Experience

Senior Capstone Seminar Experience

- Semester-long course is available to support students in completion of their Capstone project.

Testing Information

Northwest Evaluation Association (NWEA) or Measures of Academic Progress (MAP): This formative assessment is given to grade 9 and 10 students to determine their proficiency in reading, writing, and mathematics. It is an adaptive, computer-based assessment that is proctored in the students' classes. These scores are used to determine instruction, specifically acceleration and remediation

Scholastic Aptitude Test (SAT) for Grade 11 Students: The Connecticut State Board of Education adopted the SAT as the statewide assessment for grade 11. The SAT is administered during the school day to all grade 11 students in all public schools in Connecticut in the spring.

Suggested Level of Proficiency on SAT

2023 SAT Grade 11 Benchmarks

- Math: 510 out of 760
- Evidence-based Reading and Writing: 460 out of 760

PSAT / NMSQT- Preliminary Scholastic Aptitude Test **(PSAT**)/National Merit Scholarship Qualifying Test (**NMSQT**): This test is administered in the fall to help students prepare for the SAT and is the means for juniors to enter a competition for the National Merit Scholarships and/or the National Achievement Scholarships.

PSAT 8/9: This test is administered to all grade 8 and 9 students each fall. It is intended to be used as a baseline of student achievement as they enter high school on topics that matter most to college and career success.

Advanced Placement Tests (AP): Students are expected to take the AP exam if enrolled in an AP course. Information explaining tests, fees, application dates and more is available online at www.collegeboard.com.

International Baccalaureate Tests (IB): Students are expected to take the IB exam if enrolled in an IB course. Information explaining tests, fees, application dates and more is available online at www.ibo.org.

Language Assessment System (LAS) Links: English proficiency testing of Multilingual Learners (MLLs) occurs upon registration. The test consists of 4 sections – listening, speaking, reading, and writing. All students designated as MLLs are tested each year on the LAS Links to measure progress towards English language proficiency.

Connecticut Physical Fitness Assessment (CPFA): All students must have their CT Physical Fitness Assessment scores reported to the State throughout their High School career. The school is measured by the State according to both participation and passing rates.

Project Lead the Way Testing (PLTW): PLTW End-of-Course Assessments. These assessments measure a balance of both subject-matter knowledge and mastery of in-demand, transportable skills, including problem solving, critical and creative thinking, collaboration, communication, and ethical reasoning. Performance on the PLTW Assessment may result in students receiving **dual credit** at various higher education institutions.

Course Descriptions

Brien McMahon High School and Norwalk High School

Humanities:

English

Social Studies

Fine Arts and Music

World Languages

English

During the four years of high school, students must earn four credits in English. All students must pass the following required courses: **English 1, English 2, English 3**, and **two core English grade 12 related courses** (that prepare students for a career pathway or Capstone Experience) or **Advanced Placement English** or **IB course** or **World Literature (CGS only)**. *Subject offerings can also be found within the Multilingual Learner (MLL) section of this book.

Honors English courses are available to students in grades 9, 10, and 11 and **Advanced Placement English** is an option for grades 11 and 12. **For these programs, a required reading and writing assignment must be completed during the summer prior to enrollment.** It is the responsibility of the student to obtain the appropriate list from the English department staff.

In addition to the required **English** course, students in all grades may choose from among several English related courses; any special prerequisite is indicated in the course description.

Guidelines for high school English Departments concerning student enrollment in required courses:

- No student may be simultaneously enrolled in two courses of required English.

English Requirement Course Sequence

BMHS ONLY

9	10	11	12
English 1 Transition English*	English 2 Transition English*	English 3 Transition English*	Senior Core English Courses Transition English*
Honors English 1	Honors English 2 AP Language & Composition	Honors English 3 AP Literature & Composition	AP Language & Composition AP Literature & Composition
		IB Language and Literature (Y1)	IB Language and Literature (Y2)

NHS ONLY

9	10	11	12
English 1 Transition English*	English 2 Transition English*	English 3 Transition English*	Senior Core English Courses Transition English*
Honors English 1	Honors English 2	Honors English 3	AP Language & Composition AP Literature & Composition
		AP Language & Composition AP Literature & Composition	

*See notes for Transition English enrollment and MLLs under Multilingual Learners course description.

EN0016GAE English 1 Grade 9 1 Credit
***[Graduation Requirement: English Credit]**

This course is an exploration of the reading-writing connection. Students will study a diverse collection of informational and literary texts and will use the writing process and technology to develop writing proficiency. Students will also work on speaking and listening, vocabulary development, comprehension strategies, and logical thinking and study skills. Emphasis will be placed on close reading strategies that develop critical reading and analytical skills development.

EN0019HAE Honors English 1 Grade 9 1 Credit
***[Graduation Requirement: English Credit]**

This accelerated English course will consist of an in-depth examination of both fiction and nonfiction. An emphasis will be placed on the various forms of discourse (e.g., persuasive, expository, narrative, and descriptive). Students will learn the components and skills associated with critical and rhetorical analysis. Multicultural readings will be studied throughout the course to gain a better understanding of the author's voice and choice. This course will provide an intensive educational opportunity for qualified, highly motivated students. Students may be required to complete a summer reading and writing assignment in advance of taking this course. Prerequisite: Eighth-grade teacher recommendation based on student's interest and motivation.

EN0026GAE	English 2	Grade 10	1 Credit
*[Graduation Requirement: English Credit]			

In this course, students will acquire the skills and develop the vocabulary necessary to read the major genres of literature: the novel, short story, drama, poetry, essay, and biography. A combination of nonfiction and fiction works will be used in the course of study. Students will study the various techniques of developing and researching a topic and will write papers and develop multimedia presentations using these skills. Instruction will focus on response writing, persuasive essay, and reflective personal statements. Grammar, research, vocabulary, and oral communication skills will also be emphasized.

EN0029HAE	Honors English 2	Grade 10	1 Credit
*[Graduation Requirement: English Credit]			

This accelerated English course will consist of an in-depth analysis of challenging classical and contemporary short stories, drama, novels, poetry, non-fiction, and biographies. Selections will include a diverse set of authors that reflect the multiculturalism found in our society. In addition, the course will stress the writing process and include an emphasis on expository, research and thesis writing. Other activities will include the acquisition of grammatical skills, the development of vocabulary, the application of literary terminology, and the development of oral communication skills. More emphasis will be placed on understanding rhetoric and the appeals. The course will provide an intensive, educational opportunity for qualified, highly-motivated students. Students may be required to complete a summer reading and writing assignment in advance to take this course. The responsibility for obtaining and completing the reading and writing assignments is with the student.

EN0036GAE	English 3	Grade 11	1 Credit
*[Graduation Requirement: English Credit]			

Students in this course will read major writers of American Literature from the early colonial period to the present to become aware of their cultural traditions. Through their reading, discussions, vocabulary work, and writing, students will develop an awareness of their place in society and their value as an individual. Students will develop research skills and use the writing process to develop creative, analytical, and persuasive pieces. Informational and literary texts will be analyzed using close reading strategies as preparation for college entrance exams. Focus will also be given to the personal narrative as a way to best prepare students for college essay admission requirements.

EN0039HAE	Honors English 3	Grade 11	1 Credit
*[Graduation Requirement: English Credit]			

Students in this accelerated English course will develop the ability to examine the growth of American Literature from the colonial to the contemporary period. Through a critical analysis of the works of major American writers, students will achieve knowledge of their cultural traditions, an understanding of the development of American literary thought, and an awareness of their place in society. Students will write papers and produce multimedia presentations to increase their skills in the techniques of expository, narrative, and research writing. Work will be collected and maintained in individual portfolios, which will be reviewed periodically. Students do intensive vocabulary study and will make use of literary terminology in their discussions and written work. Informational and literary texts will be analyzed using close reading strategies as preparation for college entrance exams. Focus will also be given to the personal narrative as a way to best prepare students for college essay admission requirements. This course will provide an in-depth, challenging study of American Literature for the qualified, highly-motivated student. Students may be required to complete a summer reading and writing assignment in advance to take this course. The responsibility for obtaining and completing the reading and writing assignments is with the student.

EN0040ACE	Advanced Placement: Language and Composition	BMHS Grades 10, 12	1 Credit
*[Graduation Requirement: English Credit]		NHS Grades 11, 12	

Students will be engaged in becoming skilled readers of prose written in a variety of rhetorical styles and in becoming skilled writers who compose for a variety of purposes. Both their reading and their writing should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness of writing. Students are expected to take the Advanced Placement exam. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses may require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time.

EN0050ACE	Advanced Placement: Literature and Composition	Grades 11, 12	1 Credit
*[Graduation Requirement: English Credit]			

In this course, students will analyze poetry, drama, prose, fiction, and expository literature, including as a minimum four core and four ancillary grade 12 titles. They will intensively study a representative sampling from various genres and periods. Students will defend their interpretations of literature and share ideas through class discussions, critical writing, and oral presentations. This college-level course of literature and composition is for mature students who have excelled in English. Students are expected to take the Advanced Placement exam. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses may require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time.

BMHS ONLY	IB Group 1: Language and Literature	Grade 11 and 12	1 credit per year
EN0051ICEIB	IB Language and Literature Y1 HL		
EN0112ICEIB	IB Language and Literature Y2 HL		
*[Graduation Requirement: English Credit)			

The English Language and Literature course synthesizes the IB mission through the study of the English language and its linguistic structure. Through challenging, active learning, this two-year college-level course develops students' understanding of both oral and written discourse, with a focus on expanding their analytic and composition skills. The course includes a wide range of literature from various global cultures. Through literary criticism and analysis, students will examine conflict and challenges within a multicultural context, providing students an opportunity to broaden their perspective on literature and humanity. In this course, students respond reflectively, speak with empathy, listen actively, and communicate with a heightened global understanding. Ultimately, the activities and tasks will underscore international awareness and develop qualities outlined in the IB learner profile. Coursework is drawn from IB prescribed lists.

BRIEN MCMAHON HIGH SCHOOL SENIOR CORE COURSES

Senior Core English Courses (2 courses required) *[Graduation Requirement: English Credit]	Grade 12	0.5 credits each

- **Adolescent Literature (EN0100GAC)**

Explores the values and influence of stories designed for young people through an exploration of mythology and fairy tales, works by influential children's authors and poets as well as young adult authors.

- **The Arts through the Decades (EN0107GAC)**

Arts through the Decades intends to study, analyze, and compare the best "throwbacks" from each era from 1940 to the present. In the class, students will use music, movies, and literature to analyze their context and make connections to the time period.

- **BrightCore: Optimistic Learning (EN0120GAC3)**

"BrightCore: Optimistic Learning" is an elective course designed to explore the principles of optimism, resilience, and positive psychology through the lens of literature, art, and personal development. This course aims to empower students with the knowledge and skills to cultivate a growth mindset, navigate challenges, and thrive in various aspects of life.

- **Crime Studies: *Avengers, Detectives, and Vigilantes in Literature* (EN0101GAC)**

Beginning with 19th century predecessors, students will cover modern American crime narratives, emphasizing the noir fiction that flourished between the Jazz Age and the Cold War as the true crime novel.

- **Greece to Gotham: *The Evolution of the Hero* (EN0102GAC)**

This course will examine how real life and fictional heroes have evolved over time, beginning in the ancient Greek world and continuing through the modern era. Students will explore how societies define and portray heroes, as well as how they promote cultural values and morals. Students will study a variety of heroes, including mythological heroes, epic heroes, tragic heroes, antiheroes, and superheroes.

- **The Immigrant Experience (EN0106GAC)**

Students will be introduced to multicultural literary perspectives and the course will examine the effects of such issues on modern society such as ethnicity in America, the melting pot theory, separatism, cultural pluralism, legal issues, and bilingual education and instruction.

- **Sports Literature (EN0104GAC)**

Students will reflect on athletes, their lives and stories, and how sports fit into a global society while honing real-life writing skills that reflect pieces read in class.

- **The Poetry of Music (EN0105GAC)**

This class focuses primarily on students who may have not yet warmed up to poetry but who readily seek contact with music. The lessons on music may serve as a foundation for finding poetic connections to art, land, or other sources of inspiration.

- **Rethinking Gender in Literature (EN0064GAC)**

This literature and writing course takes a historical approach to exploring the evolution of gender relations within American society. Gender and Literature is a focused survey of women's contributions to American letters, undergirded by historical and theoretical works of non-fiction.

NORWALK HIGH SCHOOL SENIOR CORE ENGLISH COURSES

Senior Core English Courses (2 courses required)	Grade 12	0.5 credits each
*[Graduation Requirement: English Credit]		

- **Crime Studies: *Avengers, Detectives, and Vigilantes in Literature* (EN0101GAC)**

Beginning with 19th century predecessors, students will cover modern American crime narratives, emphasizing the noir fiction that flourished between the Jazz Age and the Cold War as the true crime novel.

- **Ghosts, Monsters, Mysteries and Madness: *The Stories, Legends, and Obsessions of the Gothic Age* (EN0109GAC)**

This course uses high-interest genres of horror and murder mystery stories to engage in investigating the historical background of Gothic Romanticism during the Victorian Era.

- **Greece to Gotham: *The Evolution of the Hero* (EN0102GAC)**

Examine how real life and fictional heroes have evolved over time, beginning in the ancient Greek world and continuing through the modern era. Students will explore how societies define and portray heroes, as well as how they promote cultural values and morals. Students will study a variety of heroes, including mythological heroes, epic heroes, tragic heroes, antiheroes, and superheroes.

- **The Immigrant Experience (EN0106GAC)**

Students will be introduced to multicultural literary perspectives and the course will examine the effects of such issues on modern society such as ethnicity in America, the melting pot theory, separatism, cultural pluralism, legal issues, and bilingual education and instruction.

- **The Poetry of Music (EN0105GAC)**

This class focuses primarily on students who may have not yet warmed up to poetry but who readily seek contact with music. The lessons on music may serve as a foundation for finding poetic connections to art, land, or other sources of inspiration.

- **Rethinking Gender in Literature (EN0064GAC)**

This literature and writing course takes a historical approach to exploring the evolution of gender relations within American society. Gender and Literature is a focused survey of women's contributions to American letters, undergirded by historical and theoretical works of non-fiction.

- **Rockers, Rebels, and Revolutionaries: *The Counter Culture of the 1960s* (EN0110GAC)**

This course uses literary text and multimedia sources to enable students to get a cultural overview of the events that contributed to the social revolution of the 1960s. They will evaluate lyrics, speeches, and news articles that ignited a generation and fueled a revolution.

- **Science Fiction (EN0117GAC5)**

This course will explore the world of modern science fiction and the role it has played as an influence and reflection of the politics and culture of the 20th and 21st century as well as mankind's relationship with each other, technology, and the great unknown.

- **Sports Literature (EN0104GAC)**

Students will reflect on athletes, their lives and stories, and how sports fit into a global society while honing real-life writing skills that reflect pieces read in class.

ENGLISH PATHWAY COURSES

EN0076GAC	Approaches to Film and Media Study	BMHS Grades 10, 11 NHS Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This one-semester English related course teaches students to view, discuss, and write about films critically in order to understand the ways in which films convey meaning, express points of view, influence public opinion, and reflect the time period. Students will learn about the history of film, the basics of film theory, and the critical analysis of film. Although films will be viewed in class, students will be expected to view films at home and in the movies. Genres and movements of film include, but are not limited to, Film Noir, Impressionism, montage, science fiction/fantasy, westerns, Cinema Verite, and silent films. Possible readings include film analyses, directors' notes, texts on which films are based, screenplays, and reviews. Students will use a variety of media to respond to their viewing.

EN0057GAC	Creative Writing	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Students will study many aspects of writing technique and will apply these techniques to the following writing options: short stories, poetry, one act plays, T.V. scripts, and children's stories. Students will be encouraged to write for an audience by sharing their work aloud with classmates and by submitting their writing for publication as appropriate. 10th, 11th, and 12th graders take this course in addition to the required English 2, 3, or 4 as applicable.

EN0078GAC	Digital Storytelling	Grades 10, 11, 12	NHS ONLY	0.5 Credit
*[Graduation Requirement: Pathway Related Course]				

Storytelling will be a great option for any student who wants to learn more about the conventions of filmmaking and how to use various forms of technology to tell interesting and compelling stories. The course will introduce elements of storytelling and will encourage creativity and teamwork through a variety of projects such as video narratives, memoirs, poetry, short films, and more.

EN0058GAC	Dramatic Experience	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Dramatic Experience is designed to allow students the opportunity to experience drama through reading, discussion and dramatic presentation. Significant works, classical to contemporary, will be examined in the context of dramatic structure, theme, and the evolution of theater. Students will explore different acting techniques and styles with an emphasis on developing the actor's instrument (voice and body), ensemble work, improvisation, monologue, acting for the camera, and scene performance. Students will also experience the art of oratory (speech), which includes crafting individual dramatic pieces.

EN0061GAC	The Graphic Novel	Grades 9, 10	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This course is a combination of independent reading and collaborative learning experiences that explore the comics medium as a mode of modern storytelling. Students will explore various types of graphic texts to acquire, practice and master traditional and new literacies, including visual and critical media literacy. Students will analyze graphic novels as literature, looking at story structure, theme, character development and literary devices. Additionally, students will look at the pop culture phenomenon of graphic novels and the special effects created in graphic art. Students will practice critical thinking and composition skills through reader responses and collaborative presentations.

EN0071GAE	Journalism 1	Grades 10, 11, 12	1 Credit BMHS 0.5 Credit NHS
*[Graduation Requirement: Pathway Related Course]			

This introductory course will include class instruction and lab activity. Students will practice the fundamentals of news writing, differentiate between news and opinion, and track current issues on the local, national, and international scenes. Students will study the function, techniques, and responsibilities of journalism. Students will assist with the preparation and publication of the school newspaper. This course is recommended for students whose writing skills are firmly grounded. The course introduces students to the history of journalism and covers the basic requirements for using Adobe software In-Design.

EN0073GAE	Journalism 2	Grades 11, 12	1 Credit BMHS 0.5 Credit NHS
*[Graduation Requirement: Pathway Related Course]			

This course offers students more of a role in the production of the student newspaper. Students are tasked with editing student work, organizing photography, and the general design of the paper. Students determine how the advertising and distribution of the paper is managed. Students in Journalism II are already familiar with the AP standards for writing and have experience with In-Design software. These students have shorter deadlines and are required to cover more long term, in depth writing assignments. Further, the class requires students to organize class discussions and meetings. After school hours are required to meet deadlines necessary to the publication of the paper. Prerequisite: Journalism 1

EN0079HAE	Honors Journalism 3	Grade 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			

This course is for students who are committed to the publication of the student run newspaper. Students in this course have taken Journalism I & II and will be assigned an Editor or Manager position. Students are expected to know the Associated Press writing standards and have mastered Adobe InDesign. Positions include: Editor In-Chief, News Editor, Opinion Editor, A&E Editor, Sports Editor, Photography & Design Editor, Feature Editor, and Business Manager. These students will manage the content from Journalism I & II students. Prerequisites: Journalism 1 and Journalism 2.

EN0119GAC	Literary Magazine: A Writer's Workshop	Grades 9, 10, 11, 12	0.5 Credit BMHS ONLY
*[Graduation Requirement: Pathway Related Course]			

This course is focused on teaching the skills needed to write within a variety of genres including fiction, nonfiction, poetry, and prose. The class is designed as a workshop where students analyze, critique, and discuss the work of their peers. By the end of the semester, students will have written original pieces and develop independence while assuming responsibility for their own writing, use of class time, and helping each other during the workshop sessions. Writers are encouraged to publish their work within the school's literary magazine as a way to celebrate their writing.

EN0093GAC	Public Speaking	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Students will learn how to create and deliver speeches. Students will focus on both verbal and nonverbal communication, interpersonal and intrapersonal skills, and preparation and delivery of various types of speeches.

EN0075GAC	Psychology in Literature	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Students will read and discuss short stories and plays focusing on parents and children, family conflicts, and adult relationships. Observing the tensions and misunderstandings of characters in fiction, students will give their opinions of the personalities and situations presented in the stories. Students will explore and voluntarily share their own beliefs and behaviors. The course appeals to students of all Language Arts ability levels. 11th and 12th graders take this course in addition to the required English 3 or 4 as applicable.

EN0098GAC3	The Art of Storytelling through Narrative	Grades 10, 11, 12	0.5 Credit BMHS ONLY
*[Graduation Requirement: Pathway Related Course]			

Nowadays students live in a culture that bombards them with media/ their senses are saturated by visual and auditory stimuli. Increasingly, the effort to discern relevant and truthful information from fabrication, and to distinguish depth of argument from shallow emotionalism has become a challenge. Through a variety of mediums such as podcasts, articles, speeches, nonfiction, and fictional literature, this course will expose students to various types of writing, such as argumentative, informative narrative, and analytical arguments. Students will engage in meaningful discourse about the strengths, weaknesses, and types of verbal and written arguments.

EN0080GAC	SAT English Prep	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

This semester-length (NHS) class is intended to prepare students for the evidenced-based reading and writing segments of the SAT. Teachers will provide students with activities in analytical thinking and with the skills and strategies associated with the evidence-based reading and writing section and the math section of the redesigned SAT. Topics covered include developing a study plan, vocabulary, sentence completion strategies, reading comprehension, and essay-writing strategies, as well as time management, scoring procedures, and strategies for managing test anxiety. Course materials may include SAT review materials, current assessment software programs, and previous standardized examinations. This course does not fulfill the graduation credit in English. **This course will be designated to be pass or fail.**

EN0017GAE	Transition English	Grade 9, 10, 11, 12	1 Credit
*[Graduation Requirement: English Credit]			

This course follows the English I curriculum standards and is designed for MLL students. The course is co-taught between an English teacher and an MLL teacher. Teachers use instructional strategies that are effective with MLLs to prepare students for the mainstream English II course that is next in the English core sequence. The curriculum is an exploration of the reading-writing connection and students will incorporate the writing process as they develop their communication skills and engagement in academic discourse. Successful completion gives the student one credit in English.

Social Studies

The purpose of the Social Studies curriculum is to provide learning programs to prepare our young people to be humane and rational participants in an ever-changing environment. In order to live a successful life in this expanding world, students need to develop a keen understanding of the social, intellectual, political, and economic forces they will face. The scope and sequence of the curricula will prepare students to achieve these goals and assist in their growth as citizens in a multicultural, global community. In addition to the required courses, a variety of Pathway Related Courses are provided to fulfill student needs and interests. All 9th, 10th, and 11th grade students may complete a summer reading assignment. The summer reading list is available from the school. *Subject offerings can also be found within the Multilingual Learner (MLL) section of this book.

9	10	11	12
World History Honors World History	US History Honors US History AP US History UConn ECE US History (BMHS)	Civics Honors Civics AP US Government & Politics	Civics Honors Civics AP Government & Politics
	AP European History (NHS) AP Macroeconomics AP Psychology (BMHS) SCSU Introduction to Psychology / Social Psychology (NHS) Civics (BMHS) – IB	AP European History (NHS) AP Macroeconomics AP Psychology (BMHS) SCSU Introduction to Psychology / Social Psychology (NHS) IB History Year 1 (BMHS) IB Global Politics Year 1 (BMHS)	AP European History (NHS) AP Macroeconomics AP Psychology (BMHS) SCSU Introduction to Psychology / Social Psychology (NHS) IB History Year 2 (BMHS) IB Global Politics Year 2 (BMHS)

SS2206GAE **World History** **Grade 9** **1 Credit**
***[Graduation Requirement: Social Studies Related Course]**

This course is a survey of World History from its origins to the 21st century. It will include historical development of economics, political, social and religious institutions with an emphasis on geography's impact on historical and cultural development.

SS2209HAE **Honors World History** **Grade 9** **1 Credit**
***[Graduation Requirement: Social Studies Related Course]**

This course is a survey of World History from its origins to the 21st century. It will include historical development of economics, political, social and religious institutions with an emphasis on geography's impact on historical and cultural development. Students will conduct some in-depth studies of themes in World History including conducting research, analyzing primary and secondary sources, writing a research paper, and/or completing a research project. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. **Strongly Recommended: B or better in grade 8; standardized assessment scores will be considered in teacher recommendation; strong writing and reading skills; ability to do independent writing and research.**

SS2226GAE **United States History** **Grade 10** **1 Credit**
***[Graduation Requirement: US History]**

This course surveys the development of the American political, socio-cultural, and economic landscapes during the post-Civil War period and investigates the role of the United States in world affairs. Provision may be made for students to concentrate on and/or specialize in areas of interest through classroom projects and writing assignments.

SS2229HAE **Honors United States History** **Grade 10** **1 Credit**
***[Graduation Requirement: US History]**

This course surveys the development of the American political, socio-cultural, and economic landscapes with an emphasis on the post-Civil War period and investigates the role of the United States in world affairs. Provision may be made for students to concentrate in special areas of interest through classroom projects, formal essays, and research papers. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. **Strongly Recommended: B or better in World History; standardized assessment scores will be considered in teacher recommendation; strong writing and reading skills; ability to do independent writing and research.**

SS2240ACE	UConn ECE AP United States History	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: US History]			BMHS ONLY
	UConn ECE HIST 1501 / 0.5 Credit and UConn ECE HIST 1502 / 0.5 Credit		

This course runs concurrently with Advanced Placement U.S. History and it is certified with UConn's Early College Experience (ECE) that grants students the opportunity to earn six college credits over the course of the year.

SS2236GAC	Civics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Civics]			

The course surveys the origins and institutions of the US Government. Emphasis is placed on the political organization and structure of our national, state and local governments as well as their development. The Constitution and its interpretation will be studied through the use of Supreme Court decisions. Analysis and interpretation of outside readings will be required. Students are encouraged to actively participate in the democratic process and will be given an opportunity to participate in the governmental process through fieldwork projects.

SS2237HAC	Honors Civics	Grade 10, 11, 12	0.5 Credit
*[Graduation Requirement: Civics; Social Studies Related Course]			

The course meets the Civics graduation requirement. The Constitution is often referred to as a living document; this one semester course will examine the progress of the Constitution and our changing understanding of its meaning. The focus of study will be how different groups have been affected by changes in the document over time. Beginning with its origins in Enlightenment thought, the course will trace the changes in the document and how our understanding of it has changed over time. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Strongly Recommended: B or better in previous year's social studies course; standardized assessment scores will be considered in teacher recommendation; strong writing and reading skills; ability to do independent writing and research.

SS2259HAC	Honors Economics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

The Honors Economics course will provide an introduction to microeconomic and macroeconomic theory as it applies to the American Free Enterprise System. Students will also study other economic systems, analyze and compare them to capitalism. Analysis and interpretation of outside readings will be required. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade.

AP Social Studies Courses

Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade.

SS2240ACE	Advanced Placement European History	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			NHS ONLY

This one-year course will cover the history of Europe from 1450 to the present, in accordance with the College Board requirements for Advanced Placement Modern European History course. The course will focus on cultural, economic, political and social developments that have played a fundamental role in shaping the western world. Emphasis will be placed on research and the analysis of primary sources. A college text will be used. The class will be conducted in a seminar style. Students will be involved in individual and/or group projects. Emphasis will be placed on the clarity of written expression. Students are expected to take the Advanced Placement exam.

SS2327ACE	Advanced Placement Macroeconomics	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			

Students will explore the principles of economics that apply to an economic system as a whole. Students will use graphs, charts, and data to analyze, describe, and explain economic concepts. The course is intended to be the equivalent of a college level introductory course in macroeconomics. Students are expected to take the Advanced Placement exam.

SS2264ACE	Advanced Placement US Government and Politics	Grades 11, 12	1 Credit
*[Graduation Requirement: Civics; Social Studies Related Course]			

This course explores the political theory and everyday practice that direct the daily operation of our government and shape our public policies. The express purpose of this course is to prepare students to take the AP Exam for U.S. Government and Politics. The course is for all intents and purposes taught on a college level and it requires a substantial amount of reading and preparation for every class. The objectives of this course go beyond a basic analysis of how our government "works." Students will develop a critical understanding of the strengths and weaknesses of the American political system, as well as their rights and responsibilities as citizens. This course fulfills the Civics graduation requirement. Students are expected to take the Advanced Placement exam.

SS2241ACE	Advanced Placement United States History	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: US History]			

This one-year course will cover the history of the United States from the colonial period through the modern age in accordance with the College Board requirements for Advanced Placement United States History course. Focus will be placed on the major developments in political-constitutional economic and diplomatic history, as well tracing developments in social, cultural and intellectual history through each major time period. Emphasis will be placed on drawing meaning from a wide variety of primary and secondary source documents and on the clarity of written expression. A college text will be used. Students are expected to take the Advanced Placement exam.

SS2283ACE	Advanced Placement Psychology	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			BMHS ONLY

The purpose of the Advanced Placement Psychology course is to introduce students to the systematic and scientific study of behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students are expected to take the Advanced Placement exam.

BMHS ONLY	IB Group 3: Individuals and Societies	Grades 11, 12	1 credit per year
SS2300ICE	IB History HL Y1		
SS2340ICE	IB History HL Y2		
*[Graduation Requirement: Social Studies Related Course] All IB Diploma students must take History HL or Global Politics SL			

This course includes a rigorous search into the histories of Early Modern States, focusing on societies in transition. The course will follow the historical narratives of the expansion of the Ottoman Empire throughout the Middle East, Europe, Africa, the Reconquista, and early Spanish conquest into the Americas. As a part of the required IB coursework, students will be challenged to conduct historical investigations and case studies on multiple subjects that will expand their understanding of perspective, cause and effect, and interpretation.

This course is the second year of the two-year IB higher-level course. Students will study three units related to the course theme of "Conquest and Its Impact" within the history of the Americas. These units will cover developments predominantly in the United States, Mexico, Peru, Brazil, Haiti and Cuba. The first unit covers Indigenous societies and civilization (700-1500 CE) and European conquest in the Americas (1400-1600 CE). This explores the reasons posited by historians for Europeans' successful colonization and the new societies and governments created under colonial rule. The second unit covers slavery in the Americas (1400-1800 CE), including how and why it expanded, as well as social and political consequences. The final unit is a case study for independence movements throughout the Americas (1763-1830 CE), which examines how and why various colonies overthrow imperial control. The course focuses on how indigenous and enslaved people resist conquest, assimilate to European rule, and preserve their culture.

BMHS ONLY	IB Group 3: Individuals and Societies	Grades 11,12	1 credit per year
SS2310ICE	IB Global Politics SL Y1		
SS2311ICE	IB Global Politics SL Y2		
*[Graduation Requirement: Social Studies Related Course] All IB Diploma students must take History HL or Global Politics SL			

This is a two year course in the IB program. Global politics as described by the International Baccalaureate Diploma Program is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. The aims of the global politics course are to enable students to:

- Understand key political concepts and contemporary political issues in a range of contexts
- Develop an understanding of the local, national, international and global dimensions of political activity
- Understand, appreciate and critically engage with a variety of perspectives and approaches in global politics
- Appreciate the complex and interconnected nature of many political issues and develop the capacity to interpret competing and contestable claims regarding those issues.

The four core units that make up the class are:

- Power, sovereignty and international relations
- Human rights
- Development
- Peace and conflict

Social Studies Pathways Related Courses

SS2322GAE African American/Black and Puerto Rican/Latino Studies *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	1 Credit

This course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives and collaborations of African America/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, nation and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities.

SS2270GAC American Studies and Pop Culture *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	0.5 Credit NHS ONLY

This course is for students who are interested in studying American History using popular culture. Students will be able to examine cultural products such as film, television, music, art, advertisement and study its relevance and connection to the society which produced them. This is a highly participatory class that requires students to critique historical events and values that influenced popular culture.

SS2277GAE Broadcast Journalism 1 *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	1 Credit NHS ONLY

This introductory study of broadcast media (television, film, and internet) aims to analyze and critique the mass media through the perspective of the humanities. This full year course will include technical instruction as well instruction on writing for the ear, editing news stories, video production including the editing components. The main thrust of the course is for the students to produce the content for the weekly Broadcast of Norwalk High School's news show, BEAR COUNTRY NEWS. Students who take this class will learn to become independent learners as well as fostering their abilities to work with others.

SS2286GAE Broadcast Journalism 2 *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	1 Credit NHS ONLY

Students in this course will manage and organize teams of students in order to edit and produce a weekly news program applying skills and knowledge gained in Broadcast 1. Students will have learned the basics of Final Cut Pro Ten in the Broadcast 1 and will deepen their knowledge of this industry standard software. In addition, they will utilize the Tri-Caster computer system, as well as the Devos Video Delivery System. These students will take on managerial roles and organize the production teams in order to produce a 10 to 25-minute news program that is shown during Advisory. **Prerequisite**: Broadcast Journalism 1

SS2251GAC Current Issues *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	0.5 Credit

Students in this related course develop an awareness of the socio-political and economic issues that face the global community. Students are challenged to understand their own value structure as well as the point of view of others in their nation and in the world. This understanding is key to recognizing what motivates the actions and decisions of world leaders and the populations they govern. The program is thematically organized, and case studies used must remain fluid to maintain the relevance of the content provided teachers select topics from each theme. Freshmen may take this course in addition to World History.

SS2309GAC Genocide *[Graduation Requirement: Social Studies Related Course]	Grades 10, 11, 12	0.5 Credit BMHS ONLY

Examines the psychological, cultural, and societal roots of human cruelty, mass violence, and genocide. We examine the questions of what enables individuals collectively and individually to perpetrate mass violence and genocide as well as examine the impact of apathetic bystanders on human violence. Genocides studied include the Armenian genocide, the Holocaust, the auto-genocide in Cambodia, the Rwandan genocide, the origins of the Irish Potato Famine and others.

SS2329GAC	History of Norwalk	Grades 9, 10, 11, 12	0.5 Credit NHS ONLY
*[Graduation Requirement: Social Studies Related Course]			

This course examines the growth and development of Norwalk from the time first settlers arrived in 1651 until present day. The modern city of Norwalk is its own product of the past. Present day socio-economic conditions are attributable to a sequence of events, a gradual evolution from a seventeenth century English settlement to a multi-ethnic modern city.

SS2333GAC3	Regional Studies	Grades 9	0.5 Credit BMHS ONLY
*[Graduation Requirement: Social Studies Related Course]			

This geography course offers students an in-depth exploration of the diverse physical, cultural, and political landscapes of our world. Through engaging lessons and activities, students will develop a deep understanding of the Earth's physical features, climate patterns, and ecosystems. They will also investigate the cultural diversity, historical developments, and contemporary issues of different regions and countries. Students will engage in map analysis, case studies, and discussions to foster spatial thinking and global awareness. By the end of the course, students will have a comprehensive understanding of the interconnectedness of the world and the impact of geographic factors on societies and the environment.

SS2272GAC	Psychology 1	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a one-semester introductory survey of the field of human behavior. Topics include sensory awareness, perception, self-esteem, dreams, mediation, motivation, and the unconscious. Students use readings, experiments, roleplays, small and large group discussion, and projects to explore these areas of human behavior.

SS2272GAC	Psychology 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a one-semester, more advanced investigation of special topics in psychology. Some of the topics studied are major personality theories and abnormal behavior. These topics are studied through in-depth reading, research, and experiments, role-plays, small and large group discussions and projects to explore yourself, your family and your life choices. **Prerequisite: Psychology 1**

SS2331CCC	SCSU Introduction to Psychology (PSY100)	Grades 10, 11, 12	1 Credit NHS ONLY
SS2332CCC5	Social Psychology		
*[Graduation Requirement: Social Studies Related Course]			

Introduction to Psychology (PSY 100) and Social Psychology (PSY 227) is a dual enrollment class through Southern Connecticut State University where students will receive both high school credits and six college credits. In the first half of this course, students will be introduced to the field of psychology through the study of research methods, biology, memory and the major theorists. This course involves understanding the foundational topics of psychology while applying to real life and personal experiences. . Students must earn a C or higher to continue into PSY 227.. The second half of the course will focus on abnormal psychology and social psychology. Topics include mental health disorders, group dynamics, conformity, perception, attitude, aggression, prejudice and discrimination as well as the relevant research studies, such as Asch and Milgram.. **Prerequisite: Teacher Recommendation is needed**

SS2278GAC	Sociology 1	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a one-semester study of society and the structures we build within society. The course will be based on the exploration of sociological perspectives, culture, and human nature through socialization, social structure, and research methods of sociologists. The class will use readings, articles, discussions, and projects to highlight how society is built.

SS2279GAC	Sociology 2	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

In the second semester, the course focus is on the specific components of society, e.g., family, community, etc. The course will explore the concepts of social deviance and the impact of gender and racial inequality on society. The course will culminate with a study of urbanization, urban sprawl, and the effects of population growth on social structure. Students will be using discussion, articles and projects to explore these themes. Prerequisite: Sociology 1.

SS2308GAC	Social Justice	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

This semester course is designed to increase students' awareness, knowledge, and understanding of issues related to diversity, human rights, social and economic justice. Diversity is understood as the intersectionality of multiple factors including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation. In this course, students will explore social justice movements like Women's Rights, Civil Rights, and LGBTQ+.

SS2243GAE	Sports in American History	Grades 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course examines the development of sports in America, from the colonial period to the present. Students will explore how unorganized and impromptu athletic activities were transformed into spectator sports at the collegiate and professional level, and the ways in which sports reflected and informed issues of race, class, gender, ethnicity, and international politics. Specific topics include: the transformation of "blood sports" into acceptable athletic pursuits, such as boxing; amateurism and the rise of athletic clubs; baseball's popularity during the first half of the twentieth century; sports heroes of the 1920s and 1930s; women's sports; racial segregation in sports; athletic rivalries during the Cold War; and the globalization of American sports.

SS2318GAE	Sports Media Communication 1	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			NHS ONLY

This course will provide students with foundational skills in sports journalism necessary to be able to implement a program in sports information, publicity, marketing and promotions. Course content includes: preparation of news releases and feature stories; publishing programs and brochures; compiling statistical breakdowns; performing research to develop narratives; working in conjunction with established media partnerships; filming and editing game contests; and serving as announcers and commentators through live streaming.

SS2318GAE	Sports Media Communication 2	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			NHS ONLY

Students in this course will manage and organize collaborative teams of students in order to build the brand that is Norwalk High Athletics. Students will apply the skills and knowledge gained in the prerequisite course Sports Media Communications 1 to be prepared to take on managerial roles as key editors in organizing content and managing the workflow of the material produced.
Prerequisite: Sports Media Communication 1

SS2258GAC	Street Law	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			BMHS

This course is designed to examine the United States judicial branch and court cases relevant to teenagers. Street Law will not only advance student understanding of justice, but also empower students with the skills, legal, and civic knowledge to bring about positive change for themselves and the community.

SS0072GAE	Yearbook in Design	Grades 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			NHS ONLY

In this class, students will study the function, techniques, and responsibilities of yearbook design. The course will include instruction and lab activity. Students will assist with the preparation and publication of the senior yearbook. This course is recommended for students whose writing skills are firmly grounded. Students will have Photoshop lessons to design page layouts. Students will also have instructions on marketing and advertisement to sell and distribute final product. Yearbook is a permanent Legal Document: it gives students opportunities to gather points toward college admissions. It also will give students a good understanding of how to use Photoshop, Windows, and the Adobe Suite in creating pages and advertisements. Students will be assigned deadlines and tasks to complete for grading purposes. **Prerequisite: Teacher recommendation.**

Digital Media and Communication Academy at NHS

CM2302GAC	Media Consumption and Creation	Grades 9, 10	0.5 Credit MLL MATH Phase 1
*[Graduation Requirement: Pathway Related Course DMCA]			

A semester-long examination of the US culture, and how the media (music, television, and film) has shaped the country. Students will also investigate the role this has in the 21st century as "new media" (internet, social networking, smart phones) are impacting the way democracy functions. Students will "act out" scenarios utilizing a variety of mediums. Students will analyze how their own opinions are shaped by their consumption of media. Students will learn the impact the content they create has on society. This course is the foundational requirement for grade 9 and 10- (Phase 1) students in the Digital Media and Communications Academy. It is open to all NHS students as well as any BMHS student that wishes to be a part of the academy.

CM8813GAE	Advanced Media Studies	Grades 10, 11, 12	1 Credit Phase 2
*[Graduation Requirement: Pathway Related Course DMCA]			

Students will have the opportunity to build the foundation necessary to navigate the digital media world. This fundamental course will include training in the software necessary to continue in their pursuit of telling their story whether through words, images or design. Students will become well-versed in the industry standard software Adobe Suite; which includes Photoshop, InDesign, Illustrator, Premier, Character Animator, Audition, among other applications. **All students enrolled in the Digital Media and Communications Academy are required to complete this course with a passing grade. Prerequisite: Media Consumption & Design**

CM2296GAC	Digital Communications	Grades 10, 11, 12	0.5 Credit Semester 1 Phase 3
*[Graduation Requirement: Pathway Related Course DMCA]			
This course is available for college credit through Quinnipiac University			

This semester-long course will teach students about the role journalism plays in society, the impact that it has had on people and the powerful learning of Adobe *InDesign*. Students will learn the importance of developing a story, research skills, interview prep along with the skills needed to conduct an interview. The course will highlight several of the most important news stories of the last fifty years to demonstrate the role good journalism plays. Professionals from the field will regularly come in to give first-hand accounts of how the field operates in real world practices. **Prerequisite: Advanced Media Studies**

CM8857GAC	Communication Through Photography and Graphic Design	Grades 10,11,12	0.5 Credit Semester 1 Phase 3
[Graduation Requirement: Pathway related course DMCA]			

Capturing the world around you and using the visual media to communicate to others requires knowledge of appropriate software and an observant eye. This course is designed to teach digital photography, and the manipulation of imagery through Adobe Photoshop and Illustrator. Students will learn the principles of design through the use of lighting, composition as well as utilizing graphics to tell their stories. Students will create photographs and graphics that will be used for film posters, documentary films, and new story images on the website. The essential skills of utilizing images ethically to tell a story will be fostered. Students will be required to research their subjects and responsibly publish their work. **Prerequisite: Advanced Media Studies**

CM0085GAC	Film Production	Grades 10, 11, 12	0.5 Credit Semester 2 Phase 3
* [Graduation Requirement: Pathway Related Course DMCA]			
This course is available for college credit through Quinnipiac University			

Students will have the opportunity to explore the many aspects of filmmaking in both the narrative form well as the Documentary style learning *Adobe Premiere Pro*. This student driven course will allow the participants to further develop the technical, organizational and creative skill needed to make a film. Adobe Premier software will be used to produce the content. The student will work at the Digital Media Pathway with industry professionals and Norwalk High School Faculty. **Prerequisite: Advanced Media Studies**

CM8858GAC	Audio Design and Podcasting	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course DMCA]			Semester 2
This course is available for college credit through Quinnipiac University			Phase 3

Audio Design is a hands-on course designed to allow students to create sound for various forms of media as well as becoming proficient in audio production techniques utilizing industry standard software such as Adobe Audition. Students will learn about studio operations, recording principles, sound-mixing , editing and effects processing while becoming proficient with the software. The course will provide students with the opportunity to create original sound content for a variety of film and television projects as well as the chance to work side by side with industry professionals on radio and podcast projects. Students will conduct background research, learn the art of writing a good story and develop collaboration skills necessary to produce original content. Students will also have the chance to record and produce musical content.

CM28900GAE	Digital Portfolio/ Capstone	Grades 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			Phase 4

Students will have the opportunity to explore the many aspects of the *Adobe Suite* and choose their own path of study. Students will research and develop a digital portfolio using the storytelling skill set they have acquired as part of the DMCA. Students will use the body of work they have created in the DMCA in order to finalize their portfolios. The students will create content that will not only promote their own efforts but will have the opportunity to work with clients in order to produce viable content in a real world setting.

Fine Arts

The Art Department offers many exciting courses for students to develop their creative expression through the visual arts. Students learn higher order thinking skills, problem solving, planning strategies, and the correct application of the elements of art and the principles of design. Working independently and collaboratively, students use traditional as well as experimental approaches to fine arts. Students create art and develop visual literacy. Students practice art history informed criticism as well as aesthetics.

Fine Art Course Sequence

9	10	11	12
Foundations of Art	Foundations of Art	Foundations of Art	Foundations of Art
Peer Assisted Art	Peer Assisted Art	Peer Assisted Art	Peer Assisted Art
Advanced Foundations of Art	Advanced Foundations of Art	Advanced Foundations of Art	Advanced Foundations of Art
Digital Illustration & Design 1 (NHS)	Digital Illustration & Design 1 & 2 (NHS)	Digital Illustration & Design 1 & 2 (NHS)	Digital Illustration & Design 1 & 2 (NHS)
Textile Arts (NHS)	Textile Arts 1 & 2 (NHS)	Textile Arts 1 & 2 (NHS)	Textile Arts 1 & 2 (NHS)
Graphic Design (BMHS)	Graphic Design (BMHS)	Graphic Design (BMHS)	Graphic Design (BMHS)
Advanced Foundations of Art, Applied Arts 1,Digital Illustration & Design 1, Drawing 1, Modern and Contemporary Art, Painting 1, Photography 1, Printmaking 1, 3D-Sculpture 1 ,Textile Arts 1, and , are available, however they require a prerequisite	Applied Arts I and II	Applied Arts I and II	Applied Arts I and II
	Drawing 1 & 2 UConn ECE Drawing 2 (NHS)	Drawing 1 & 2 UConn ECE Drawing 2 (NHS)	Drawing 1 & 2 UConn ECE Drawing 2 (NHS)
	Painting 1 & 2	Painting 1 & 2	Painting 1 & 2
	Printmaking 1 & 2	Printmaking 1 & 2	Printmaking 1 & 2
	3D Sculpture 1 & 2	3D Sculpture 1 & 2	3D Sculpture 1 & 2
	Digital Media 1 & 2 (BMHS)	Digital Media 1 & 2 (BMHS)	Digital Media 1 & 2 (BMHS)
	Photography 1 & 2	Photography 1 & 2	Photography 1 & 2
	AP Art History	AP Art History Honors Portfolio AP Studio Art	AP Art History Honors Portfolio AP Studio Art
		IB Visual Arts Year 1 HL/SL (BMHS) IB Art History Year 1 SL (BMHS)	IB Visual Arts Year 2 HL/SL IB Art History Year 2 SL

AR8830GAE **Foundations of Art** **Grades 9, 10, 11, 12** **1 Credit**

***[Graduation Requirement: Fine Arts]**

This class is the department foundation full-year class designed to introduce students to the principles and elements of art. This course teaches students a wide variety of materials and techniques for creating art. Drawing skills, essential to the creative process, are stressed as well as painting, printmaking, and sculpture. Students are introduced to the computer lab and the Adobe Creative Suite. Students build a large art vocabulary while learning how to critique their own and others' artwork. Students are required to keep a sketchbook for homework and design ideas.

AR8831GAE **Advanced Foundations of Art** **Grades 9, 10, 11, 12** **1 Credit**

***[Graduation Requirement: Fine Arts]** **NHS ONLY**

Students taking Advanced Foundations of Art create advanced drawing, painting and collage projects while learning advanced applications of the principles and elements of art and design. Students look at, write about, discuss and create artworks influenced by master artists to guide their artistic choices as well as deepen their visual literacy. Advanced Middle School art students can by-pass Foundations of Art with a Middle School art teacher recommendation. **Prerequisite: Foundations of Art or Middle School Art Teacher Recommendation**

AR8814GRE	Peer Assisted Art	Grades 9, 10, 11, 12	BMHS	1 Credit
AR8814GAC			NHS	0.5 Credit
*[Graduation Requirement: Fine Arts]				

This class is a full-year peer assisted art class designed to introduce students to the principles and elements of art by utilizing a variety of materials and techniques for creating art. This course is designed to integrate visual art content with group activities. Students with disabilities are integrated into Art class with adapted course work. Students are supported by high school art student peer mentors, Special Education paras, and the art teacher consulting with educators. **Prerequisite: Students should have one-year in art classes and are recommended by the high school school counselor.**

AR8843GAC	Art History	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			BMHS

This half-year survey class is designed for students who wish to study the global history of art from Prehistoric to the present. Students read, write about, and discuss art. Minimal art making is involved. Students learn to distinguish between art historical arguments that are rooted in historical fact, accepted scholarly interpretation, and informed speculation. This class can be used as a preparation for AP Art History.

AR8827GAC	Applied Arts 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

In this class, students create products for a "client or company" by learning and utilizing fine art concepts and skills in; product/ industrial, marketing/advertising, interior, textile, environmental and set design. This class is open to freshmen taking Art 2 the other semester. Students are required to keep a sketchbook for homework and design plans. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8828GAC	Applied Arts 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This course teaches students advanced fine art concepts in; product/ industrial, marketing /advertising, interior, textile, environmental and set design. Students will work with various methods and materials to create new products for the marketplace. Through theory, practice and reflection, students will develop original approaches to solve multiple rigorous design challenges. A sketchbook for design plans and homework is required. **Prerequisite: Design 1**

AR8925GAC	Digital Illustration and Design 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

In this course, students will learn the principles and elements of art as they apply to digital art and design. Students will create projects modeled after real-world industry assignments, developed in Adobe Photoshop and Illustrator. Students will present a final project at the conclusion of the course. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8926GAC	Digital Illustration and Design 2	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

In this course, students will learn advanced principles and elements of art as they apply to digital art and design. Students will create advanced real-world projects modeled after industry assignments developed in Adobe Photoshop and Illustrator. Students will create digital art projects utilizing advanced Adobe tools. Students will create a mock company, logo and website. Students will learn copyright and fair use policies for Internet imagery and digital design. At course end, students will present a final project as an animated graphic advertisement for their company. **Prerequisite: Digital Illustration and Design 1**

AR8931GAC	Digital Media I	Grades 9, 10, 11, 12	0.5Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

This course teaches students how to create digital video in the form of narratives, commercials, music videos, short videos, traditional and stop-motion animation. Students will learn each step in the creative process from pre- to post-production. Students are introduced to a variety of software applications and programs. Finished works are presented for class review. **Prerequisite: Photo 1 or Foundations of Art and teacher recommendation**

AR8932GAC	Digital Media II	Grades 9, 10, 11, 12	0.5Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

This course teaches students how to create advanced videos and digital animation in the form of narratives, original videos, and digital animations. Students will learn each step in the creative process from storyboarding, pre- to post-production, and visual and audio editing. Students develop 21st Century Learning skills with advanced application of course software application. Students premiere their finished works for review in groups or individually. **Prerequisite: Digital Media 1**

AR8848GAC	Digital Video and Animation 1	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

This course teaches students how to create videos and digital animation in the form of narratives, commercials, music videos, short videos, traditional and stop-motion animation. Students will learn each step in the creative process from pre- to post production. Students are introduced to a variety of software applications. Finished works are presented for class review. **Prerequisite: BMHS only Photo 2 or Photo 1 and teacher recommendation NHS Only Digital Illustration and Design 1, Digital Art 1 Art 1, Photo 1**

AR8805GAC	Drawing 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This course is designed for all students who would like the opportunity to increase their drawing skills in an intense half-year course. Students explore a wide variety of drawing techniques, materials, subjects and styles. Drawing will be based on observation and imagination that will lead the student to self-discovery and awareness of his/her environment. A sketchbook/journal is required to plan and think through composition ideas. **Prerequisite: Middle School Art Teacher Recommendation**

AR8806GAC	Drawing 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

This course challenges the technically skilled drawing student. Students focus on portfolio pieces concentrating on portraiture, the human figure, still life, and landscape drawings. Sketchbooks are required to keep a record of progress and ideas for future drawing compositions**. Prerequisite: Drawing 1**

AR8806GAC	UConn ECE Drawing 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

This course challenges students' technical and creative skills, learning advanced principles of drawing from observation. Students create artworks in a variety of genres including: still life, perspective drawings, landscapes, and portraiture**.** Students use a variety of mediums including graphite, charcoal, and ink. Students will be required to submit drawing assignments to complete a portfolio. Students can earn three college credits for this course. **Prerequisite: Drawing 1 & Foundations of Art or Advanced Foundations of Art**

AR8859GAE	Graphic Art and Design	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

In this exploratory course, students learn the elements and principles of design, as well as foundational concepts of visual communication. While surveying a variety of design, fine art, and media, students use image editing, animation, and digital drawing to put into practice the art principles they have learned. They explore career opportunities in the design, production, display and presentation of digital artwork. They respond to artwork of others and learn how to combine artistic elements to create finished pieces that effectively communicate their ideas.

AR8864GAC	Modern and Contemporary Art	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

In this class, students will look at, read, talk about, and create a variety of modern and contemporary global art styles including but not limited to: Impressionism, Post-Impressionism, Cubism, Abstract Art, Surrealism, Abstract Expressionism, Pop Art, Photo Realism, Folk Art, Contemporary Crafts, Performance Art and more! Students will learn about the history of art while creating Modern and Contemporary art styles with a variety of art making methods and materials including: drawing, painting, printmaking, sculpture, and crafts. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**.

AR8807GAC	Painting 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

For the student who loves to paint, this class is designed for the student who wishes to explore and improve in all forms of painting media, techniques, and subjects. Media to include: Watercolor, Gouache, and Acrylics. Art styles will be the focus as students learn the basics of color media. As with other classes, a sketchbook is required, as the student will be using it to render sketches for painting subjects.**Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Recommendation**

AR8808GAC	Painting 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

Students who would like to add to their portfolio will be challenged in this advanced painting course. They will be asked to create thematic, meaningful and current paintings; which will expose intent and mastery of media. Opportunities to work independently and to make personal choices for materials and techniques will be given throughout the semester. **Prerequisite: Painting 1**

AR8841GAC	Photography 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This class is an introductory course covering the basics of black and white photography. Students begin with non-camera darkroom imagery, build and use pinhole cameras, and learn how to create Images using a film camera. Students learn how to make contact sheets and to enlarge images from negatives. Students learn Digital Photography and Photoshop. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8842GAC	Photography 2	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This class is an extension of Photo 1 that offers students a more in depth look into how to take good quality photographic images. In this course students will learn how to process their own film and learn more advanced darkroom techniques such as using the filter system. Students will be introduced to lighting techniques both natural and manipulative. Students learn advanced Digital Photography and Adobe Suite applications. **Prerequisite: Photography 1**

AR8844HAE	Honors Portfolio	Grades 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This class is designed for Art Students who want to build a superior portfolio, a body of work, for higher educational review. Portfolio students can be preparing for AP Studio Art, taking AP concurrently, or have finished AP Studio Art class. Students are expected to be proficient in 2D Processes. Students create a substantial (20-24 pieces) portfolio of finished artwork. **Prerequisite: Two years of art classes**.

AR8809GAC	Printmaking 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

Students in this course will be able to make multiple copies and editions of artwork rendered in a variety of printmaking media, techniques, and subjects. Media include: stencil, monoprint, collagraph, linoleum, woodcut, dry-point etching, and embossed prints as well as found object printmaking. In addition to making prints, students will engage in these media through historical and conceptual topics. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8810GAC	Printmaking 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

Students in this course will learn advanced printmaking techniques and processes building on previous techniques and media covered in Printmaking 1. Students work in a variety of media including; reduction printmaking, multiple layer stencil, woodcut, embossing and collage transfer. Students can independently research new methods and materials. This class encourages both collaborative and independent work. **Prerequisite: Printmaking 1**

AR8811GAC	3D Sculpture 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This course is a 3-dimensional art or sculpture class. Students learn to make artworks in a variety of media including; folded paper/ cardboard, papier-mâché, clay, wood, assemblage, wire, and plaster. Students learn clay/ ceramics hand building techniques. Students will learn to visualize and create artworks from 2D plans in 3D form using a sketchbook for homework and design plans. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8812GAC	3D Sculpture 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

This class offers students advanced clay hand building and wheel thrown pottery techniques. Students problem solve building sculptures using more challenging applications of the principles and elements of art and design. Students create 3D artworks from a variety of methods and materials including; paper, papier-mâché, clay, wire, wood and assemblage. Students must be able to work independently and collaboratively. Students will learn to visualize and create artworks from 2D plans in 3D form using a sketchbook for homework and design plans. **Prerequisite: 3D Sculpture 1**

AR8845ACE	Advanced Placement Studio Art	Grades 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This class is designed for students pursuing art in their higher-level educational choices. A rigorous course with art school foundation level expectations, AP Studio requires a portfolio review and summer work for acceptance. Students create a concentration of (30) quality works for review and scoring by the College Board. Students with passing exam scores earn college credits. Students are expected to take the Advanced Placement exam. The student is responsible for obtaining their summer assignments and submitting the completed work on time. **Prerequisite: Two years of art classes.**

AR8901GAC	Textile Arts 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

This course is designed to teach students textile making, designing and fiber arts. Students will learn a variety of hand and machine sewing techniques as well fiber arts including; knitting, crocheting, weaving, macramé, embroidery, paper craft including silk screening. Students will learn historical and cultural connections to craft based techniques. Students create sketchbooks and are required to submit unit design plans. **Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation**

AR8902GAC	Textile Arts 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			NHS ONLY

This course is designed to teach students advanced textile making, designing and fiber arts. Students will learn a variety of advanced hand and machine sewing techniques as well as advanced fiber arts including; knitting, crocheting, weaving, macramé, embroidery and paper craft. Students will learn historical and cultural connections to craft based techniques. Students create sketchbooks and are required to submit unit design plans. Students will visit a Design studio or place of employment to learn about vocational educational opportunities. Students will create a final project or a Capstone experience. **Prerequisite: Textile Arts 1**

AR8847GAE	Yearbook in Design	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			BMHS ONLY

In this class, students will study the function, techniques, and responsibilities of journalism design. The course will include instruction and lab activity. Students will assist with the preparation and publication of the senior yearbook. This course is recommended for students whose writing skills are firmly grounded. Students will have Photoshop lessons to design page layouts. Students will also have instructions on marketing and advertisement to sell and distribute the final product. Yearbook is a permanent Legal Document: it gives students opportunities to gather points toward college admissions. It also will give students a good understanding of how to use Photoshop, Windows, and the Adobe Suite in creating pages and advertisements. Students will be assigned deadlines and tasks to complete for grading purposes. Prerequisite: Teacher recommendation.

BMHS ONLY	IB Group 6: The Arts	Grades 11, 12	1 credit per year
AR8856ICEIB	IB Visual Art HL Y1		
AR8904ICEIB	IB Visual Art HL Y2		
AR8905ICEIB	IB Visual Art SL Y2		
*[Graduation Requirenent: Fine Arts]			

IB Art is a studio-based art course that highlights the creative process as a method for learning. Students develop 2D, 3D, or time-based art products as a result of skill development and artistic inquiry. Students focus on their own thinking and art making processes. Students document their learning in written and visual formats as evidence of in-depth research into chosen areas of interest. Throughout the course emphasis is placed on all stages of the creative process: plan and practice; create; revise; present; reflect. Students are encouraged to be independently motivated, as they investigate the history and practice of a chosen art form. Students form a thesis across cultures, time periods, and disciplines to unite their work throughout the course. Students will learn how to connect research and art creation that expresses personal meaning within a cultural, historical and discipline-based context. In addition to learning how to appreciate and evaluate their own work and that of others, students will be encouraged to stretch and explore their own work and share it with an audience through critiques, exhibitions, and presentations.

SL IB ART: Over the course of the year, students experiment with various media, techniques, processes, and styles. Gradually, they are asked to identify themes in their own work and determine an area of focus. Through various teacher-driven assignments, students will gain practice in taking ideas and ways of knowing, from other disciplines, as inspiration for artistic expression.

HL IB ART: Students concentrate their work in one or two media and focus on developing a strong, cohesive portfolio of art that explores a central thesis that shows evidence of depth and breadth of research and investigation. Thematic series are strongly recommended and occur naturally in most cases.

The IB program recommends that the class be 60 percent art production and 40 percent related research (Option A). (Or as an alternative for students interested in Art History and Research, 60 percent research and 40 percent art production (Option B)). IB Art student's summative Art exam in Studio Work is an individual art show of 10 to 15 works. Students are expected to participate in all educational field experiences, and in gallery exhibitions, especially in their senior year.

BMHS ONLY	IB Group 6: The Arts.	Grades 11, 12	1 credit per year
AR8913ICEIB	IB Art History SL1		
AR8915ICEIB	IB Art History SL2		
*[Graduation Requirement: Fine Arts]			

This course involves an intensive study of notable works of architecture, sculpture, painting, and other art forms within diverse and historical contexts. Over the course of two years students will develop their understanding of artistic heritage in broad terms, from delving into scholarly sources and gaining first-hand knowledge of museum and art gallery collections, to analyzing the visual imagery surrounding them in all aspects of life. This course gives students the means to critically engage with the images, which saturate our world, to explore why they look the way they do, and to interpret their layers of meaning. Students will be actively engaged with visual analysis, reading assignments, writing assignments, and oral presentations. Students will learn to understand the vital role artistic expression holds within all societies and recognize the universality of human thought and artistic expression in conveying historical, cultural, and personal perspectives. Students may earn college credit by passing the IB exam.

Music

Students involved in all major performing organizations are required to participate consistently in lessons and/or sectional rehearsals as part of the course content. Individualized instruction will be scheduled on a rotating basis and will meet a minimum of once a week. Students may elect to choose the same performing group for multiple years.

Music Course Sequence			
9	10	11	12
Prelude Orchestra	Prelude Orchestra	Prelude Orchestra	Prelude Orchestra
Symphonic Band	Philharmonic Orchestra	Philharmonic Orchestra	Philharmonic Orchestra
Beginning Choir	Honors Principal Orchestra	Honors Principal Orchestra	Honors Principal Orchestra
	Symphonic Band	Symphonic Band	Symphonic Band
Color Guard	Wind Ensemble	Wind Ensemble	Wind Ensemble
Winter Guard	Honors Wind Symphony	Honors Wind Symphony	Honors Wind Symphony
Winter Percussion Ensemble	Beginning Choir	Beginning Choir	Beginning Choir
Jazz Ensemble	Advanced Choir	Advanced Choir	Advanced Choir
	Chorale	Chorale	Chorale
	Honors Chamber Singers	Honors Chamber Singers	Honors Chamber Singers
	Intro. to Music Theory (BMHS)	Intro. to Music Theory (BMHS)	Intro. to Music Theory (BMHS)
	Color Guard	Color Guard	Color Guard
	Winter Guard	Winter Guard	Winter Guard
	Winter Percussion Ensemble	Winter Percussion Ensemble	Winter Percussion Ensemble
	Jazz Ensemble	Jazz Ensemble	Jazz Ensemble
Theatre Course Sequence			
9	10	11	12
Intro to Theatre Studies 1 Theatre Studies II	Intro to Theatre Studies Acting I Honors Musical Theater Production	Acting 1 Honors Acting II Honors Play Production Honors Musical Theater Production	Acting I Honors Acting II Honors Play Production Honors Musical Theater Production

AR8936GAC Introduction to Theatre Studies 1	Grades 9, 10	0.5 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Theatre Studies I is an introduction to the techniques, vocabulary, etiquette, and history of the art of theatre. Students will learn fundamental theatre skills through introductory modules that explore ensemble building, stage movement, dramatic literature, playwriting, the various roles and careers in the theatre, theatre history, and acting techniques for the stage. This course emphasizes daily participation and values process over product. Students' will engage in daily activities, reading and writing assignments, and summative assessments involving performances and projects.

AR8918GAE Theatre Studies 2	Grades 9	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Theatre Studies II is an accelerated introduction to the techniques, vocabulary, etiquette, and history of the art of theatre for students with previous theatre experience. Students will practice foundational theatre skills through modules that explore ensemble building, stage movement, musical theatre, playwriting, Shakespeare, technical theatre, and acting techniques for the stage. Students will engage in daily activities, reading and writing assignments, and summative assessments involving performances and projects. Theatre Studies II students will be required to participate in performances open to the community. **Requires teacher recommendation from middle school.**

AR8884GAE Dramatic Writing	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Dramatic writing is for students looking to create their own scripts for theatre, film, or multi-media. Students will learn dramatic structures, methods of revision, how to give feedback to their peers and be asked to write daily in a wide range of mediums including playwriting, screenwriting, animation, narrative podcasts, graphic novels, and video games. This course will ask students to create a full length project which they will have the opportunity to have read in front of an invited audience. **Prerequisite: Theatre Studies 1 or teacher recommendation.**

AR8920GAC Acting I	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Acting I is for experienced theater students who wish to develop as performers and are seeking performance opportunities. Students will deepen performance technique by engaging in daily vocal and physical training. They will study a wide range of acting skills and forms including classical and contemporary stage acting, improvisation, musical theater, script analysis, and film acting. Students will also develop an audition portfolio and participate in a scene study in front of an invited audience. Prerequisite: Theatre Studies 1 or teacher recommendation.

AR8937HAE Honors Acting II	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Acting II is an honors level course for advanced theatre students who are seeking pre-college acting training and competitive performance opportunities. Students will continue to develop performance technique by engaging in daily vocal and physical training as well as learn techniques to refine speech and diction. They will participate in acting competitions, auditions, and compose a portfolio of work as preparation for college auditions. Acting II students will perform frequently throughout the course, including a culminating performance of a one-act play. **Requires Theatre Studies I or II and Acting I or instructor approval.**

AR8938HAE Honors Play Production	Grades 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

Play Production is an honors level, culminating theatre course that allows experienced theatre students to apply what they have learned in previous coursework to creating full productions. In the first semester, students will design, produce, and perform a one-act play directed by the instructor. During the second semester, students will self-select the work and a student director to lead a second production. This course is designed to support student capstones. It is only available to upperclassmen who have taken at least two credits of theatre.

AR8927HAE Honors Musical Theatre Performance	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]		NHS ONLY

This course is designed to immerse students into the study of musical performance including voice for the stage, which will be studied and practiced. Musical instructional and interpretation are the focus of the course. Focus will also include performance and preparation for auditions including the development of an audition portfolio and resume. Students learn by participating in a theatrical musical production, as cast and production staff. Students will be utilized in the cast according to their desires and abilities. The student will be responsible for the study and style of musical theatre in greater depth through research and presentation. **Prerequisite or corequisite: Acting 1 or Teacher Recommendation**

AR88935GAE	Technical Theatre and Production	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Technical Theatre and Production is a practicum that will introduce students to the essential elements of lighting, scenic, costume, prop, and sound design as well as how to organize and support a production through scheduling, budgeting, and advertising. Students will be given hands-on experience with set construction, scenic painting, hanging and focusing lighting equipment, and creating and editing sound cues. They will be given extra-curricular opportunities to apply those skills to concerts and productions throughout the school year. This course requires a prerequisite of Theatre Studies I or teacher recommendation.

AR8851GAE	Beginning Choir	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Beginning choir is a mixed group of students with a desire to learn the fundamentals of voice production and to improve their natural vocal abilities.. It is designed for students with a desire to learn the fundamentals of voice production and to improve their natural voice abilities. There should be a demonstrated desire to learn basic music reading. Through the use of voice drills and the singing of solo and ensemble repertoire, students develop an awareness of the voice as an expressive and resonant instrument. Through this group, students can attain the necessary experience for singing in other auditioned choral ensembles. Areas of study include: basic music theory, music reading skills, voice production, and musical interpretation. A variety of music literature is studied, both sacred and secular. Choir members are required to participate in all scheduled school and community performances.

AR8852GAE	Advanced Choir	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Advanced choir is a group of experienced singers who have participated in other performing organizations including choir, band or orchestra. Areas of study are: basic music theory, voice production, solo and ensemble singing, and artistic interpretation. A variety of music literature is studied, including sacred and secular compositions from the master works to contemporary. Advanced choir members are required to participate in all activities that include: school assemblies, public concerts, contests, CMEA events, and exchange concerts. **Prerequisite: Beginning Choir or teacher recommendation.**

AR8862HAE	Honors Chamber Singers	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a serious study of artistic music for the select chorus musician. Music will be selected by the instructor for its aesthetic content, historical importance and variety of style. Whenever possible, the pieces will be performed in original content with regard to language and accompaniment. Students will be selected through an audition-based criterion. Honors Chamber Singers are required to participate in all activities that include: school assemblies, public concerts, contests, CMEA events, and exchange concerts. **Prerequisite: Audition or teacher recommendation.**

AR8863GAE	Chorale	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Chorale is composed of experienced singers who have previously performed in music ensembles such as choir, advanced choir, chamber singers, band or orchestra. Students will be selected through an audition-based criterion. This is a performance-based organization; therefore, students are required to participate in all designated school, community and county performances, as well as after school rehearsals. **Prerequisite: Audition**

AR8898GAE	Introduction to Music Theory	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Art]			BMHS ONLY

This course is designed for students who have an interest in learning the basics of music fundamentals. Students will learn to read, write, listen to, analyze and describe music as professional musicians do. Prior experience in music is beneficial, but NOT required. Completion of this course will prepare students for success in Honors Intermediate Music Theory.

AR8871GAE	Prelude Orchestra	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of the middle school orchestra program at a more advanced level. The orchestra plays at special programs, in other schools in the system, and at public concerts. Emphasis is placed upon good rhythm, intonation, tone, and technique. String quartets and small ensembles are offered. Students will be required to attend weekly pull-out lessons. Prerequisite: Orchestra in middle school or audition. **Prerequisite: Orchestra in middle school or audition**

AR8872GAE	Philharmonia Orchestra	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of course 8871 (Prelude) at a more advanced level. The Philharmonic Orchestra plays at special programs, at other schools in the system, and at public concerts. Emphasis is placed upon refining tone quality, artistic interpretation of music, and application of music theory and music history to informed performance practice. String quartets and small ensembles are offered. Students are encouraged (but not required) to audition for music festivals (CMEA, NEMFA, etc.). Students will be required to attend weekly pull-out lessons. **Prerequisites: Completion of Prelude Orchestra and audition.**

AR8873HAE	Honors Principal Orchestra	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of 8871 (Prelude) at a more advanced level. The Principal Orchestra plays at special programs, at other schools in the system, and at public concerts. Emphasis is placed upon elevating all elements of performance practice to the highest level in order to create a truly artistic interpretation. String quartets and small ensembles are offered. Students in Principal Orchestra are expected to participate in the Norwalk All-City Orchestra and are encouraged (but not required) to audition for music festivals (CMEA, NEMFA, etc.). Students will be required to attend weekly pull-out lessons. **Prerequisites: Completion of Prelude Orchestra and audition.**

AR8881GAE	Symphonic Band	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Symphonic Band is the initial band instrumental course. This course will survey the basic idiomatic concepts of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, and parade band. Within the confines of the course tone production, embouchure development, intonation, rhythmic reading and accuracy and musical expression will be stressed. Public appearances are required in the venues of marching band, symphonic band, and combined bands. All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. **Prerequisite: Participation in middle school band or an audition.**

AR8883GAE	Wind Ensemble	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Students will have an in-depth study of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, and parade band. Special emphasis will be placed on advanced knowledge of timbre, intonation, rhythmic reading, musical expression, sight-reading, musical interpretation, and idiomatic styles. Public appearances are required in venues of marching band, wind ensemble, and combined bands. All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. **Prerequisite: Participation in Symphonic Band and an Audition.**

AR8895HAE *[Graduation Requirement: Fine Arts]	Honors Wind Symphony	Grades 10, 11, 12	1 Credit

Wind Symphony is the premiere performing organization of the band instrumental department. Instrumentation is based on one person per part except doubling in clarinet, flute, and percussion. Admission into the ensemble requires previous successful participation in Symphonic Band or Wind Ensemble and an audition. Students will have an intensive study of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, solo repertoire, individualized regional and state adjudication, small ensemble performances, and parade band. Knowledge of timbre, intonation, rhythmic reading, musical expression, sight-reading, musical interpretation, and stylistic understanding of idiomatic styles will be coupled with an analysis utilizing nationally accept rubrics. Public appearances are required in the venues of marching band, wind symphony, combined bands, small ensembles, and soloists. All participants are required to rehearse two weeks prior to the commencement of school (band camp) for the purpose of advanced participation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. **Prerequisite: Participation in Symphonic Band/Wind Ensemble and an Audition.**

AR8896GAC *[Graduation Requirement: Fine Arts]	Color Guard	Grades 9, 10, 11, 12	0.5 Credit

This is an intensive outdoor study of body, dance, staging, drill, saber, rifle, and flag styles. These seven styles will be assimilated into a singular performance idiom. Exploration, analysis, demonstration, and evaluation of contemporary performances styles will be examined utilizing nationally accepted rubrics. Public appearances are required in the venue of the marching band. All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice with the marching band occurs in **September through November. Prerequisite: Membership in the marching band and an Audition.**

AR8882GAE *[Graduation Requirement: Fine Arts]	Jazz Ensemble	Grades 9, 10, 11, 12	1 Credit

Students will build upon their knowledge from their participation in pre-required courses and through the study of jazz, rock, gospel, blues and fusion idioms. Emphasis will be placed upon the performance and interpretation of various jazz styles, rhythms, harmony and theory, and improvisation. Public performances are required. **Prerequisite: Concurrent enrollment in Symphonic Band, Wind Ensemble, or Wind Symphony and an Audition.**

AR8897GAC *[Graduation Requirement: Fine Arts]	Winter Guard	Grades 9, 10, 11, 12	0.5 Credit

This is an intensive indoor study of body, dance, staging, drill, saber, rifle, and flag styles to prerecorded music. These seven styles will be assimilated into a singular performance idiom. This performance idiom is referred to as winter guard. Exploration, analysis, demonstration, and evaluation of contemporary performances styles will be examined utilizing nationally accepted rubrics by Winter Guard International and Musical Arts Conference. Public appearances are required in the venue of winter guard. Out of school practices and performance occur in **January through April. Prerequisite: Membership in the marching band and an Audition.**

AR8866GAC *[Graduation Requirement: Fine Arts]	Winter Percussion Ensemble	Grades 9, 10, 11, 12	0.5 Credit

This is an intensive study of percussion through the use of performance, instruction and evaluation. The students will be exposed to a variety of musical instruments, including but not limited to, traditional marching percussion, concert percussion, pitched and non-pitched instruments. A broad range of musical styles will be explored, including but not limited to, classical, contemporary, rudimental and theatrical. Assessments will be given based on the nationally accepted rubrics from Winter Guard International and locally through the Musical Arts Conference. Public performances are required as part of the course. **Out of school rehearsals and performances will occur from December through May. Prerequisite: Membership in the marching and concert band program or by audition to the director of bands.**

World Languages

World Languages are organized sequentially within natural pathways on a continuous learning progress basis. Successful performance in one level is necessary before continuing to the next level to ensure and attain listening, speaking, reading, and writing proficiencies. Introductory World Languages courses only will be offered with sufficient enrollment. Students in Grade 8 may earn 1 High School World Languages credit for a high school level language course.

Core World Languages Sequences

9	10	11	12
Spanish 1 French 1 Italian 1	Spanish 2 French 2 Italian 2	Spanish 3 French 3 Italian 3	Spanish 4 French 4
Honors Spanish 2 Honors French 2 Spanish 2 French 2	Honors Spanish 3 Honors French 3 Honors Italian 2 Honors Spanish 4 Spanish 3 French 3	Honors Spanish 4 Honors French 4 Honors Italian 3 AP Spanish Language & Culture [NHS] Spanish 4 French 4	AP Spanish Language [NHS] AP Spanish Literature [NHS] ECE Spanish Composition & Conversation[NHS] AP French Language [NHS] ECE French Composition & Conversation AP Italian Language (NHS) ECE Italian Composition & Conversation (NHS)
Native Spanish 1	Native Spanish 2	Native Spanish 3	Native Spanish 4 or 5 AP Spanish Language & Culture [NHS]
Native Spanish 2	Native Spanish 3	Native Spanish 4 AP Spanish Language & Culture [NHS]	AP Spanish Literature and Culture [NHS] IB Language B HL Spanish Y1 (BMHS)
Honors Native Spanish 2	Honors Native Spanish 3	AP Spanish Language and Culture [NHS] IB: Lang B HL Spanish Y1 [BMHS]	ECE Spanish Composition & Conversation AP Spanish Literature & Culture (NHS) IB: Lang B HL Spanish Y2 [BMHS]
	AP Spanish Language & Culture [NHS]	ECE Spanish Composition & Conversation AP Spanish Literature & Culture [NHS]	ECE Spanish Composition & Conversation AP Spanish Literature & Culture
		IB: Ab Initio Spanish Y1 [BMHS] IB: Ab Initio French Y1 [BMHS] IB: Ab Initio Italian Y1 [BMHS] IB: Lang B SL Spanish Y1 [BMHS] IB: Lang B SL French Y1 [BMHS]	IB: Ab Initio Spanish Y2 [BMHS] IB: Ab Initio French Y2 [BMHS] IB: Ab Initio Italian Y2 [BMHS] IB: Lang B SL Spanish Y2 [BMHS] IB: Lang B SL French Y2 [BMHS]

WL4420GAE	French 1	1 Credit
WL4411GAE	Italian 1	
WL4430GAE	Spanish 1	
[Graduation Requirement: World Languages]		

The beginning course will provide the student with a general introduction to the language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information, and basic grammatical structures. Emphasis will be on the acquisition of four skills: listening, speaking, reading and limited writing. These skills are developed through a thematic approach that stresses themes such as sports, family, shopping, school, travel, and meals. Geography is also included. The student learning goals for this course include the ability to carry on a simple conversation and practice in correct usage of basic vocabulary and language structures to enable students to function effectively within realistic settings.

WL4422GAE	French 2	1 Credit
WL4412GAE	Italian 2	
WL4432GAE	Spanish 2	
[Graduation Requirement: World Languages]		

Continuation of the beginning course deals with fundamental skills with greater emphasis on the natural use of the language in everyday situations. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading and writing. Emphasis is on perfecting pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Reading selections are used to enhance vocabulary skills. Culture is further developed. Students will complete individual projects on selected topics. **Prerequisite: Level 1.**

WL4457HAE	Honors French 2	1 Credit
WL4456HAE	Honors Italian 2	
WL4458HAE	Honors Spanish 2	
[Graduation Requirement: World Languages]		

Level II Honors is an advanced course that focuses on the continued development of fluency, reading of authentic texts, development of conversational ease, and understanding and use of more complex grammatical structures. Increased emphasis is placed on the use of idioms, as Level II H begins with more challenging communicative skills: narrating past events orally and in writing, describing daily activities in more detail, engaging in longer communicative exchanges, reading a wide variety of texts and stories.. Integrated audio and video programs help the students to improve pronunciation, listening and speaking. This course is taught at an accelerated pace.

WL4423GAE	French 3		1 Credit
WL4413GAE	Italian 3	BMHS ONLY	
WL4433GAE	Spanish 3		
[Graduation Requirement: World Languages]			

The intermediate course reinforces and advances fundamental skills. Students review previous structures as well as learn more advanced structures. More emphasis is placed on developing a proficiency of expression using a variety of tenses with more expanded vocabulary and grammatical structures. Emphasis is placed on using the language in a meaningful way through continued use of paired/group activities, cooperative learning, hands on projects, presentations, discussion, games, music, and communicative activities. Cultural themes are developed. Writing becomes expository and less structured. **Prerequisite: Level 2.**

WL4424HAE	Honors French 3	1 Credit
WL4414HAE	Honors Italian 3	
WL4434HAE	Honors Spanish 3	
[Graduation Requirement: World Languages]		

Level III Honors is an advanced course that focuses on the continued development of fluency, reading of authentic texts, development of conversational ease, and understanding and use of more complex grammatical structures. Increased emphasis is placed on the use of idioms, on the mastery of tense usage, and on the enhancement of independent writing skills. In addition, Level III Honors stresses oral/aural proficiency, the ability to manipulate language structures, to define vocabulary, identify derivations, to use grammar functionally and accurately, to understand written texts, to think in the chosen language, and complete original writing with reasonable facility. This course is taught at an accelerated pace. **Prerequisite: Level 2 Honors.**

WL4425GAE	French 4		1 Credit
WL4415GAE	Italian 4	BMHS ONLY	
WL4435GAE	Spanish 4		
[Graduation Requirement: World Languages]			

Continuation of the intermediate course places emphasis on developing speaking skills and writing. Students review previously learned structures and more emphasis is placed on developing a proficiency of expression using a variety of tenses with more expanded vocabulary and grammatical structures. Appreciation and knowledge of the Spanish-speaking world is emphasized in a meaningful way through continued use of reading, paired/group activities, cooperative learning, hands-on projects, presentations, discussion, games, music, and communicative activities. Emphasis is placed on conversational approach using language in practical solutions. Students continue with writing assignments designed to improve proficiency to a higher level. Group conversations are frequent as well as paired work with students reacting to a partner's statement. Discussion periods will be provided. Individual and/or group projects will be accomplished during the year. **Prerequisite: Level 3**.

WL4425GAE	Honors French 4	1 Credit
WL4435GAE	Honors Spanish 4	
[Graduation Requirement: World Languages]		

Level IV is an advanced course that stresses oral/aural proficiency, the ability to manipulate language structures, to define vocabulary, identify derivations, to use grammar functionally and accurately, to understand written text, to think in the chosen language, and complete original writing with reasonable facility. Using excerpts from Spanish, Italian, and/or French literature along with other selected cultural and historical readings, students are expected to write original compositions using vocabulary appropriate to the materials. In this course, students continue with a focus on listening, speaking, reading and writing at the intermediate ACTFL proficiency level. This course is taught at an accelerated pace. Senior students can take the Seal of Biliteracy Exam.

AP World Languages Courses

Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Students are expected to take the Advanced Placement exam.

WL4429ACE	Advanced Placement French Language	Grade 12	1 Credit
*[Graduation Requirement: World Languages]			NHS ONLY

This college-level course provides opportunities for students to demonstrate their proficiency in the modes of communication (Interpretive, Interpersonal, and Presentational) from the Intermediate to the Pre-Advanced range. When communicating, students in the AP French Language and Culture course will demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings. The AP French Language and Culture course is conducted exclusively in French.

WL4429ACE	Advanced Placement Italian	Grade 12	1 Credit
*[Graduation Requirement: World Languages]			NHS ONLY

This college-level course provides opportunities for students to demonstrate their proficiency in the modes of communication (Interpretive, Interpersonal, and Presentational) from the Intermediate to the Pre-Advanced range. When communicating, students in the AP Italian Language and Culture course will demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings. The AP Italian Language and Culture course is conducted exclusively in Italian.

WL4439ACE	Advanced Placement Spanish Language	Grade 11, 12	1 Credit
*[Graduation Requirement: World Languages]			NHS ONLY

This college-level course provides opportunities for students to demonstrate their proficiency in the modes of communication (Interpretive, Interpersonal, and Presentational) from the Intermediate to the Pre-Advanced range. When communicating, students in the AP Spanish Language and Culture course will demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings. The AP Spanish Language and Culture course is conducted exclusively in Spanish.

WL4440ACE	Advanced Placement Spanish Literature and Culture	Grade 12	1 Credit
*[Graduation Requirement: World Languages]			NHS ONLY

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism).

WL4428CCE	UConn ECE French Language, Culture, Grammar, and Composition	Grade 12	1 Credit
UConn: FREN3250: Global Culture 1; FREN3268: Grammar and Composition			NHS ONLY
*[Graduation Requirement: World Languages]			

This course is aligned with the University of Connecticut's courses French 3250 (Global Culture I, 3 credits) and French 3268 (Grammar and Composition, 3 credits). The course offers an examination of oral techniques of communication in conjunction with weekly topics of conversation associated with various French and Francophone cultures. This class engages in rigorous and active oral practice through dialogues, interviews, round tables, and oral reports. Students engage in the advanced study of French texts and extensive written practice in a variety of forms ranging from compositions, essays, summaries, and film reviews. Successful completion of Honors French 4 and instructor consent is required.

WL4418CCE	UConn ECE Italian UConn: ILCS3239: Composition and Conversation I	Grade 12	1 Credit
*[Graduation Requirement: World Languages]			NHS ONLY

This course is aligned with the University of Connecticut's course **Italian 3239 (Composition & Conversation I, 3 credits)**. Practice in written and oral composition. Syntax study. **Prerequisite: Successful completion of Honors Italian 3 and instructor approval.**

WL4438CCE	UConn ECE Spanish Composition and Conversation: Cultural Topic UConn: SPAN 3178, SPAN 3179	Grade 12	1 Credit
*[Graduation Requirement: World Languages]			

This course is aligned with the University of Connecticut's courses **Spanish 3178 (Intermediate Spanish Composition, 3 credits) and Spanish 3179 (Spanish Conversation: Cultural Topics, 3 credits)**. The course provides a thorough review of grammar and methodical practice in composition leading to command of practical idioms and vocabulary. It also develops speaking skills through cultural readings, group discussions, and oral presentations on selected topics concerning the Spanish-speaking world.
Prerequisite: Successful completion of Honors Spanish 4 and instructor approval.

BMHS ONLY	IB Group 2: Language B	Grades 11 and 12	1 credit per year
WL4521ICE	IB Spanish HL Y1		
WL4538ICE	IB Spanish HL Y2		
*[Graduation Requirement: World Languages]			

This course represents a two-year sequence of upper level Spanish studies. The main purpose of this course is to perfect the students' skills in reading, writing, listening and speaking the target language and to use those skills in interpersonal, presentational, and interpretative modes. Students will also be developing a strong understanding of the similarities and differences between their own culture and the cultures studies. The areas of studies will include: 1) identities, 2) experiences, 3) human ingenuity, 4) social organizations, and 5) sharing the planet. Students will also develop meta-linguistic awareness of how the use of the target language impacts the message being communicated. Finally, students will critically analyze and relate learning from other facets of their IB education to the content of this course. As part of this course students will discuss and write about selected literary works. The HL course differs from the SL course in that performance expectations are higher than those for the SL courses and the addition of two cultural works of fiction in the course.

BMHS ONLY	IB Group 2: Language B		
WL4522ICE	IB Spanish SL Y1	Grades 11 and 12	1 credit per year
WL4539ICE	IB Spanish SL Y2		
*[Graduation Requirement: World Languages]			

This course represents a two-year sequence of upper level Spanish studies. The main purpose of this course is to perfect the students' skills in reading, writing, listening and speaking the target language and to use those skills in interpersonal, presentational, and interpretative modes. Students will also be developing a strong understanding of the similarities and differences between their own culture and the cultures studies. The areas of studies will include identities, experiences, human ingenuity, social organizations, and sharing the planet. Students will also develop meta-linguistic awareness of how the use of the target language impacts the message being communicated. Finally, students will critically analyze and relate learning from other facets of their IB education to the content of this course.

BMHS ONLY	IB Group 2: Language B	Grades 11 and 12	1 credit per year
WL4523ICEIB	Spanish ab initio Y1		
WL4540ICEIB	Spanish ab initio Y2		
*[Graduation Requirement: World Languages]			

This course will be offered as a two-year course for students with little experience in Spanish. This course deals with 5 themes: identities, experiences, human ingenuity, social organizations, and sharing the planet. Students are exposed to a variety of authentic texts as they explore these themes and develop receptive, productive, and interactive abilities in Spanish. The course also emphasizes the study and understanding of the cultures of the Spanish speaking world. Summative assessments towards the end of the two years include internal testing of students' speaking and listening skills through genuine conversations and external testing of writing and reading comprehension skills through authentic print texts and short written exercises.

BMHS ONLY	IB Group 2: Language B		
WL4524ICE	IB French SL Y1	Grades 11 and 12	1 credit per year
WL4541ICE	B French SL Y2		
*[Graduation Requirement: World Languages]			

This course represents a two-year sequence of upper level French studies. The main purpose of this course is to perfect the students' skills in reading, writing, listening and speaking the target language and to use those skills in interpersonal, presentational, and interpretative modes. Students will also be developing a strong understanding of the similarities and differences between their own culture and the cultures studied. The areas of studies will include 1) identities, 2) experiences, 3) human ingenuity, 4) social organizations, and 5) sharing the planet. Students will also develop metalinguistic awareness of how the use of the target language impacts the message being communicated. Finally, students will critically analyze and relate learning from other facets of their IB education to the content of this course.

BMHS ONLY	IB Group 2: Language B		
WL4542ICE	IB French ab initio Y1	Grades 11, 12	1 credit per year
WL4543ICE	IB French ab initio Y2		
*[Graduation Requirement: World Languages]			

The ab initio French course will be offered as a two-year course for students with little experience in French. This course deals with 5 themes: identities, experiences, human ingenuity, social organizations, and sharing the planet. Students are exposed to a variety of authentic texts as they explore these themes and develop receptive, productive, and interactive abilities in French. The course also emphasizes the study and understanding of the cultures of the French Speaking world. Summative assessments towards the end of the two years include internal testing of students' speaking and listening skills through genuine conversations and external testing of writing and reading comprehension skills through authentic print texts and short written exercises.

BMHS ONLY	IB Group 2: Language B		
WL4544ICE	IB Italian ab initio Y1	Grades 11, 12	1 credit per year
WL4545ICE	IB Italian ab initio Y2		
*[Graduation Requirement: World Languages]			

The ab initio Italian course will be offered as a two-year course for students with little or no experience in Italian. This course deals with 3 themes: 1) individuals and society, 2) leisure and work, and 3) urban and rural environment. Students are exposed to a variety of authentic texts as they explore these themes and develop receptive, productive, and interactive abilities in Italian. The course also emphasizes the study and understanding of the cultures of the Italian-speaking world. Summative assessments towards the end of the two years include internal testing of students' speaking and listening skills through genuine conversations and external testing of writing and reading comprehension skills through authentic print texts and short written exercises.

Native Language Spanish Course Sequence

WL4530GAE	Native Language Spanish 1	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course is the first course of a series of four designed specifically for Native/heritage speakers. The general objectives of this course are to develop competence in students' reading and writing skills, to master certain grammar points particular to Native/heritage speakers, to help them improve their presentational skills and take into an account the experiences and influences of their bilingual and bicultural upbringing.This course is for students who are fluent speaking Spanish but have basic skills in reading and writing and require support in those areas. Students will build on their competency in all four skills: listening, speaking, writing and reading their native/heritage language, with the intention to further enhance their understanding of the culture of the Hispanic World.

WL4531GAE Native Language Spanish 2 Grades , 10, 11, 12 1 Credit
***[Graduation Requirement: World Languages]**

This course is designed to further develop the students' basic four literacy skills: Reading, Listening, Speaking, and Writing. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World.

WL4531HAE Honors Native Language Spanish 2 Grades , 10, 11, 12 1 Credit
***[Graduation Requirement: World Languages]**

This course is designed to further develop the students' reading and writing skills. Native 2 Honors is a reading and composition course that engages Native/Heritage learners in exploring social and contemporary topics with a variety of readings from newspapers, magazines, essays and online media. One of the main objectives of this course is to develop strong writing & reading skills in Spanish. Students will practice not only argumentative writing, but also practical writing, such as writing a letter or an article. In this course, students will continue reviewing and recycling the most challenging grammar topics and vocabulary in order to continue building confidence and skill in writing & reading in Spanish. This course is taught at an accelerated pace.

WL4532GAE Native Language Spanish 3 Grades 10, 11, 12 1 Credit
***[Graduation Requirement: World Languages]**

This course is designed to expand the students' knowledge of Spanish through readings, written essays, and oral presentations. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World.

WL4533HAE Honors Native Language Spanish 3 Grades 10, 11, 12 1 Credit
***[Graduation Requirement: World Languages]**

This course aligns to the AP Language and Culture (NHS) and IB (BMHS) course outlines. Students are expected to engage in spoken interpersonal communication, engage in written interpersonal communication, synthesize information from a variety of authentic audio, visual, and audiovisual resources, synthesize information from a variety of authentic written and printed resources, plan, produce, and present spoken presentational communication; and plan and produce written presentational communication. This course is significantly more demanding in order to develop those skills measured on the Advanced Placement Examination in Spanish Language. This course is taught at an accelerated pace. Senior students can take the Seal of Biliteracy Exam.

WL4533GAE Native Language Spanish 4 Grades 10, 11, 12 1 Credit
***[Graduation Requirement: World Languages]**

This course is designed to focus on the development of techniques for written and oral formal public presentations in a variety of contexts and themes: organizing and presenting information for clear and successful presentations in Spanish. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World.

WL4450CCE UConn ECE Spanish Composition, Reading, and Conversation: Cultural Topics Grade 11 & 12 1 Credit
***[Graduation Requirement: World Languages]**

This course is aligned with the University of Connecticut's courses **Spanish 3177 (Composition & Reading for Native Spanish Speakers, 3 credits) and Spanish 3179 (Spanish Conversation: Cultural Topics, 3 credits)**. The course entails grammar, written composition, and readings for speakers of Spanish with little or no formal training. Emphasis is on literature. It also develops speaking skills through cultural readings, group discussions, and oral presentations on selected topics concerning the Spanish-speaking world. **Prerequisite: Successful completion of Honors Native Spanish 3 and instructor approval.**

STEM:

Math

Computer Science & Technology Information Science

PLTW Engineering

The McMahon Medical Pathway

The Marine Science Academy at BMHS

Mathematics

All high school students must earn an amount of four (4) math credits in order to graduate high school. Upon transitioning to 9th grade, a student may have earned one high school math credit after successfully completing the High School course in middle school.

Norwalk Public Schools provides a variety of courses in mathematics. There are courses that require prerequisite skills and mastery in order to advance. Refer to the course descriptions for prerequisite requirements prior to creating your schedule.

Honors mathematics courses are available to students in all grade levels. We offer honors level courses in Geometry, Algebra 2, and Precalculus. In addition, we offer Advanced Placement courses in Calculus, Statistics, and Computer Science. There are several one semester courses offered to juniors and seniors. Any prerequisites are listed in the course descriptions. *Subject offerings can also be found within the Multilingual Learner (MLL) section of this book.

Possible Math Course Sequences:

9	10	11	12
Intensified Algebra 1 Algebra 1	Integrated Algebra & Geometry Geometry Honors Geometry Algebra 2 Honors Algebra 2	Algebra 2 Advanced Algebra (Semester) Applied Geometry (Semester) Precalculus IB Math Year 1 (BMHS)	Probability & Statistics (Semester) Sports Statistics (Semester) Topics in Algebraic Reasoning Calculus 1 IB Math Year 2 (BMHS)
Geometry Honors Geometry	Algebra 2 Honors Algebra 2	Precalculus Honors Precalculus Probability & Statistics IB Math Year 1 (BMHS)	Advanced Algebra (Semester) Topics in Algebraic Reasoning Sports Statistics (Semester) Topics in Algebraic Reasoning Calculus 1 IB Math Year 2 (BMHS)
Algebra 2 Honors Algebra 2	Honors Geometry Honors Precalculus	Honors Precalculus AP Calculus IB Math Year 1 (BMHS)	AP Calculus AP Statistics IB Math Year 2 (BMHS)

MA1112GAG **Intensified Algebra 1** **Grades 9, 10, 11, 12** **2 Credits**
***[Graduation Requirement: 1 Math Credit and 1 STEM Related Course]**

In this course students will examine real world problems using tables, graphs, and equations. Topics include number patterns, linear equations, proportions and percent, positive and negative numbers, writing formulas, slopes and intercepts, data analysis, systems of linear equations, common laws of exponents and probability and statistics. Successful completion gives the student one credit in mathematics and one credit for a math related course. **The one additional math related credit or STEM credit does not fulfill graduation credit in mathematics.**

MA1121GAE **Algebra 1** **Grades 9, 10, 11, 12** **1 Credit**
***[Graduation Requirement: Math Credit; STEM Related Course]**

This course will cover many similar topics as Intensified Algebra 1, but in more depth. In addition, students will engage in an extensive study of systems of linear equations as well as an introductory study of quadratic equations and expressions.

MA1128GAE **Integrated Algebra and Geometry** **Grades 10, 11, 12** **1 Credit**
***[Graduation Requirement: Math Credit; STEM Related Course]**

This course is designed to develop confident knowledge of the fundamentals of algebra and geometry, material that is at the core of the study of high level mathematics. It cultivates the essential skills and habits required to make use of mathematics, including the ability to approach challenging problems and to communicate mathematical ideas clearly. The mathematical content of the course includes more advanced applications of material from Algebra I, as well as material drawn from the traditional content of Geometry and some Algebra II. Topics are woven throughout the course to build a deeper understanding.
Prerequisite: Algebra 1 or Intensified Algebra.

MA1122GAE	Algebra 2	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

The major theme of this course is functions. The concept of functionality will be developed fully, and the course includes a study of linear, quadratic, exponential, and polynomial. Also included in this course is content with probability and statistics.
Prerequisite: Intensified Algebra 1 or Algebra 1. May be taken concurrently with Geometry.

MA1129HAE	Honors Algebra 2	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

The operations of the complex number system, linear, polynomial, quadratic, cubic, and quartic equations, logarithms and exponents, permutations, combinations, probability, coordinate geometry, conic sections and sequences and series, will be included in the course. **Prerequisite: Intensified Algebra 1 or Algebra 1**

MA1131GAE	Geometry	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

This course is fully aligned to the new Connecticut Core Standards. Topics include: Transformations and the Coordinate Plane; Congruence, Proof and Constructions; Polygons; Similarity, Proof, and Trigonometry; Circles, and other Conic Sections; Extensions to Three Dimensions; and Applications of Probability. **Prerequisite: Algebra 1**

MA1133HAE	Honors Geometry	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

Honors geometry includes the study of assumptions, definitions, theorems, deductive and inductive reasoning, proofs, loci, topology and non-Euclidean. Emphasis will be placed on developing a greater understanding of the logic inherent in the structure of geometry. **Prerequisite: Algebra 1**

MA1130GAC3	Applied Geometry	Grades 10, 11, 12	.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

This half-year course in Geometry provides students with an in-depth learning experience where they will need to apply their knowledge of numerous fundamental geometry concepts. The concepts are based on the major areas of work found on the SAT. These topics include but are not limited to circles, right angle trigonometry, coordinate geometry, complex numbers, area and volume. Students will be able to understand the key concepts and skills necessary to be successful with SAT scenarios with and without the calculator. **Prerequisite: Algebra 1; can be taken concurrently with Algebra 2**

MA1117GAE3	Topics in Algebraic Reasoning	Grades 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

This inquiry-focused course is built around a compacted 5E instructional model, whereby students engage in hands-on activities to help activate prior knowledge and explore a series of investigations to look for patterns and make conjectures. The hands-on learning approach guides students to synthesize their learning from multiple activities so that they can explain their reasoning in a formalized way. **Prerequisite: Algebra 2**

MA1144GAC5	Advanced Algebra	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

This course will consist of the study of the real number system, solving linear and quadratic equations with numerous applications, natural and common logarithms, sequences and series, and exponential functions with applications.
Prerequisite: Algebra 2

MA1123GAE	Precalculus	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

This course will expand the student's knowledge of functions. Polynomial, exponential, logarithmic, and trigonometric functions and their applications will be studied in depth. Also included are other topics in trigonometry, sequences and series, probability and some analytic geometry. **Prerequisite: Algebra 2.**

MA1139HAE	Honors Precalculus	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

All of the topics of Precalculus will be covered, with a more theoretical emphasis. In addition, the student will study rational functions, polar and parametric equations, and vectors. **Prerequisite: Algebra 2**

MA1148GAE	Calculus 1	Grade 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

Calculus 1 is designed for students who have taken Precalculus, but who are not ready for Calculus at the AP Level. This course would offer students, especially seniors, a fourth year of math and give them extra time (beyond/after the AP exam) to learn most of the Calculus concepts that are taught in AP Calculus. In addition to skills remediation, topics would include limits, derivatives, applications of the derivatives, anti-derivatives, and integrations. **Prerequisite: Precalculus.**

MA1142GAC	Probability and Statistics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

Probability is studied intuitively and formally. Topics include permutations and selections, mathematical induction, frequency distributions and measure of central tendency, binomial distribution with applications to hypothesis testing infinite population sampling. **Prerequisite: It is recommended that students take Algebra 2 prior to taking Probability and Statistics.**

MA1153GAC	Sports Statistics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			NHS ONLY

Do NFL teams have a home-field advantage? Is Steph Curry a streaky shooter? This course teaches students how to answer these questions, and others like them, using the four-step statistical process: ask questions, collect data, analyze data, and make conclusions. Major topics include: proper methods of data collection, using graphs and summary statistics, normal distributions, rules of probability. Throughout the course, students will complete investigative projects involving athletes or teams of their choice. Through this unique approach, this course teaches statistics in a different context for all students. **Prerequisite: Algebra 2**

MA1140GAE	Statistics	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]			

Probability and statistics is recommended for those who want a related credit that will be beneficial to many academic, medical, social, and business careers. Statistics topics studied include describing data with graphs, distributions, histograms, and other graphical techniques. Students will also use statistical measures of center and spread to analyze data and graphical displays. Probability topics include: probability rules, probability distributions-discrete, binomial, Poisson, and normal distributions. Other topics studied are sampling design, sampling distributions, hypothesis testing and confidence intervals for one mean and one proportion samples using z-tests and t-tests. **Prerequisite: It is recommended that students take Algebra 2 prior to taking Statistics.**

MA1180GAC	Math SAT Prep	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

This semester-length (NHS) class is intended to prepare students for the *math* segments of the SAT. Teachers will provide students with activities in analytical thinking and with the skills and strategies associated with the math section of the redesigned SAT. Course materials may include SAT review materials, current assessment software programs, and previous standardized examinations. **This course does not fulfill the graduation credit in mathematics. This course is a pass/fail course.**

Advanced Placement- Math Courses

Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Students are expected to take the Advanced Placement exam.

MA1150ACE	**Advanced Placement Calculus AB**	**Grades 11, 12**	**1 Credit**
***[Graduation Requirement: Math Credit; STEM Related Course]**			

All topics in the College Entrance Examination Board's AP Calculus syllabus will be thoroughly studied. Topics include limits, the derivative (theory and applications), techniques of differentiation, indefinite and definite integrals, and techniques and application of integration. The graphing calculator is thoroughly integrated throughout the course. **Prerequisite: Precalculus.**

MA1151ACE	**Advanced Placement Calculus BC**	**Grades 10, 11, 12**	**1 Credit**
***[Graduation Requirement: Math Credit; STEM Related Course]**			BMHS ONLY

This course is designed to supply an extra semester of study in conjunction with AP Calculus AB. Topics studied include parametric, polar, and vector functions (including their derivatives), analysis of plane curves given in parametric, polar, and vector form, numerical solution of differential equations, applications of the definite integral, advanced techniques of anti-differentiation, improper integrals, logistical differential equations, and a comprehensive study of polynomial approximations and series. **Prerequisite: Precalculus.**

MA1141ACE	**Advanced Placement Statistics**	**Grades 10, 11, 12**	**1 Credit**
***[Graduation Requirement: Math Credit; STEM Related Course]**			

This full year course is designed to provide the student with a college level course in statistics. Students will learn how to collect data in a meaningful way, analyze data using a variety of statistical measures, explore phenomena using probability and simulation, and select appropriate models using statistical inference. Technology such as the computer and the graphing calculator will be thoroughly integrated into the study of statistical concepts. **Prerequisite: Algebra 2**

IB Group 5: Math BMHS ONLY

MA1186ICE	IB Math: Applications and Interpretations SL Y1	Grades 11, 12	1 credit per year
MA1187ICE	IB Math: Applications and Interpretations SL Y2		
*[Graduation Requirement: Math Core; Math Elective; STEM Elective]			

Application and Interpretation SL is a two-year Mathematical sequence course that focuses on a vast array of mathematical concepts including algebra, function modeling using technology, probability and statistics, geometry, trigonometry, and calculus. Students will approach problems through application and using technology to advance understandings of each topic. Students will need to have knowledge of basic mathematical concepts and be knowledgeable enough to apply mathematical concepts. Over the course of two-year students will be exposed to international mindedness, Theory of Knowledge (TOK – as it relates to mathematics), and be required to complete an Internal Assessment (math exploration of their choosing), and IB Math External Exams (Paper 1 and Paper 2 in May of Y2). All of this focuses on how well can students apply the knowledge they have acquired throughout the course. Aligning with the IB Syllabus, a TI-84 graphing calculator is an essential tool for this course. **Prerequisite: Algebra 2.**

MA1190ICE	IB Math: Analysis and Approaches HL Y1	Grades 11, 12	1 credit per year
MA1191ICE	IB Math: Analysis and Approaches HL Y2		
*[Graduation Requirement: Math Core; Math Elective; STEM Elective]			

Mathematics HL is a two-year course covering many topics. During year one students will learn probability and statistics, algebra, functions, circle functions, trigonometry, and vectors. At the end of year one students will complete an internal assessment (math exploration of their choosing). Year two gives an in-depth look into calculus (equivalent to AP Calculus BC). Students will develop the attributes helpful to an internationally minded individual seeking to create a better and more peaceful world, with a focus on problem solving and mathematical inquiry. Students are expected to have a TI-84 graphing calculator at all times. The course will culminate with an external assessment consisting of three parts. **Prerequisite: At least an A- in Honors Algebra 2.**

MA1188ICE	IB Math: Analysis and Approaches SL Y1	Grades 11, 12	1 credit per year
MA1189ICE	IB Math: Analysis and Approaches SL Y2		
*[Graduation Requirement: Math Core; Math Elective; STEM Elective]			

The IB DP Mathematics: Analysis and Approaches course is a two-year course and is intended for students who wish to pursue studies in mathematics at university of subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology. Topics include Algebra, Geometry, Trigonometry, Statistics, Probability, and Calculus. At the end of year one, students will start their internal assessment (math exploration of their choosing) which offers the students the opportunity to develop independence in their mathematical learning. Students are expected to have a TI-84 graphing calculator at all times. **Prerequisite: B- or better in Algebra 2.**

Computer Science and Technology Information

Computer Science and Technology Information transcends throughout the Math and Business departments in Norwalk. In addition to fulfilling the STEM graduation requirements, students will apply computer related classes into daily activities and future employment. The technology information courses lead to careers such as programmers, software engineers or IT professionals while the computer science pathway leads the way for careers in information security, network architecture, database and systems support.

9	10	11	12
	CompTIA IT Fundamentals (BMHS) CompTIA Core1 (BMHS)	CompTIA Core 2 (BMHS) (Can be taken 11th or 12th))	
Honors Computer Science Essentials PLTW (BMHS)	Honors Computer Science Principles PLTW (BMHS)	Honors Computer Science Principles PLTW (BMHS)	Honors PLTW Cybersecurity (BMHS)
Computer Science 1	Computer Science 1 Computer Science 2 Computational Logic	Computer Science 1 Computer Science 2 Computational Logic	Computer Science 1 Computer Science 2 Computational Logic
AP Computer Science Principles (NHS)	AP Computer Science Principles (NHS)	AP Computer Science A	AP Computer Science A

AR5502GAC **Computer Applications** **Grades 9, 10, 11, 12** **0.5 Credit**
[Graduation Requirement: STEM Related Course; Digital Literacy]

This course is essential to each student's development of technological skills and abilities which are needed at both the high school and college level, as well as entry level employment. Instruction will focus on:

1. Microsoft Word/Docs for word processing - students will create and edit an MLA report, resume, and personal business letters.
2. Microsoft Excel/Sheets for spreadsheets - students will create a worksheet to organize data, visually present data using embedded charts and graphs, and learn to use formulas and functions.
3. Microsoft PowerPoint/Slides for presentations - students will research, create and deliver a presentation with illustrations and shapes on a topic of their choice.
4. Microsoft Publisher - students will learn how to navigate to create cards, flyers, and brochures.

AR5538GAC **Computer Construction and Repair** **Grades 10, 11, 12** **0.5 Credit**
[Graduation Requirement: STEM Related Course; Digital Literacy] **NHS ONLY**

This course is interactive and provides students with the knowledge and opportunity to assemble a multimedia computer. An overview of available career and certification options will be provided through a heavy emphasis on technical readings and practice exams. Topics covered will include the different types of operating systems, motherboards, CPUs, power supplies, expansion cards, and memory. Students will also research current industry standards for computer construction as older components are updated or become obsolete. **Recommended: Computer Applications.**

AR5515GAC	Video Game Design	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course Digital Literacy]			

This STEM course will introduce students to the world of video game design and development, learning all aspects of the creative, business, and technological components. Students will examine history, structure, and strategy of game development. Overall creation of the computerized video game will include storytelling, characters, game play, levels, and audio content. Participants will learn key programming constructs using GameMaker software. By the end of the course, students will have created a computerized video game. This course is an introductory-level course that does not require a background in computer programming. It is important that students are proficient in English as coding requires it. ***This course fulfills the digital literacy requirement.**

AR5514GAC	Web Page Design	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]			

In this course students will build and maintain professional websites utilizing HTML and other web site development software such as Adobe Dreamweaver. Students will be able to understand the role the Internet plays on our daily lives and the impact it has on business success. Students will be able to identify the importance of creating a professional website with the proper content and structure. Students will apply daily applications in creating websites from several perspectives and web designing stand points. Students will complete various activities that allow them to create, evaluate and improve web design through experiences and research. It is important that students are proficient in English as coding requires it.

AR5518GAC	CompTIA IT Fundamentals	Grades 9,10, 11	0.5 Credits
*[Graduation Requirement: STEM Related Course; Digital Literacy]			BMHS ONLY

CompTIA IT Fundamentals+ (ITF+) is an introduction to basic IT knowledge and skills. This course focuses on using features and functions of common operating systems and establishing network connectivity, identifying common software applications and their purpose, and using security and web browsing best practices. The course prepares students to become A+ certified.

AR5519GAC	CompTIA Core 1	Grades 10, 11, and 12	0.5 Credits
[Graduation Requirement: STEM Related Course; Digital Literacy]			BMHS ONLY

CompTIA Core 1 builds on the skills learned in CompTIA IT Essentials and prepares students for the A+ Core 1 exam. Objectives in the course include the following: hardware, networking, mobile devices, hardware & networking troubleshooting.

AR5520GAC	CompTIA Core 2	Grades 11, 12	0.5 Credits
[Graduation Requirement: STEM Related Course; Digital Literacy]			BMHS ONLY

CompTIA Core 2 builds on the skills learned in CompTIA IT Essentials and prepares students for the A+ Core 2 exam. Objectives in the course include the following: windows operating systems, other operating systems & technologies, security, software troubleshooting, operational procedures.

MATH DEPARTMENT COMPUTER SCIENCE

MA1164GAC	Computer Science 1	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course; Digital Literacy]			

Topics covered will allow students to study programming methodology and design data structures and algorithms. Upon completion of this course, students will have an extensive introduction to the language of Java. ***This course fulfills the digital literacy requirement. Prerequisite: Algebra I. Recommendation: Algebra 2**

MA1165GAC	Computer Science 2	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit; STEM Related Course; Digital Literacy]			

Topics covered will include the introduction to JAVA programming language and the use of spreadsheet and database applications. ***This course fulfills the digital literacy requirement. Prerequisite: Algebra 2 or Computer Science 1.**

MA1169GAC	Computational Logic	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Related Course; STEM Related Course]			BMHS ONLY

Computational Logic plays an important role in many areas of computer science, including verification of hardware and software, programming languages, databases and Artificial Intelligence. This course lays the foundations for the more advanced core courses: Computer Science 2, AP Computer Science A. **Prerequisite: Algebra 2**

ADVANCED PLACEMENT COMPUTER SCIENCE COURSES

Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. *This course fulfills the digital literacy requirement.

MA1168ACE	Advanced Placement Computer Science Principles	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course; Digital Literacy]			

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. It will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Students are expected to take the Advanced Placement exam.

MA1166ACE	Advanced Placement Computer Science A	Grades 11, 12	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course; Digital Literacy]			

The College Entrance Examination Board syllabus will be followed. JAVA language will be used. Topics covered will be object-oriented programming (OOP), features of the programming language, data types and classes, algorithms, application of computing, computer systems and social implications of computers, and a case study designated by the College Board. Students are expected to take the Advanced Placement exam.

PLTW COMPUTER SCIENCE

AR5594HAE	Honors PLTW Computer Science Essentials	Grades 9, 10	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			BMHS ONLY

Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence that prepares them to advance to Computer Science Principles and Computer Science A. ***This course fulfills the digital literacy requirement.**

AR5595HAE	Honors PLTW Computer Science Principles	Grades 10, 11	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			BMHS ONLY

Using Python® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. *This course is endorsed by the College Board, giving students the opportunity to take the AP CSP exam for college credit.* **Prerequisite: Honors PLTW Computer Science Essentials or approved comparable Computer Science course. *This course fulfills the digital literacy requirement.**

AR5596HAE	Honors PLTW Computer Science A	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			BMHS ONLY

Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases, as well as creating a game for their friends or an app to serve a real need in their community. This course is aligned to the AP CSA framework. **Prerequisite: Honors PLTW Computer Science Essentials or approved comparable Computer Science course. *This course fulfills the digital literacy requirement.**

AR5597HAE	Honors PLTW Cybersecurity	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			BMHS ONLY

Students explore the tools and concepts of cybersecurity and create solutions that allow people to share computing resources while protecting privacy. ***This course fulfills the digital literacy requirement.**

Science

A Norwalk student must earn three (3) credits in science to graduate. Two (2) of those credits must be fulfilled in a laboratory science setting within the Life and Physical Science disciplines. Courses that meet this requirement include Biology (Life Science), Earth and Integrated Physical Science (EIPS), Chemistry (Physical Science) and Physics. In addition to the many science related courses that are available to all students, Project Lead the Way Pre-Engineering courses are available as related courses and upon successful completion, college credit can be earned. Students also have multiple Advanced Placement options in Biology, Chemistry, Physics, and Environmental Science; college credit is available in these fields by enrolling in the UConn ECE program.
*Subject offerings can also be found within the Multilingual Learner (MLL) section of this book.

Science course sequence options:

9	10	11	12
Biology	Earth and Integrated Physical Science	Chemistry	Physics
Honors Biology with EIPS	Honors Chemistry with EIPS	Honors Physics AP Chemistry (NHS) AP Physics AP Seminar IB Environmental Science (BMHS) IB Physics (BMHS) IB Marine Science Y1 (BMHS)	AP Biology (NHS) AP Environmental Science (NHS) AP Chemistry (NHS) AP Physics AP Seminar IB Environmental Science (BMHS) IB Physics (BMHS) IB Marine Science Y2 (BMHS)
Pathway Related Courses			
Honors Principles of Biomedical Science	Honors Human Body Systems	Honors Medical Interventions	
Drone Engineering and Operation	Honors Principles of Engineering	Honors Digital Electronics	
Honors Introduction to Engineering Design Introduction to Healthcare Science Marine Studies 1	Honors Environmental Sustainability Honors Digital Electronics Honors Biotechnology Engineering Marine Studies 2 Honors Introduction to Engineering Design	Honors Introduction to Engineering Design Honors Environmental Sustainability Honors Principles of Engineering Marine Engineering and Trades 1 Marine Engineering and Trades 2 Local Marine Biology and Ecology Global Marine Biology and Ecology Future Marine Educators	Honors Introduction to Engineering Design (PLTW) Honors Environmental Sustainability (PLTW) Honors Principles of Engineering (PLTW) Honors Digital Electronics Local Marine Biology and Ecology Global Marine Biology and Ecology Future Marine Educators

SC3326GAE **Biology (Lab Science)** **Grades 9, 10, 11, 12** **1 Credit**

***[Graduation Requirement: Biology/Life Science (Lab)]**

NCAA

Emphasis of study will be placed on the biochemical, physiological, morphological, ecological, bacteriological, embryonic, nutritional, pathological and biographical natures of life. Upon completion of this course a student will have a knowledge of the principles on which all life depends, and an awareness of the interdependency of organisms in the biological world with reference to the balance of nature and conservation.

SC3340HAE **Honors Biology with EIPS (Lab Science)** **Grades 9*** **1 Credit**

***[Graduation Requirement: Biology/Life Science (Lab)]**

NCAA

Honors Biology will cover topics similar to those covered in the college prep biology class: the principles and inter-relationships of living forms with reference to the balance of nature and a realistic concern for the environment. These topics will be covered in greater depth, placing more emphasis on the self-reliance of the student. Biochemistry will be emphasized, and students will be

expected to write science papers and work on science projects. **Strongly Recommended: grades of "A" 7th and 8th grade science and 8th Grade science teacher recommendation (based on student's interest and motivation); students taking and obtaining a grade of "B" or better in Algebra in 8th grade.**

SC3304GAE	Earth and Integrated Physical Science (Lab Science)	Grade 10, 11	1 Credit
*[Graduation Requirement: Chemistry/Physical Science; Science Related Course; STEM Related Course]			NCAA

Emphasis of study will be placed on students' understanding of the interconnections and feedbacks among the geosphere, hydrosphere, atmosphere, and anthroposphere as well as the physical aspects of motion, energy, forces, and waves and technology. Students will study climate systems and climate change, the human impacts on Earth systems and issues of human sustainability, current global and regional data sets, the systems and transfer of energy, laws of force and motion, and waves and technological applications. Students will make projections for the future, analyze space systems and research, and use engineering design concepts to evaluate future societal choices in the earth, space, and physical sciences. Upon completion of this course a student will have a knowledge of principles including but not limited to: energy futures, resource management, space exploration and structures, land use, environmental impacts, pollution regulation, and applications of motion, waves, and energy. **Prerequisite: Biology**

SC3391GAC	Everyday Chemistry	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

This course is a project-based, consumer chemistry course that will examine the chemistry behind everyday life: movie special effects, toys, foods, art, and forensic chemistry. This course takes a hands-on approach with each unit beginning with a challenge task. Students will perform experiments and investigations to meet their unit challenge. This semester related course is not a substitute for a full year lab Chemistry class.

SC3348GAE	Chemistry (Lab Science)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Chemistry/Physical Science (Lab)]			NCAA

This course covers the following topics: properties of materials, the transformations which matter undergoes, the conditions affecting those transformations and the nature and amount of energy released or absorbed in these changes, the uses of materials and creation of new substances. Emphasis is placed upon mathematical application to chemistry and an extensive degree of laboratory work. Recommended C or better in the prerequisite courses. **Prerequisite: Intensified Algebra 1 or Algebra 1 and Biology**

SC3341HAE	Honors Chemistry with EIPS (Lab Science)	Grades 10, 11	1 Credit
*[Graduation Requirement: Chemistry/Physical Science (Lab)]			NCAA

This course is for students in the accelerated science sequence and provides an in-depth concentrated study of topics studied in high school chemistry. The work is rigorous and challenging and laboratory activities constitute a major part of this course's curriculum. Students are expected to work at a higher level and complete a project. **Prerequisite: Biology; Co-requisite: Algebra 2**

SC3361GAE	Physics (Lab Science)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NCAA

Physics is the study of matter and energy including an introduction to the mechanics of solids, liquids and gasses, wave motion, sound, heat, magnetism, electricity, light and other concepts in modern physics. The fundamental principles and concepts of each topic are studied and applied through problem-solving and laboratory experimentation. Emphasis is placed on experience integrating physics and mathematics. **Prerequisites: Biology and Algebra 2 or Geometry**

SC3369HAE	Honors Physics (Lab Science)	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NCAA

Honors Physics is an in-depth study of physics. Demands will be placed on the student to work independently in the classroom as well as the laboratory. The student will be expected to complete both long and short term outside projects and research as well as to master the use of sophisticated equipment including computers. The honors course will emphasize quantitative physics. Students will be expected to handle linear and quadratic equations and geometry with ease and trigonometry when needed. Problems involving several physical relationships will be stressed as well as derivation of physical relationships.
Prerequisites: Biology and Algebra 2 or Geometry; Co-requisite: Precalculus

Advanced Placement Science Courses

Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Students are expected to take the Advanced Placement exam.

SC3330ACE	Advanced Placement Biology (Lab Science)	Grades 11, 12	1.5 Credits
*[Graduation Requirement: STEM Related Course; Science Related Course]			NHS ONLY

This course covers principles and concepts in cellular biology, biochemistry, anatomy, physiology, heredity and evolution. Students are expected to contribute to class through seminars, demonstrations of significant laboratory skills, preparation of scientific papers and readings of science journals. Completion of a research project is required. **Prerequisite: Biology and Chemistry. Course runs concurrently with UConn ECE Biology.**

SC3350ACE	Advanced Placement Chemistry (Lab Science)	Grades 11, 12	1 Credit
*[Graduation Requirement: STEM Related Course; Science Credit]			NHS ONLY

The AP Chemistry course covers topics such as the structure of matter, kinetic theory, chemical equilibrium, chemical kinetic and basic thermo-dynamics. **Prerequisite: Chemistry; Co-requisite: Algebra 2 or Precalculus.**

SC3370ACE	Advanced Placement Physics 1 (Lab Science)	Grade 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

AP Physics 1: Algebra-Based is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. **Co-requisite: Precalculus.**

SC3383ACE	Advanced Placement Environmental Science	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

This course is designed to be the equivalent of an introductory university course in environmental science. It is an incredibly interesting, complex applicable science that is constantly changing and expanding. It is a rigorous laboratory science course that stresses scientific principles, process, and analysis while also providing opportunities to explore the many social, political, economic, and ethical issues that are relevant to the environmental topics studied. **Prerequisite: Biology and Chemistry.**

SC3454ACE5	Advanced Placement Seminar	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

This course is one of the most rigorous AP Courses offered by College Board and prepares students for advanced research opportunities in their future education and professional careers. AP Seminar is the first of a two course sequence designed to engage students in cross-curricular conversation that explore real-world topics and issues by engaging in diverse perspectives. Students will analyze literary and non-fiction texts, synthesize information from multiple sources, and express their own unique perspectives in various formats. This course prepares students for AP Research and is required to earn the AP Capstone degree. The framework for this course focuses on the QUEST pedagogical framework: Question & Explore, Understand and Analyze, Evaluate multiple perspectives, Synthesize ideas, and Team, Transform & Transmit. To pass the AP test, students must complete a Team Project & Presentation (20%), Individual Research-Based Essay (35%), and an End-of-course exam (2 hours).

Science STEM Courses

SC3381GAC	Astronomy	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

A rigorous study of astronomy to provide an understanding of the order of the universe and an awareness of man's place in this order. This course includes such diverse topics as the modern concept of the origin of the universe, the life and death of stars, galactic evolution, pulsars, quasars and black holes. **Prerequisite: EIPS, Intensified Algebra 1 or Algebra 1, Biology**

SC3338GAE	Human Anatomy and Physiology (Lab Science)	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

Human Anatomy and Physiology includes the study of all structures within the major organ systems of the human body. The morphology of these systems will be directly correlated with how major structures are able to function. This course is designed to examine a healthy state of the human body in comparison with the abnormalities and their physiological effects that result from disease. A comprehensive review of biology, chemistry, and other biological sciences will be integrated throughout this full year course. Dissections will serve as a significant form of assessment allowing practical application of the knowledge attained throughout the semester. Course material will be covered in depth and at a demanding pace. Course material will be covered in a manner that is conducive to students of all backgrounds and abilities to learn. **Prerequisite: Biology and Chemistry**

SC3336HAE	Honors Anatomy and Physiology (Lab Science)	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

Human Anatomy and Physiology includes the study of all structures within the major organ systems of the human body. The morphology of these systems will be directly correlated with how major structures are able to function. This course is designed to examine a healthy state of the human body in comparison with the abnormalities and their physiological effects that result from disease. A comprehensive review of biology, chemistry, and other biological sciences will be integrated throughout this full year course. Dissections will serve as a significant form of assessment allowing practical application of the knowledge attained throughout the semester. Course material will be covered in depth and at a demanding pace. **Prerequisite: Biology and Chemistry**

SC3441GAC	Drone Engineering and Operation	Grades 9, 10	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			

Drone Engineering is a dynamic course designed to immerse students in the world of unmanned aerial vehicles (UAVs) through a hands-on, project-based experience. Students will gain a comprehensive understanding of the components, systems, and operational principles that define UAVs. This includes aerodynamics, propulsion systems, flight dynamics, and payload integration This course integrates principles from Science, Technology, Engineering, and Mathematics (STEM) to equip students with foundational knowledge and practical skills essential for drone design, operation, and application in various industries. Throughout the course, emphasis will be placed on developing critical workforce skills such as project management, teamwork, communication, and presentation skills to better prepare students for college and career.

SC3383GAC	Environmental Science	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			

An introduction to the biological and non-biological factors of the environment and their effects on environments and inter-environmental relationships, including an investigation into methods of control and management of human-populated environments. Environmental outdoor laboratory sessions in the Norwalk area are part of the course. **Prerequisite: Biology**

SC3385GAC	Forensics	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

Forensics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Discussion in this course will be limited to only those areas of chemistry, biology, physics, and geology that are useful for determining the value of crime scene and related evidence. Work in this course will center around the science and technology of evidence collection. This course will be a comprehensive review of biology, chemistry, physics and other science topics. Topics covered will include fingerprinting, body fluids, DNA typing, fire tread analysis, hair and fiber analysis, metallurgy, polygraph testing, ethics, and legal issues. **Prerequisite: Biology and Chemistry**

SC3385GAC	Forensics: Crime Scene to Courtroom	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Forensics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Discussion in this course will be limited to only those areas of chemistry, biology, physics, and geology that are useful for determining the value of crime scene and related evidence for crime scene investigations. Work in this course will center around the science and technology of evidence collection. This course will be a comprehensive review of biology, chemistry, physics and other science topics. Topics covered will include fingerprinting, fire tread analysis, metallurgy, polygraph testing, ethics, and legal issues. **Prerequisite: Biology and Chemistry**

SC3457GAC	Forensics: Beyond The Grave	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Forensics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Discussion in this course will be limited to only those areas of chemistry, biology, physics, and geology that are useful for determining cause of death based on; hair and fiber analysis, DNA fingerprinting, blood analysis, ballistics, toxicology, and stages of death. Forensic anthropology will be used to analyze evidence of cause of death. Work in this course will center around the science and technology of evidence collection. This course will be a comprehensive review of biology, chemistry, physics and other science topics. **Prerequisite: Biology and Chemistry**

SC3335GAC	Genetics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			

This course is designed to educate students about molecular basis and application of Genetics. Topics include, but are not limited to mitosis and meiosis, birth defects, Mendelian genetics, patterns of inheritance, sexual development and inheritance, pedigrees, structure and function of nucleic acids, transcription and translation, DNA mutation and repair, genetic disorders, karyotypes, allele frequencies, genetic engineering, and biotechnology. This course should be of particular interest to college bound students with ambitions toward medical or health-related careers. **Prerequisite: Biology**

SC3440GAC	Introduction to Robotics	Grades 9, 10	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

Robotics is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots in addition to learning the fundamentals of open loop systems using analog and digital sensors. Course information will be tied to lab experiments; students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robot contest. We will be using VEX Robotic Design System as our platform. Students will be divided into groups and complete a variety of robot construction and programming activities within the confines of these groups.

SC3332GAC	Marine Biology	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

This course is designed as a marine environmental study focusing on the fauna and flora of the intertidal zones, estuaries and marshlands of **Long Island Sound**. This course will include field trips to these areas, the use of instruments and charts to collect data from a variety of marine environments and laboratory exercises to identify and classify marine organisms. Significant aspects of physical and chemical oceanography will be integrated into the course of study. Rain, snow, mud and water conditions will be encountered. **Prerequisite: Biology**

SC3388GAC	Meteorology	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			

Meteorology is the study of earth's gaseous envelope, its atmosphere and its role as it processes the sun's daily assault of energy. Storms, winds, climate patterns, seasons all relate their characteristics to the interaction of the sun's energy and earth's atmosphere. Topics include atmospheric structure, composition and motion; atmospheric evolution throughout earth's history; understanding and making observations using standard meteorological tools and instruments; daily and long-rate weather forecasting; effects of severe weather on the environment; humanity's continuing struggle to prepare for the consequences of living in the path of destructive storms or extreme weather conditions. **Prerequisite: Biology and EIPS (BMHS).**

SC3434GAC5	Public Health and Epidemiology	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			NHS ONLY

Public Health and Epidemiology investigates introductory level epidemiology principles, concepts and procedures useful in the surveillance and investigation of health-related events. Some topics will include Disease Control and Prevention; Epidemiology; Outbreak Investigations; Preparedness and Response; and Surveillance. Basic microbiology and vaccinations, universal precautions, and biostatistics concepts will also be integrated. **Prerequisite:** Biology and Algebra 1; **Co-requisite:** Chemistry

SC3456GAC	Sport Science	Grades 10, 11, 12	0.5 Credits
*[Graduation Requirement: STEM Related Course; Science Related Course]			NHS ONLY

The course is designed to engage students in a variety of sciences as it pertains to sports, athletes, and exercise. The course units are Kinesiology and Exercise Science; Nutrition and Cellular Processes; and Physics. Each unit will begin with a phenomenon that students can connect with and will drive investigations throughout the lessons. Students will be challenged to demonstrate their understanding through assessments, investigations, interviews of athletes, research, scientific modeling, and projects. The course will develop 21st century skills as it will utilize simulations, technology, and virtual experiences to round out topics of study. The course also lends itself to alignment with Senior Capstone Projects. Below is a general scope and sequence (including an estimated timeline) of the themes, topics, and concepts that are to be covered in "Sports Science". **Prerequisite:** Biology

The following Science STEM Elective Courses are NCAA eligible courses.

- Astronomy
- Drone Engineering and Design
- Environmental Science
- Forensics
- Genetics
- Human Anatomy & Physiology
- Introduction to Robotics
- Marine Biology
- Meteorology
- Public Health and Epidemiology

BMHS ONLY	IB GROUP 4: SCIENCE		
SC3430ICE	IB Physics SL & HL Y1	Grades 11 and 12	1 credit per year
SC3432ICE	IB Physics SL & HL Y2	2 Year Course	
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Physics HL is an in-depth and rigorous Physics course in which students will learn concepts and methods of physics and develop analytical and experimental skills. Topics of study include mechanics, oscillations and waves, optics, heat and thermodynamics, fluid physics, electricity and magnetism, atomic and nuclear physics, relativity, etc. This course will be Algebra and Trigonometry based. Lessons will consist of lecture, group work, problem solving and experimentation, enabling students to develop their thinking, reflection, inquiry and communication skills while developing their knowledge of physics as well as their knowledge of the world through physics.

BMHS ONLY	IB GROUP 4: SCIENCE		
SC3431ICE	IB Environmental Systems and Societies SL Y1	Grades 11 and 12	1 credit per year
SC3433ICE	IB Environmental Systems and Societies SL Y2	2 Year Course	
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Environmental Science is an extensive two-year study of human interactions with planet earth, through a global and multicultural lens. This course will maintain the rigor and expectations of an introductory environmental science course at any higher learning institution. In addition to traditional instruction and labs, students will be challenged to become self-guided learners, developing their own projects and research activities throughout the course. The goal of this course is to (1) provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, and (2) to require students to think critically about information and issues, and to problem solve, with the foresight to weigh the risks, rewards, and ethics of any solution. Core topics will include earth systems and resources, ecosystem structures, diversity, and resiliency, population dynamics, sustainability of modern land and water use, energy resources and consumption, pollution, global climate change, and international environmental law. Finally, this course will get students outside of the classroom and into the natural world, visiting locations, interacting with the environment, and addressing contemporary issues in the proper setting.

BMHS ONLY	IB Group 4: Science		
SC3438ICE	IB Biology SL Y1	Grades 11 and 12	1 credit per year
SC3439ICE	IB Biology SL Y2	2 Year Course	
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Biology is a Standard Level course that fulfills the science requirement for the International Baccalaureate Diploma Programme (DP). The Biology SL course will provide students with higher-order investigative experiences and activities to promote a deeper understanding of critical concepts in Biology. Such concepts will include basic biochemistry, cell structure and function, genetic patterns of inheritance, plant form and function, evolution, ecology, animal physiology and the international nature of science. It will emphasize the development of inquiry skills and higher order thinking via experiential learning in both a classroom and laboratory settings. Students will be required to demonstrate knowledge in experimental methodology, data collection, and the interpretation of experimental data. The classroom environment will stimulate student open-mindedness by providing authentic application to the biology content, thus enabling students to make the broad connections to how these biological concepts are applicable to the global community. Theory of Knowledge concepts and global connections will be discussed and integrated throughout the course.

BMHS ONLY	IB GROUP 4: SCIENCE		
SC3452ICE	IB Sports, exercise and health science SL Y1	Grades 11 and 12	1 credit per year
SC3453ICE	IB Sports, exercise and health science SL Y2	2 Year Course	
*[Graduation Requirement: Science Related Course; STEM Related Course]			

Sports, exercise and health science (SEHS) is an experimental science that combines academic study with the acquisition of practical and investigative skills. It is an applied science course with aspects of biological and physical science being studied in the specific context of sports, exercise and health. Moreover, the subject matter goes beyond the traditional science subjects to offer a deeper understanding of the issues related to sports, exercise and health in the 21st century. Apart from being worthy of study in its own right, SEHS is a good preparation for courses in higher or further education related to sports fitness and health and serves as useful preparation for employment in sports and leisure industries.

McMahon Project Lead the Way Engineering

SC3410HAE	Honors Introduction to Engineering Design (PLTW)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			NCAA

This course introduces students to the basics of sketching. Lettering, orthographic projection, and 3D Modeling. Students will practice these skills on the drafting board and be introduced to Computer Aided Drafting (C.A.D.). The knowledge and skills developed can be applied to any of the fields of engineering including civil, electrical and mechanical. Topics include the design process, research and analysis, teamwork, communication methods and engineering standards and technical documentation. This course follows the Project Lead the Way curriculum which will allow students who meet the requirements to receive college credit. **Co-requisite: Geometry**

SC3411HAE	Honors Principles of Engineering (PLTW)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			NCAA

Using activities, projects, and problems students will explore careers in engineering and technology, look at various technology systems and manufacturing processes and learn how engineers and technicians use math, science and technology in an engineering problem-solving process to benefit people. This course follows the Project Lead the Way curriculum which will allow students who met the requirements to receive college credits. **Prerequisite: Geometry. Recommended prerequisite: Introduction to Engineering Design**

SC3412HAE	Honors Digital Electronics (PLTW)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course; Digital Literacy]			

Through the use of computer simulations and actual prototyping, students will design, test and construct electronic circuits and devices to learn about the logic of electronics. This course follows the Project Lead the Way curriculum which allows students that meet the requirements to receive college credit. **This course fulfills the computer literacy requirement. Prerequisite: Intensified Algebra 1 or Algebra 1; Co-requisite: Geometry**

McMahon Medical Pathway

SC3448GAE	Introduction to Healthcare Science	Grade 9	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Introduction to Healthcare Science provides the foundational knowledge and skills students need for careers in healthcare. Using real-life scenarios and application-driven activities, students learn the responsibilities and challenges of being healthcare professionals. In addition to building their understanding of technical concepts and skills, students evaluate the qualifications required for specific careers and develop personal career plans to pursue work in the healthcare industry. The course focuses on day-to-day skills of healthcare workers including promoting wellness, maintaining a safe environment, creating medical records and practicing good communication, collaborating and leadership.

SC3414HAE	Honors Principles of Biomedical Science (PLTW)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

This course provides an introduction to the biomedical sciences through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They will determine the factors that led to the death of a fictional woman as they sequentially piece together evidence found in her medical history and her autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the woman's life and demonstrate how the development of disease is related to changes in human body systems. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems. Key biological concepts including maintenance of homeostasis in the body, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. This course is designed to provide an overview of all the courses in the biomedical sciences program and lay the scientific foundation for subsequent courses.

SC3421HAE	Honors Human Body Systems (PLTW)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. **Prerequisite: Honors Principles of Biomedical Science**

SC3394HAE	Honors Medical Interventions (PLTW)	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat a disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. (PLTW Course Description.) **Prerequisite: Successful completion of Principles of Biomedical Science and Human Body Systems**

SC3435GAE	Emergency Medical Technician Certification (EMT), ECE	Grades 11, 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

The Emergency Medical Technician course prepares the EMT student to provide prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical service systems, roles and responsibilities of EMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the prehospital setting, and providing patient transportation. ECE option available. **Prerequisite: Principles of Biomedical Science and Human Body Systems.**

McMahon Marine Science Academy

SC3423GAE	Marine Studies 1	Grades 9, 10	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

In this full-year course, students will be introduced to the study of Marine Science and Industry. Topics will include raising marine wildlife in our facility's aquaculture laboratory, exposure and application of relevant industry practices in partnership with local marine-based industries. This course includes work at fieldwork sites at Norwalk's local waterfronts as well as research opportunities on Sheffield Island. Through projects, authentic laboratory experiences and class discussions, students will be exposed and engaged in the techniques and technology that are current and relevant in the diverse Marine Science field.

SC3424GAE	Marine Studies II	Grade 10, 11	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

In this full year course, Students will use the skills and knowledge learned in Marine Studies I to further study the marine sciences and marine industries. Students will study physical oceanography in detail and use mathematical and statistical analysis to study the impacts of tides, currents, and other physical oceanographic phenomena on the marine ecosystems, sea going vessels and shipping industry. Students will use statistical analysis to further study the various marine ecosystems while using current standard sampling and analysis tools to monitor water quality and the health and sustainability of local ecosystems as well as in the aquaponics laboratory classroom. Students will gain further knowledge of local marine science industries and apply mathematical skills necessary to analyze the sustainability of these industries into the future. Students will work with the BMHS Marine Science Academy partners to learn and experience marine science firsthand. **Prerequisite: Marine Studies**

SC3449GAE	Marine Engineering and Trades	Y1	Grade 11	1 Credit
SC3356GAE	Marine Trades and Engineering II	Y2	Grade 12	1 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]				BMHS ONLY

Marine Engineering and Trades offers a broad introduction to the mechanical and technical aspects of the marine industry this course will provide student's project based laboratory experiences focusing on key aspects of 21st century skills required for the industry. Through a series of conceptual small- term projects culminating in a hands-on final project, students get first-hand experience in what day-to-day life as a marine engineer and /or skilled tradesman is like. Students will benefit from the technical and soft skills acquired during this course for years to come. Regardless of the career path they choose. Marine Engineering and Trades II is a full year course that will use the skills and knowledge learned in Marine Engineering and Trades I to further study the technical aspects of the marine industry.This course will provide students project-based laboratory experiences focusing on key aspects of 21st century skills required for the field. Through a series of conceptual small-team projects culminating in a hands-on final project, students get first-hand experience in day-to-day life as a marine engineer and /or skilled tradesmen. In partnership with The American Boat and Yacht Council, students will be prepared and have the opportunity to obtain an entry-level Marine Service Technician Certification. The assessment measures technical skills at the occupational-training level needed for successful employment and career growth within the marine service sector. **Prerequisite: Marine Engineering and Trades I needed for II**

SC3450ICE	IB Marine Science SL Y1	Grades 11 and 12	1 Credit each year
SC3451ICE	IB Marine Science SL Y2		
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

IB Marine Science is a two-year multidisciplinary course that provides a rigorous option for students where hands-on practical work in the field can be carried out and they have many opportunities to engage in real-world scientific inquiry and investigation. Students in this course develop a deep understanding of five topics: origin and structure of oceans; dynamics of Earth's crust; patterns of water movement; properties of ocean water; ocean life. A sixth topic is selected from three options: marine ecosystems; atmosphere, ocean and climate; geology of ocean basins. Students are required to complete a total of 40 hours of laboratory and fieldwork. In addition, students demonstrate their knowledge and analytical skills through writing, discussion, formulating scientific research questions and producing formal lab reports. The course is designed to address the practices of science and engineering as identified in the Next Generation Science Standards.

SC3462GAC3	Global Marine Biology and Ecology	Grade 11, 12	.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

This course will focus on the marine biology and ecology of systems outside of the Long Island Sound through a variety of global marine ecosystems. The study will be specifically on the flora and fauna of Coral reefs, mangrove forests, hydrothermal vents, deep seas, open ocean and other extreme marine environments. **Prerequisite: Biology**

SC3463GAC3	Local Marine Biology and Ecology	Grade 11, 12	.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

This course will focus on the marine biology and ecology of long island sound ecosystems. The study will be specifically on the flora and fauna of local intertidal zones, estuaries, sandy beaches, rocky coasts and salt marshes. Students will be expected to participate in field trips to our coastlines to study the ecosystems outside of the classroom. Collection, identification and care of local species for our marine lab are also a requirement of this course. **Prerequisite: Biology**

SC3464GAC3	Future Marine Educators	Grade 11, 12	.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			BMHS ONLY

Future Marine Educators is a course where students who are in the marine science pathway will design lessons and teach younger students about the marine world by hosting elementary and middle school students to the marine lab or by planning and teaching mini lessons for local schools. Our students can also help with field trips for the elementary school and be partners with younger students on specific experiences. **Prerequisite: Marine Studies 1 and Marine Studies 2 or currently enrolled in IB Marine Science**

Physical Education & Health Education

PE9001GAC	Physical Education	Grades 9, 10, 11, 12	0.5 Credit
PE9002GAC	Physical Education	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			

Physical Education is a comprehensive program that teaches students the skills and concepts necessary to lead a healthy lifestyle. Credit earned in physical education counts toward honor roll, graduation, and rank-in-class. *Students must pass 1 credit of physical education and wellness to graduate, which includes the state required physical fitness test.*

PE9009GAC	Peer Assisted Physical Education	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			

Peer Assisted Physical Education will be provided in accordance with the student's Individualized Educational Plan. The program is designed to develop physically educated students who demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities, and understands movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities. The student should also exhibit responsible personal and social behavior that respects self and others in physical activity settings.

PE9020GAC	Aquatic Fundamentals (Swimming)	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			NHS ONLY

Whether you are only in, on, or around the water in the summer, you live near the beach or have a pool, you want to swim for exercise or pleasure, already know the basics or are beginning, this semester course is for all grades and abilities. Designed for all levels, classes allow swimmers to develop good habits in, on, and near water, become comfortable in the water, learn and refine new strokes, and become stronger, safer swimmers.

PE9021GAC	Lifeguarding	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			NHS ONLY

The American Red Cross lifeguarding classes are designed with your learning style in mind. The American Red Cross Lifeguard Manual contains skills sheets and references to help you understand the importance of water safety and arm you with all of the knowledge necessary to help save lives and avoid injury. At the culmination of the course, students will take the lifeguarding test for the opportunity to be a certified lifeguard. **Students must be at least 15 years old on or before the final scheduled session of the course.**

PE9113GAC	Functional Fitness	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			BMHS ONLY

This course will focus on exercises and programs which allow students to perform the activities of daily life more easily and without injuries. The foundation of the course is PLT4M, which utilizes a variety of research-based fitness and performance programs, managed through an online platform, which will allow students to capture their results and measure their progress.

PE9105GAC	Health Education 1	Grades 9, 10	0.5 Credit
PE9106GAC	Health Education 2	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Health and Safety]			

The health courses develop the concept that a person's health is greatly influenced by the kind of information that a person has and the way this information is used in making decisions about the individual's life. Life skills integrated throughout coursework are: accessing reliable information, advocacy, analyzing influences, decision making, goal setting, and not limited to student self-management. The Health Curricula focuses on Four State standards: Healthy and Active Life, Injury and Disease Prevention, Human Growth and Development, Substance Abuse Prevention. Students must pass 1 credit of health and safety to graduate.

PE9024GAC	Responding to Emergencies	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Courses]			

The primary purpose of the American Red Cross Responding to Emergencies: Comprehensive First Aid/CPR/AED program is to help students recognize and respond appropriately to cardiac, breathing and first aid emergencies. The courses in this program teach students the knowledge and skills needed to give immediate care to an injured or ill person and to decide whether advanced medical care is needed. Upon successful completion of all skills and assessments, students will earn the appropriate American Red Cross certification.

Pathway Related Courses:

Business

Family Consumer Science

JROTC

IB Core

Multilingual Learner (MLL) Education

Specialized Education

Business

The Business Department offers courses in both the Business Administration and Management and Computer Studies. The skills and business methods taught in these courses will provide valuable preparation for students who are planning for a career in business, computer technology as well as other career paths.

AR5501GAE	Principles of Business	BMHS Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]		NHS Grades 9, 10	

Students will apply and connect basic business principles to current market trends and opportunities. Instruction includes product innovation, competitive environments, and economic decision making. Students will explore methods to increase individual and company productivity as they look at situations from both a business owner and employee point of view. Major business concepts include: economics, leadership, entrepreneurship, management, marketing, finance, operations, human resources, and the government's effects on business. The course will offer current events, case studies, self-directed projects and activities that allow students to collaborate as they would in a business environment.

AR5561GAC	Business Law	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This course involves the principles of personal and business law. Facets of law covered include Constitutional Statutes, Common Law, Law of Contracts, Law of Sales, Criminal Law, Cyber Law, and Tort Law. This course is geared to help students understand the principles of law that affect their everyday personal and business life. Students will understand how the technological advances of the digital age have impacted the regulation and moderation of businesses. Students will examine current events related to legal topics that impact consumer and corporate interests. Students will compare and contrast rulings from previous legal cases and examine their impact on business.

AR5603GAC	Career Readiness	Grade 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Career readiness is the process of preparing students with the essential skills they need to find, acquire, maintain, and grow within a job. This course will help best prepare students with the advice, skills and knowledge they need to make important decisions on life after high school including what college to attend, what major(s) to pursue, what certificate to obtain and more.

AR5502GAC	Computer Applications	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]			

This course is essential to each student's development of technological understanding and skills which are needed at both the high school and college level, as well as post-secondary employment. Instruction will focus on:

- 21st Century Skills - Students will focus on developing their digital literacy skills through social media literacy, digital footprint exploration, and evaluating digital sources.
- Word Processing - students will create and edit business documents as well as review and apply MLA paper formatting rules.
- Presentations - students will research, create and deliver a presentation with illustrations and shapes on a topic of their choice
- Spreadsheets - students will create a worksheet to organize data, visually present data using embedded charts and graphs, and learn to use formulas and functions.

AR5538GAC	Computer Construction and Repair	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]			NHS ONLY

This course is interactive and provides students with the knowledge of opportunity to assemble a multimedia computer. An overview of available career and certification options will be provided through a heavy emphasis on technical readings and practice exams. Topics covered will include the different types of operating systems, motherboards, CPUs, power supplies, expansion cards, and memory. Students will also research current industry standards for computer construction as older components are updated or become obsolete. **Recommended: Computer Applications. *This course fulfills the digital literacy requirement.**

AR5506GAC	Discovering Careers	Grades 9 & 10	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This course is an opportunity for students to direct their attention toward an area of interest that could develop into a career path; helping to identify high school and college course offerings related to their career choices. By developing a better understanding of their interests, values, strengths, personality and desired lifestyle, students can make more informed decisions about their future. Students will learn about resume building, interviewing skills, networking and adopting professional workplace attitudes and skills to succeed in the workplace. Students will also learn about the impact entrepreneurship could have on their career as we examine potential business opportunities within the field.

AR5563GAE	Entrepreneurship (Starting a Business)	Grades 10, 11, 12	1 Credit
AR5563HAE	Honors Entrepreneurship	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			

In Entrepreneurship class students develop the following 21st century skills: innovative problem solving techniques, technology resource management, collaboration, and planning skills. Students learn the necessary steps to successfully plan, create, evaluate, and improve new business ideas and opportunities. Through hands-on projects and activity-based learning, students will engage in team building and collaborative activities to recognize opportunities and develop a business plan. Our student-centered learning model allows students to problem-solve complex tasks such as raising capital for your start up, create business expectations, measure productivity and profitability and analyze entrepreneurial activities. Students will progress through different operations for developing and market testing business ideas, the processes of starting a business, the acquisition of resources, and the key components of a business plan.

Honors Entrepreneurship fosters a culture of innovation and creativity. This course covers the development process of a new venture. Special emphasis is placed on decision-making and problem solving in society through an understanding of opportunity recognition, economic/financial models, new idea creation, and advanced entrepreneur-related concepts. Students will develop essential skills through hands-on projects and activity-based learning. Group based collaborative activities will teach students to recognize opportunities and develop a new business idea. Student centered learning allows students to problem-solve complex tasks, create business expectations, and analyze entrepreneurial activities. *NCC Credit Equivalency Credit based on teacher recommendation

AR5552GAE	Accounting	Grades 10, 11, 12	1 Credit
AR5552HAE	Honors Accounting	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			

Accounting 1 is an introduction to the basic principles of Accounting, and how to account for business transactions. Emphasis on the understanding of how financial statements are prepared, and how they are used as a basis for decision making by business owners, investors, creditors, government and others interested in the financial condition of an economic entity and the result of its operations. The Honors section includes additional assessments and applicable projects. *NCC Credit Equivalency Credit based on teacher recommendation

AR5569GAC	Marketing	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This course consists of the fundamental skills of marketing including: planning and developing products, pricing, placement, and promotion with a focus on the customers' needs and wants. Students will analyze different target markets and strategies to effectively reach them. Major companies will be included in case studies and profiled for modern marketing techniques.

AR5566GAC	Sports and Entertainment Marketing	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

Students will undertake an examination of the art and science of marketing through the lens of the 21st century's sports and entertainment industries. The course will have a particular emphasis on marketing through digital platforms and the ever-changing role of social media influencers. Students will develop analytical skills by applying the 4 Ps of the "marketing mix" (price, product, place and promotion) to these increasingly all-digital worlds. The availability of precise market segmentation data will be studied as will the analytical tools available through various on-line sources. As they develop their marketing acumen, students will address personal and business responsibility in on-line marketing and the challenges of access to nearly limitless personal consumer information. Central to the course will be the students' development of digital media literacy.

Topics to be considered will be the creation of and marketing of NFTs, the special role of sports celebrities in society, the loosening of restrictions on collegiate athletes to engage in self-promotion and the challenges to traditional advertisers from streaming services.

AR5542GAC	Principles of Personal Finance	Grades 9, 10, 11	0.5 Credit
*[Graduation Requirement: Financial Literacy Course]			

This course is designed to prepare students for financial success. Through financial technology software, it lays the groundwork for understanding the importance of saving early and analyzing how to mathematically avoid making poor financial decisions. The course focuses on developing decision-making and goal setting skills, understanding the relationship between career choices and income, creating numerically sound budgets, analyzing paychecks, and obtaining and utilizing credit wisely.

AR5543GAC	Personal Finance	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Financial Literacy Course]			

This course is designed to prepare students for financial success. Through technological and numerical analysis it lays the groundwork for understanding the importance of saving early and how to avoid making mathematically unsound financial decisions. The course focuses on developing decision-making and goal setting skills, understanding the relationship between career choices and income, creating budgets using various software options, analyzing paychecks, and developing and utilizing credit wisely.

AR5565GAC	Principles of Investing	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This introductory course helps students use technology skills and digital tools to develop a thorough understanding of the financial concepts, market theories, opportunities and risks that apply to investing in the stock market, bonds, mutual funds, and ETFs. Students will develop and utilize research and analysis skills to determine which investments are the most attractive to them. Students will use digital tools and resources to assess risk and measure recent and potential growth and compare data, financial ratios, and performance from financial statements to make more informed investment decision making.

Through an on-line investment simulation, students will learn how to apply the above math and financial skills to learn about corporations, develop and manage an investment portfolio, buy and sell stocks on an exchange, and to evaluate market performance with market indexes.

AR5515GAC	Video Game Design	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course Digital Literacy]			

This STEM course will introduce students to the world of video game design and development, learning all aspects of the creative, business, and technological components. Students will examine history, structure, and strategy of game development. Overall creation of the computerized video game will include storytelling, characters, game play, levels, and audio content. Participants will learn key programming constructs using GameMaker software. By the end of the course, students will have created a computerized video game. This course is an introductory-level course that does not require a background in computer programming. It is important that students are proficient in English as coding requires it.

AR5514GAC	Web Page Design	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]			

In this course students will build and maintain professional websites utilizing HTML and other web site development software such as Adobe Dreamweaver. Students will be able to understand the role the Internet plays on our daily lives and the impact it has on business success. Students will be able to identify the importance of creating a professional website with the proper content and structure. Students will apply daily applications in creating websites from several perspectives and web designing stand points. Students will complete various activities that allow them to create, evaluate and improve web design through experiences and research. It is important that students are proficient in English as coding requires it.

AR8865ICE	IB Business Management HL Y1	Grades 11.12	1 Credit per year
AR8903ICE	IB Business Management HL Y2		BMHS ONLY
*[Graduation Requirement: Pathway Related Course]			

The IB Business Management course provides students an opportunity to "develop a holistic understanding of today's complex and dynamic business environment." This course will introduce students to the key characteristics of business organization as well as give them the chance to explore the functions of: finance and account analysis, marketing, operational management, and human resource management as they are all integral to the success of any organization at either: local, national or international levels. In addition to learning the fundamentals of business organization, the course will also emphasize the importance of ethical decision making and its influence on the global economy.

AR3357GAE	Computer Applications for Marine Science Studies	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]			BMHS ONLY

This course is essential to each student's development of technological skills and abilities which are needed at both the high school and college level, as well as entry level employment for many jobs in the Marine Science field. Instruction will focus on: Microsoft Word/Docs for word processing - students will create and edit an MLA report, resume, and personal business letters with a Marine Science Focus. It will focus on Microsoft Excel/Sheets for spreadsheets - students will create a worksheet to organize data, visually present data using embedded charts and graphs and learn to use formulas and functions using data from Atmospheric and Oceanic Studies. It will focus on Microsoft PowerPoint/Slides for presentations - students will research, create, and deliver a presentation with illustrations and shapes sharing data findings and results from labs and other Marine studies. It will also focus on Email - students will learn email etiquette and how to write both a formal and informal email with attachments to ensure appropriate written communication among individuals of all levels. ***This course fulfills the digital literacy requirement, and is a component of the Marine Science Pathway.***

Family and Consumer Science

Family and Consumer Science courses provide students with activity-oriented experiences to develop leadership, problem solving, communications, employability, interpersonal and technology skills applicable in the family, workplace and community.

AR6669GAC	Principles of Culinary Arts	Grade 9, 10	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

Through a combination of demonstration and hands-on practice, students will be introduced to the basic principles of cookery, including recipe interpretation, measurements, food safety, and basic cooking methods.

AR6668GAE	Culinary Arts 1	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

Students will learn using the industry-standard Prostart 1 curriculum. They will discover what makes a restaurant successful and examine principles of nutrition, food production and service. Students will prepare and serve a variety of foods in an industrial kitchen and visit local hotels and restaurants. **Prerequisite: Principles of Culinary Arts.**

AR6670GAE	Culinary Arts 2	Grades 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

Students will learn using the industry-standard Prostart 2 curriculum. Students will apply basic principles of food production and service covered in year one. They will extend their knowledge and understanding of cold kitchen, ethnic and regional cuisines, baking and pastry arts, and dining room management through practical application. **Prerequisite: Culinary Arts 1.**

AR6671GAE5	Culinary Arts 3	Grades 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			NHS ONLY

Students will apply theory and practical knowledge through techniques learned in Culinary Arts 1 and 2. Students will conduct research and produce special projects and will assist the head chef in preparing and catering events within the school building and off campus locations as well. **Prerequisite: Culinary Arts 1 and 2**

AR6667GAC	Introduction to Culinary Arts	Grade 9, 10	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			BMHS ONLY

This one-semester course provides a starting point to learn basic cooking in a professional setting, and is a prerequisite for all subsequent World Languages, Food, and Culture classes. The primary objectives are to provide proficiency in cooking methods, recipe interpretation, culinary tools, and proper technique. During this course, sanitation, food safety, and nutrition are stressed.

AR6675GAE	Culinary Arts 1: World Cuisine Survey	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			BMHS ONLY

In this world cuisine survey, students will learn to: compare the ways people of different cultures meet their basic nutritional needs, explain why and how certain foods have become staples in a given country, identify factors that influence food choices and customs, identify foods of different cultures and describe their history. They will also learn to describe the role of food in traditional celebrations around the world and trace the development of food traditions in the United States and prepare dishes characteristic of various cultures. **Prerequisite: Introduction to Culinary Arts.**

AR6676GAE	World Food and Culture Independent Study	Grades 11, 12	1 Credit
*[Graduation Requirement: Pathway Related Course]			BMHS ONLY

Students will choose and research a cultural region. Working in small groups, they will create projects that deepen their understanding of the relationship between the region and its cuisine and compare and contrast food sources, distributions, and uses. Projects will be designed in consultation with the instructor, and will include, but not be limited to, a series of food preparations, comparative tastings, and live presentations to other students in the course. **Prerequisite: Culinary Arts 1**

JROTC / Aerospace (Air Force) NHS ONLY

The mission of the Air Force Junior Reserve Officer Training Corps (AFJROTC) is to develop citizens of character dedicated to serving their nation and community. All Aerospace Science courses strive to build better and more successful citizens through academic classes, leadership and community service opportunities, physical fitness classes, and co-curricular activities. Students who take full advantage of the program, inside and outside the classroom, will finish with experience and skills that make them highly competitive for higher education and scholarship opportunities or employment.

Cadets are required to wear the uniform once a week to all classes. In uniform, the student is required to meet USAF grooming standards as they relate to hair, jewelry, earrings, facial hair, etc. Prospective cadets should make certain they know these requirements prior to enrollment. Failure to wear the uniform or meet grooming standards will result in failure of the course.

Aerospace Science and Leadership 1: **Grades 9, 10, 11, 12 (New Cadets Only)**
AR9281GAE **Milestones in Aviation History & Traditions, Wellness, and Foundations of Citizenship** **1 Credit**
***[Graduation Requirement: Pathway Related Course]**

The Aerospace Science class is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction to cyber technologies. The Leadership class will introduce cadets to the history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and examines the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. The Wellness program seeks to motivate cadets to lead active, healthy lifestyles beyond high school and into their adult lives.

Aerospace Science and Leadership 2: **Grades 10, 11, 12 (Returning Cadets)**
AR9282GAE **Science of Flight & Principles of Management** **1 Credit**
***[Graduation Requirement: Pathway Related Course]**

AS-200: The Science of Flight is an introductory course that focuses on how airplanes fly, how weather conditions affect flight, and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses. LE 400: Fundamentals of Management provides an introduction to basic management concepts and skills, especially as they relate to managing in a JROTC unit. Along the way, you will learn some of the history of management studies and encounter elements of more recent management research. This is a two semester course for all returning cadets.**Prerequisite: Aerospace Science and Leadership 1**

Note: Our curriculum changes annually based on a four-year cycle. Aerospace Science 1 is for new cadets and offered every year. The following are the additional academic courses covered over the cycle for returning cadets:

- Aerospace Science 2: The Science of Flight; Principles of Management
- Aerospace Science 3: Cultural Studies; Life Skills
- Aerospace Science 4: Exploring Space; Communications, Awareness, and Leadership

JROTC / Naval Science (NAVY) BMHS

Students taking NJROTC can elect to take this elective for one, two, three, or four years.

AR9285GAE	Naval Science and Leadership Education 1	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Other Related Course]			

Course is an initial exploration of the US Naval Services: familiarization with naval vessels, aircraft, and systems in a maritime environment. Students are introduced to concepts of citizenship, character development, and followership/leadership. Opportunities to wear the uniform, practice military and citizen customs and courtesies, first aid, participate in drill and ceremonies, and trips to military installations and museums. Individual discipline and accountability is emphasized. Cadets are given the opportunity to participate in community service & extracurricular activities: drill team, orienteering, & physical fitness.

AR9286GAE	Naval Science and Leadership Education 2	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Other Related Course]			

Course is focused on the Naval Services' maritime role in national security. Global role of naval forces is discussed using naval systems technology and historical examples. Leadership and character development is focused on classroom practical application and leading their peers in the school and within the corps of cadets. Continued student opportunities for uniform wear, community service, and perform drill and ceremonies as a leader. Students will be familiarized with CPR / AED, public speaking, and orienteering. STEM Opportunity: STEM-Pilot (aviation). Cadets will develop a summer success plan (personal, professional, and career goals) and assist in the cadet staff operations and activities. **Prerequisite: Naval Science 1.**

AR9287GAE	Naval Science and Leadership Education 3	Grades 11, 12	1 Credit
*[Graduation Requirement: Other Related Course]	**IB Career-related Program Option Year 1		

Course is focused on global sea power in joint military operations in selective case studies. Continued leadership development is focused on practical application in school and in the corps of cadets. Students will develop a summer success plan (personal, professional, and career goals) and participate in community service, school support, and voluntary extra-curricular activities: drill team, orienteering, and physical fitness. Students can earn designated peer leadership or staff positions in the corps of cadets. STEM Opportunity: Cyber-Patriot competition or Sea-Perch (Sub Simulation). Select cadets provided a voluntary opportunity to perform as a Cadet Aide (peer leader) at Basic Leadership Training at Camp Niantic or compete for an opportunity to attend the 2 week Leadership Academy and Sail Training (LA/ST) held at the Newport Naval Station. **Prerequisite: Naval Science 2.**

AR9288GAE	Naval Science and Leadership Education 4	Grade 12	1 Credit
*[Graduation Requirement: Other Related Course]	**IB Career-Related Option Year 2		

Course is specifically designed for organizational planning and small unit leadership skills for all aspects of the NJROTC unit including administration, management, and training. This includes the administration, coordination, and scheduling of all unit activities: community service, school support, drill, orienteering, physical fitness, and unit competitions. Current event leadership case studies analyzing and assessing leadership and character related performance will be discussed. Cadets will develop a high school transition success plan. Students are graded almost entirely upon their ability to demonstrate their leadership skills by managing the day-to-day business and long-range planning. **Prerequisite: Naval Science 3.** Optional Educational Opportunity for Cadets Participating 4 Years in the NJROTC Program

AD0015GAE	Naval Science and Leadership IB Career-related Program (IB CP:	Grade 11, 12
*[Graduation Requirement: NJROTC Service Pathways]		

For student-cadets spending four years in the NJROTC program, during their sophomore year they can voluntarily apply and screen for the IB Career-related Program. The NJROTC IB CP is focused on Service Pathway careers (*Public Safety, Humanitarian, and Uniformed Services*) at the local, state, or national level based upon the student's future career interests during their junior and senior years.

Requirements for NJROTC IB CP:

- Student must complete NJROTC curriculum
- Student must take at least two IB academic courses: Higher Level or Standard Level
- Student must complete the IB CP Core requirements
    - Service learning: annual community service tied to their career pathway interests
    - Personal and professional skills: personal development, intercultural understanding, effective communications, thinking processes and applied ethics, developing your reflective project
    - Language development: Language and cultural skills related to their career-related pathway interests
    - Reflective Project (Capstone): IB CP student selects addresses an ethical dilemma related to their career- related studies through an extended and in depth piece of work.

  The NJROTC IB career-related studies path prepares the graduate for higher education, an internship, apprenticeship, or a position in a designated service related field of interest at the local, state, or national level with international opportunities.

IB DP and CP Core (BMHS ONLY)

SS0057ICC3	Theory of Knowledge Y1	0.5 credit
SC0058ICC	Theory of Knowledge Y2	0.5 credit

*[Graduation Requirement: Pathway Related Course] *[IB Diploma Programme Requirement]

The "Theory of Knowledge" is a required IB Diploma course. This interdisciplinary course focuses on improving students' ability to think critically about the world around them, to become global citizens who use their understanding of how humans create knowledge-how we know what we know-to make the world a better and more peaceful place. Students will explore knowledge systems of mathematics, human sciences, natural sciences, history, the arts, religious and indigenous knowledge systems and ethics as understood through the lenses of emotion, reason, language, perceptions, imagination, faith, intuition and memory. Throughout the course students will make presentations that explore a knowledge question raised by a real-life situation, as well as write essays that apply their understanding of knowledge systems and the ways knowledge is obtained. Course material is rigorous, and requires excellent written and oral communication skills.

Extended Essay—an independent research essay

*[IB Diploma Programme Requirement]

This is a requirement for students working to complete the IB Diploma. All students research and write their EE independently, and can write on any topic and in any language they like (as long as it falls within the IB subject areas). Students usually write on topics that hold particular interest or reference to them, and their essay can be based on research or equipment. Additional information and guidelines will be provided to students and parents through orientation and conference with the IB Coordinator. Students will receive individual mentoring in this pursuit. Extended essays are graded by the IBO in spring of 12th grade.

Creativity, Activity, Service—an extracurricular component

*[IB Diploma Programme Requirement]

This is a requirement for students working to earn an IB Diploma. CAS is an integral part of the IB Programme and is designed to help students develop new skills, interests, and understandings while providing service for others. CAS stresses the importance of experiential learning.

- Creativity: the arts and other experiences involving creative thinking.
- Activity: physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the IB Diploma Programme.
- Service: an unpaid and voluntary exchange that has a learning benefit for the student. The rights, dignity and autonomy of all those involved are respected.

The main principles of the CAS program involve developing students into internationally-minded people who, by recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. Students are encouraged to "think globally and act locally" and that "if they believe in something, they must not just think or talk or write, but must act." As part of the CAS requirement, students engage in a reflection process before, during, and after the activity; reflections involve critical thinking in evaluating the success of the activity against the original goals. Students work with a mentor throughout the CAS process. In December of 12th grade, the CAS coordinator holistically evaluates each student's CAS activities and project as pass/fail.

AD0015ICC	IBCP Personal and Professional Skills (PPS)	Grades 11	.5 credit
AD0016ICC			.5 credit

BMHS ONLY

*[Graduation Requirement: Science Related Course; STEM Related Course] [IB Career- related Program Requirement]

The personal and professional skills course aims to develop responsibility, practical problem-solving, good intellectual habits, ethical understandings, perseverance, resilience, an appreciation of identity and perspective, and an understanding of the complexity of the modern world. Emphasis on the development of skills needed to successfully navigate higher education, the workplace and society.

Service Learning

*[IB Career-related Programme Requirement]

Service learning is **authentic service** and has the potential to be transformative for all involved, changing behaviors, actions and values as students serve the community according to the community's needs. Service learning is not counting hours, accumulating volunteer experiences or collecting money for charities. It is about engaging with the community in meaningful and positive ways. It is about strengthening communities, engaging in new learning, modeling civic responsibility, inspiring personal reflection, developing empathy and acting in ways that improve the self and the world beyond the self.

WHAT DO CP CANDIDATES NEED TO DO?

- **Devote a minimum of 50 hours** outside of the classroom towards service learning experiences. These experiences should be in service to others and/or your community.
- **Determine the nature of your own service learning** activities and experiences.
- REMEMBER: This is your experience or series of experiences. You must initiate it and make arrangements for your service. The service learning coordinator can support you in your efforts, but it is not the service learning coordinator's job to make all the arrangements for your service hours.
- **Create and maintain a service learning portfolio** to document service and reflection.
- Your portfolio may take a variety of forms – electronic, journal, scrapbook, etc – but it should be organized and must show evidence of accomplishment according to the 5 learning outcomes.
- **Meet a minimum of 3 times** with the CP service learning coordinator to discuss progress, experiences and your portfolio documentation.
- Set up meeting times a minimum of once per semester while in the programme.

HOW CAN THE CP SERVICE LEARNING COORDINATOR SUPPORT CP CANDIDATES IN THEIR SERVICE LEARNING EXPERIENCES?

The CP service learning coordinator:

- meets with community organizations and groups to develop a network of service learning contacts and school partnerships;
- makes this information available to students about service learning opportunities;
- monitors student progress through 3 interview meetings;
- provides feedback to students;
- helps the students achieve their desired goals.

Multilingual Learner (MLL) Education

The Norwalk Public Schools' (NPS) Family Center identifies Multilingual Learners (MLLs) through the Home Language Survey and administers the English LAS Links, Spanish LAS Links (if applicable) to determine appropriate course placement and services. Once designated as MLLs, students are tested annually on the LAS Links until they reach the State of CT Department of Education Multilingual Learner Exit Criteria. The NPS Family Center, in collaboration with school administrators, takes into consideration a student's prior educational history as individual student transcripts are reviewed for credit transfers. Recommendations are approved by the Assistant Principal in charge of registration at each high school. All MLLs and their families are invited to attend an orientation meeting to welcome them into the NPS school community and to discuss placement recommendations, services, and accepted credit transfers. In case families are unable to make said orientation, families are informed in writing by the school's Assistant Principal or their designee.

Below are the placement recommendations for MLL students in English and Math courses. Entry points may vary based on the students' transferred credits and LAS Links Placement scores.

MLL Course Placement Process for English

- New Arrivals with 0-1 years/LAS Level 1 will go into **English Foundations**. New Arrivals with LAS Level 2 will go into **English Development and/or English Literature.** New Arrivals with LAS Levels 3 or 4 go into **Transition English or English 1,** co-taught with an MLL teacher**.** Then, MLL students will proceed by following the English course sequence.
- Multilingual Learners with 2 years or more in the United States will be placed in English 1 or Transition English and co-taught with a MLL teacher.

MLL Course Placement Process for Content-area Subjects

- It is highly recommended that placement of bilingual content-area teachers be used to support MLL students. In the absence of a bilingual content-area teacher, school administrators can staff content-area classes using a co-teaching model with an MLL teacher or with a Bilingual Paraeducator.
- Bilingual Paraeducators should be assigned to a content area teacher that is not bilingual or not an MLL teacher to best support MLLs in learning the content and provide MLLs access to the curriculum.

MLL Course Sequence by Content:

Subject Area	First Course (Newcomers)	Second Course	Third Course	Fourth Course
English (New Arrivals, 0-1 year completed in the U.S.)	**English Foundations** (2 credits) *1 credit goes to a Humanities elective	**English Development** (1 credit) **English Literature** (Can be taken concurrently with English Development) (1 credit)	**Transition English (grades 11-12)** (1 credit) *co-taught with MLL teacher	**English 2** (1 credit) *co-taught with MLL teacher *or* **Senior Core English Course** (1 credit)
English	**English 1** (1 credit) *co-taught with MLL teacher *or* **Transition English (grades 9-10)** (1 credit) *co-taught with MLL teacher	**English 2** (1 credit) *co-taught with MLL teacher	**English 3** (1 credit)	**Senior Core English Course** (1 credit)
Math	**Bilingual Math Foundations** (2 credits) Bilingual/Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Intensified Algebra 1** (2 Credits) Bilingual/Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Integrated Algebra/Geometry** *or* **Algebra 2** *or* **Principles of Algebra 2** (1 credit) *Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Geometry** (1 credit)
Social Studies	**Bilingual (Spanish) World History** *Dual certified SS *or* **World History** (1 credit) *Co-taught with Bilingual Aide	**Bilingual (Spanish) US History** *Dual certified SS *or* **US History** (1 credit) *Co-taught with Bilingual Aide	**Civics** (0.5 credit) *Co-taught with Bilingual Aide	**SS Related Course**
Science	**Bilingual Biology** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Earth and Integrated Physical Science** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Chemistry** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Physics** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide
World Languages	MLL Foundations with Spanish Language gaps placed in Native Language Spanish 1 **OR** Other Native Language Spanish *or* other WL courses based on prior education, placement test, and/or Dept. Chair recommendation.			

EL4300GAG	English Foundations	Grades 9, 10, 11	2 Credits
*[Graduation Requirement: 1 credit Core English and 1 credit Pathway Related Course]			

This course provides intensive English language instruction with emphasis on school routines, oral skills, and literacy development. **Successful completion gives the student one credit in English and one Pathway Related Course credit. The one related course credit does not fulfill the graduation requirement in English. Prerequisite: Students identified as Multilingual Learners.**

EL4461GAE	English Development	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: 1 credit Core English]			

The course focuses on the continued linguistic development of listening, speaking, reading, and writing skills in formal and social settings. Through a content-based approach, students will engage in tasks that will support the development of reading, writing, speaking, and listening skills. **Successful completion gives the student one credit in English. Prerequisite: Students identified as Multilingual Learners.**

EL4463GAE	English Literature	Grade 9, 10, 11	1 Credit
*[Graduation Requirement: 1 credit Core English]			

This course may be taken concurrently with English Development. Emphasis is placed on learning academic English - reading, writing, and mechanics. **Successful completion gives the student one credit in English. Prerequisite: Students identified as Multilingual Learners.**

EN0017GAE	Transition English	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: 1 credit Core English			

This course follows the English I curriculum standards and is designed for MLL students. The course is co-taught between an English teacher and an MLL teacher. Teachers use instructional strategies that are effective with MLLs to prepare students for the mainstream English II course that is next in the English core sequence. The curriculum is an exploration of the reading-writing connection and students will incorporate the writing process as they develop their communication skills and engagement in academic discourse. Successful completion gives the student one credit in English. **Successful completion gives the student one credit in English.**

EL4301GAG	EL Math Foundations	Grades 9, 10, 11	2 Credits
*[Graduation Requirement: 1 credit Core Math and 1 credit Math Related Course or STEM Related Course]			

This course provides intensive Basic Math instruction with emphasis on the English and Math skills needed to prepare students for Algebra, conducted in Spanish and English. **Successful completion gives the student one credit in Mathematics and one STEM Related Course credit. The one related course credit does not fulfill graduation requirements in Mathematics. Prerequisite: Students identified as Multilingual Learners with gaps in their education. Prerequisite: Participation in the Bilingual (Spanish) program.**

EL4471GAE	Bilingual World History	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a survey of World History from its origins to the 21st century, conducted in Spanish and English. It includes historical development of economics, and political, social and religious institutions with an emphasis on geography's impact on historical and cultural development. **Prerequisite: Participation in the Bilingual (Spanish) Program.**

EL4472GAE	Bilingual US History	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: US History Requirement]			

This course surveys the development of the American political, socio-cultural, and economic landscapes beginning with the exploration of the Americas until today, conducted in Spanish and English. Students concentrate on specific time periods through American history with emphasis on important events and critical ideas. **Prerequisite: Participation in the Bilingual (Spanish) program.**

EL3320GAE	Bilingual Biology	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: Biology/Life Science (Lab)]			

Emphasis of study will be placed on the biochemical, physiological, morphological, ecological, bacteriological, embryonic, nutritional, pathological and biographical natures of life, conducted in Spanish and English. Upon completion of this course a student will have a knowledge of the principles on which all life depends, and an awareness of the interdependence of organisms in the biological world with reference to the balance of nature and conservation. **Prerequisite: Participation in the Bilingual (Spanish) program.**

EL0013GAC	MLL Culture and Career Seminar 1	Grade 9 (10, 11, if newly arrived)	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This one semester interdisciplinary course is designed as an introductory course for Multilingual Learners. They will learn and apply 21st century skills, laying a foundation which will be used during their high school years and are applicable in the real world. In addition to an introduction to career exploration, the curriculum will focus on 'skills for success' including: communication skills, organizational skills, civic responsibility, problem solving, personal development (such as collaboration and self-advocacy), technology skills, and researching skills. Students will be learning how to succeed in high school and how these skills can be applied throughout life.

EL0014GAC	MLL Culture and Career Seminar 2	Grade 10, 11	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This one semester interdisciplinary course continues to develop Multilingual Learners' skills for success with emphasis on post-secondary options. Students explore their passions and interests and how these interests might influence their career choices. They will start thinking about internship options and develop skills for resume writing and job interviews. They will also learn about the college application process and explore what different colleges have to offer. **Prerequisite: MLL Culture and Career Seminar 1**

EL5503GAC3	MLL Career Exploration Internship	Grades 11, 12	0.5 Credits
*[Graduation Requirement: Pathway Related Course]			

This one semester internship provides students with real-world career experiences and an opportunity to connect learning in the Culture and Careers Seminar 1 and 2 with the workplace. With support from the MLL Career Pathways Facilitator, students will be able to hone their work and life skills within American culture. The experience will enhance students' opportunities for post-secondary success in the job world. **Prerequisite: successful completion of Culture and Careers Seminar 1 and 2 or Teacher Recommendation.**

Specialized Education

A full continuum of Special Education supports and related services are provided to students who have been identified as eligible under the criteria of Connecticut General Statute 10-76 and IDEA. The majority of students with a disability meet the requirements for graduation through regular class placements with support from the special education instructional staff and/or student support personnel. Special education classes are available for other students with severe disabilities whose needs require intensive, explicit, direct special education instruction which may include modification of curriculum. Special education classes and programs are available to meet these needs. The appropriate classes or services provided in the Least Restrictive Environment to meet the needs of each individual student is a decision made by the Planning and Placement Team.

Co-Taught English	**Grades 9, 10, 11**	**1 Credit**
***[Graduation Requirement per PPT]**		

These courses provide specially designed academic instruction in the general education English class by both the special education and general education teachers. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan. Depending upon PPT recommendations, a fully inclusive Cluster co-teaching program is available for students who meet the entry criteria and are entering grade 9 during the 2024-25 school year.

Co-Taught Math	**Grades 9, 10, 11**	**1 Credit**
***[Graduation Requirement per PPT]**		

These courses in Intensified Algebra 1, Integrated Algebra and Intermediate Geometry provide specially designed academic instruction in the general education math class by both the special education and general education teachers. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan. Depending upon PPT recommendations, a fully inclusive Cluster co-teaching program is available for students who meet the entry criteria and are entering grade 9 during the 2024-25 school year.

Co-Taught Science	**Grades 9, 10, 11**	**1 Credit**
***[Graduation Requirement per PPT]**		

These courses in Biology, Earth and Integrated Physical Science and Chemistry provide specially designed academic instruction in the general education science class by both the special education and general education teachers. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan. Depending upon PPT recommendations, a fully inclusive Cluster co-teaching program is available for students who meet the entry criteria and are entering grade 9 during the 2024-25 school year.

Co-Taught Social Studies	**Grades 9, 10, 11**	**1 Credit**
***[Graduation Requirement per PPT]**		

These courses in World History, US History, Civics provide specially designed academic instruction in the general education social studies class by both the special education and general education teachers. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan. Depending upon PPT recommendations, a fully inclusive Cluster co-teaching program is available for students who meet the entry criteria and are entering grade 9 during the 2024-25 school year.

NK9402GRE	**Specialized Reading 1**	**Grades 9, 10, 11, 12**	**1 Credit**
***[Graduation Requirement per PPT]**			

Research-based direct reading instruction intervention provided in a special education class, specially designed to meet students' specific skill needs in the area of reading. This course builds on the foundational skills of reading. Specialized Reading focuses on higher level reading skills. This course provides direct instruction and may be supplemented with access to remote interventions and provide continuous progress monitoring in literacy skill acquisition. Placement in this course is based on an extensive literacy assessment and the recommendation of The Planning and Placement Team as designated in the students' IEP.

NK9413-16GRC	Academic Assistance	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement per PPT]			

Students will receive small group supplementary instruction focusing on the IEP goals in the areas of executive functioning skills, academic self-management skills, self-advocacy, note taking, research and written, oral or visual presentation skills. Time management skills are addressed to support independent completion of coursework, projects and homework assignments as applied across general education curriculum areas. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan consistent with goals and objectives.

NK	Consultant Teacher Services	Grades 9, 10, 11, 12	0 Credit

These supports and services provide direct or indirect specially designed academic intervention for students in the general education English, Math, Science, or Social Studies courses. Provided by the special education teacher in consultation with the general education teacher. Indirect services are provided to the general education teacher to assist with the development and implementation of accommodations, while direct services may be provided within the general education classroom. Consultant teacher services in specific courses are based upon the recommendations of The Planning and Placement Team as designated in the students' Individual Educational Plan. The availability of this service is based upon individual student needs. Services are provided to support success in the general education pathway or in senior courses required for graduation.

INCLUSIVE CLUSTER

	IC Co-Taught Science	1 Credit
	IC Co-Taught Social Studies	1 Credit
	IC Co-Taught English	1 Credit
	IC Co-Taught Math	1 Credit
	IC Academic Assistance	1 Credit
*[Graduation Requirement per PPT]		

The Inclusive Cluster (IC) provides supports and services of direct co-teaching for specially designed academic intervention for students in the general education English, Math, Science, or Social Studies courses. Students may be recommended for the IC cluster for three or four Core co-teaching classes provided by a common Special Education Teacher across content areas, acting as the case manager and who also provides one period of Academic Assistance to students within the IC cluster. Supports are provided by the special education teacher and the general education teacher. IC courses are implemented based upon the recommendations of The Planning and Placement Team as designated in the students' Individual Educational Plan. The availability of this service is based upon individual student needs.

ESSENTIALS CLASSES

NK0096-99GAE	ESSENTIALS OF English I, II, III, IV	Grades 9 – 12	1 Credit
NK1192-95GAE	ESSENTIALS OF Math I, II, III, IV	Grades 9 – 12	1 Credit
NK3392-95GAE	ESSENTIALS OF Science I, II, III, IV	Grades 9 – 12	1 Credit
NK2292-95GAE	ESSENTIALS OF Social Studies I, II, III, IV	Grades 9 – 12	1 Credit

These courses provide direct special education instruction in a special education class to develop, maintain and apply skills in English (reading/ writing), math, science, and/or social studies coursework for students with moderate to severe disabilities who cannot benefit from instruction in the general education classroom even with intensive special education supports and services. Course content is consistent with state standards and ensures access to the general education curriculum. It is anticipated that with this intensive intervention, students will be prepared to return to general education classes with significant specialized supports and services. Ongoing consistent progress monitoring is utilized to guide decisions to return students to more integrated settings. Materials and instructional techniques are differentiated, individualized, and adapted to individual student needs. Instruction may be provided individually, small groups, or class wide. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

PRACTICAL CLASSES

These courses provide direct special education instruction in a special education class to develop functional skills, and to maintain and apply independent skills in generalized settings. Classes provide practical coursework in English (reading/ writing), Math, Science, and/or Social Studies as well as pre-vocational, vocational and life skills. Materials and instructional techniques are differentiated, individualized, and adapted to individual student needs. Instruction may be provided individually, in small groups, or class wide. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan. Students may use this coursework towards HS graduation requirements. **Students typically are recommended for Alternative Assessment based upon SDE criteria for consideration by the PPT.**

NK2256GAE	Community and Civic Engagement I, II, III, IV	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]			

Students experience the practical application of social studies curriculum including world history related to family cultures and history.

NK9425GRE	Practical English I, II, III, IV	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]			

Students experience the practical application of English curriculum including functional reading and writing skills related to daily living and vocational literacy requirements.

NK9426GRE	Practical Math I, II, III, IV	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]			

Students experience the practical application of Math curriculum including time, numeracy, money, measurement skills and personal finance planning related to independent daily living skills and requirements for successful vocational experiences.

NK9404GRE	Daily Living Skills I, II, III, IV	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]			

This course provides direct special education instruction in a special education class to develop, maintain and generalize skills leading to independence across settings including school, community and workplace. Instruction emphasizes independent living and self-help skills including; health/nutrition, hygiene, grooming, money management, self-advocacy, domestic skills (e.g. cooking, shopping, housekeeping), pragmatic communication skills, and appropriate leisure time skills. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

NK9405GRE	Pre-Vocational/Vocational Skills	Grades 11, 12	1 Credit
*[Graduation Requirement per PPT]			

This course provides direct special education instruction in a special education PAES Lab (Practical Assessment Exploration System), community, or workplace to provide students the pre-vocational and vocational skills necessary for entry level competitive or supported employment. The PAES program provides training on both employment skills and independent living skills using a performance–based assessment designed to guide the student in the process of transitioning from school to the real world; while developing work behavior skills. Based on individual needs and interests, this course includes an introduction to career opportunities, resume writing and applications, interviewing skills, technical skills for specific job training requirements, soft skills including workplace behavior standards, self-advocacy in the workplace, work ethics, and problem solving skills. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

NK9406GRA	Adaptive Physical Education	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement per PPT]			

Adaptive PE will be provided in accordance with the student's Individualized Educational Plan. Physical Education is a comprehensive program that teaches students the skills and concepts necessary to lead a healthy lifestyle. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

PE9009GAC	Peer Assisted Physical Education	Grades 9, 10, 11, 12	0.5 Credit
AR8814GRE	Peer Assisted Art	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Students with disabilities are integrated into Physical Education and Art, therefore providing access to adapted coursework supported by the teaching team and peer mentors in consultation with special educators. In addition, peer mentors receive valuable experience in career exploration for those students interested in pursuing a career in general or special education, physical/occupational therapy, and other health related fields. Prerequisite for peer mentors: previous art course or PE Course or previous culinary arts course. Courses will run based on enrollment and staff availability.

THERAPEUTIC INTERVENTION PROGRAM

Integrated English	Grades 9, 10, 11, 12	1 Credit
Integrated Math	Grades 9, 10, 11, 12	1 Credit
Integrated Science	Grades 9, 10, 11, 12	1 Credit
Integrated Social Studies	Grades 9, 10, 11, 12	1 Credit
Integrated Academic/ Social Support	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]		

The Therapeutic Success Program provides small group special education instruction in core academic subjects with moderate to severe social-emotional disabilities who cannot benefit from instruction in the general education classroom even with intensive special education supports and services.

These courses are designed to provide specialized instruction within a special education class providing embedded social emotional learning, self-management skills, program-wide positive behavior strategies including DBT (Dialectical Behavior Therapy) curriculum. DBT develops skills in interpersonal effectiveness, distress tolerance, emotional regulation, and mindfulness skills. Students may participate in one to five classes per day; English, math, social studies, science, or academic/ social emotional support class. Course content is consistent with state standards and ensures access to the general education curriculum with social/emotional and DBT skills incorporated throughout the day. It is anticipated that with intensive therapeutic intervention, students will be prepared to return to general education classes with significant specialized supports and services. Ongoing consistent progress monitoring in areas of academics and social/emotional/behavioral skills are utilized to guide decisions to students to more integrated settings. Materials and instructional techniques are differentiated, individualized, and adapted to individual student needs. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

NORWALK NEXT STEPS (18-22 Transition Program) (until the June after the student's 22nd birthday)	Grades 12 +	0 Credit
*[Graduation Requirement per PPT]		

The goal of the 18-22 program is to develop soft skills to enable successful workplace experiences with increased independence via fading of school supervision supports while increasing access to natural supports in the community. The transition program will provide a variety of work-place experiences to develop entry-level job specific skill sets leading to acquisition of supported employment. Independent living skills including travel, money management and hygiene appropriate to the worksite will also be addressed. These skills across all domains will be enhanced via access to smart electronic devices to facilitate travel (GPS), communication (e-mail, text, phone) and time management (electronic calendars and schedules). Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan.

NK9406GRA	Project SEARCH	Grades 12+	0 Credit

A community based program on site at NCC (Norwalk Community College) designed for students with natural workplace supports and consultation by the special education teaching team. Students receive daily small group instruction in soft skill development while participating in three internships a year leading to competitive, marketable, transferable skills in real work settings. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan upon the student's last year of IDEA eligibility.

Center for Global Studies

at Brien McMahon High School

an Interdistrict Magnet School

Admissions

Entrance to the Center for Global Studies is by application only. Students currently in grades 8, 9, 10, and 11 may apply. Applications available at www.centerforglobalstudies.org. For more information, call 203-852-9488 option 2.

The Center for Global Studies (CGS) is an interdistrict magnet school for grades 9-12 housed in Brien McMahon High School (BMHS). CGS provides students from Fairfield County schools the opportunity to study Chinese, Japanese, and Arabic languages and culture. All CGS courses include a focus on international-mindedness. Science and additional elective courses that incorporate a global theme are offered in cooperation with BMHS. All CGS students are eligible to participate in the globally-themed International Baccalaureate Diploma Program.

CGS emphasizes international-mindedness through experiential learning. We have nine sister-schools in China, Japan, Qatar, Egypt, and Morocco, and each year, our students travel to Japan, China, or the Middle East for a two-week home stay and study tour with a sister school. Students live with families, attend classes, and spend time traveling to historic and cultural sites related to the CGS curriculum. Students may also elect to attend a project-based social/cultural trip to India or Korea, an eco-trip to Rwanda, or a service trip to Guatemala or Puerto Rico. Our curriculum includes global performers and field trips that emphasize international-mindedness.

As part of our ongoing annual exchange, CGS families host high school students from our sister schools in China, Japan, Qatar, Egypt, or Morocco. These students stay in CGS family homes and attend classes alongside their CGS host siblings.

Students who are currently in Grade 8 in Norwalk and are not in the Roton or CMS Japanese/Chinese program and are not the child of a BMHS/CGS staff member, will need to apply through Norwalk's School Choice application at norwalkps.org. This application will be posted later this month.

Admission to CGS is open to all students in participating Fairfield County districts. If there are more applicants than guaranteed seats from any town, a lottery will be held. All students who are entered into the lottery receive a number based on their home district and language selection. Students are entered into the waitlist according to those random numbers.

CGS holds two lottery sessions— one for incoming 9th graders, one for incoming 10th-12th graders. The criteria and procedures for both lotteries are the same.

The application deadline is January 10. Late applications will be accepted from January 11-September 15, but will be placed at the end of the waiting list.

Lottery Guidelines

The goal of the lottery is to create a freshman class of 80 students. Lottery will be run by district and language.

1. No more than sixty percent of CGS will be students who reside in Norwalk.
2. Any student who has taken Japanese or Chinese in Roton MS, Japanese at Ponus Ridge MS , or Japanese at Norwalk's Columbus Magnet School and fulfills the first two requirements above will be admitted prior to any lottery. Should the number of applicants exceed 30% of an incoming class's population, a lottery will be held for this pathway. Students not admitted through the Pathways lottery will be entered into the regular lottery for Norwalk students.
3. Up to 3 students per year who have parents/guardians employed at CGS or BMHS will receive preference. If the number of applicants exceeds 3, then a lottery will be held for those students. Students of staff who are not given admission priority will then be entered into the regular lottery for their home district.
4. Students who are not admitted through the lottery will remain on a waiting list for seats for their home district and the language they selected.
5. CGS does not give admissions preference to siblings.

Connecticut Certificate of Global Engagement

[Civic and Global Engagement Pathway] CGS Students are eligible for a Connecticut Certificate of Global Engagement [Civic and Global Engagement Pathway] which requires:

1. Globally-Focused Coursework (at least 7.0 credits or demonstration of mastery)
    a. World Languages coursework (at least 3 years of high school equivalent study in one or more World Languages.)
    b. Social Studies, English Language Arts and other coursework (at least 4 credits of coursework – or demonstration of mastery) in courses with a global focus, which may include courses on: international economics, business, or marketing; international or foreign affairs; world/non-US history; world geography; comparative cultures or religions; science or technology courses with global perspective; literature of another country, region, or culture; music, drama, and visual arts with international perspective; other disciplines and courses with an international focus.
2. Globally-Focused Student Activities
    a. Students participate in at least one or more co-curricular activities over at least 3 years of their high school experience. These may include participating in: local or remote engagement with individuals from other countries that is regular and direct (pen pals, Skype, school/community-based organizations); language clubs or honor societies; internationally focused clubs; internationally themed programs/competitions for high school students (Model UN, DECA); language immersion programs; travel abroad or educational tour; international exchange program as student or host.
3. Global Service Learning or Action Project (completion of a global/cross-cultural public service project involving at least 20 hours of work, connected to a global community or issue). Documents such as time logs, project description sheets … etc. need to be completed.

CGS Required Courses

Humanities (World Literature, Social Studies, Fine Arts, World Languages)	13.5 Total
World Literature	4.0
World Languages (Arabic, Chinese, or Japanese)	4.0
World History	1.0
World Languages Seminar	.5
US History	1.0
Civic Engagement	.5
Cultural Anthropology (exemption if enrolled in IB History)	.5
IB Theory of Knowledge OR Asian History	.5
Honors Global Public Speaking	.5
Fine Arts (Art, Cooking, Film, Theater)	1.0
STEM (Science, Technology, Engineering, Math)	9.0 Total
Math (includes Integrated Math, Statistics, or other math courses)	4.0
Life Science (lab)	1.0
Physical Science / Earth Science (lab)	1.0
Other Science	1.0
STEM Related Course (including .5 Digital Literacy Requirement)	2.0
Physical Education and Wellness; Health and Safety	2.0 Total
Physical Education	1.0
Health and Safety	1.0
Capstone Experience CGS Students will have several avenues through which they can complete their capstone project: study tours, hosting, global engagement action project, IBDP or IBCP, or through opportunities within specific courses. Grade 9 and 10 capstone modules will appear in World History, World Literature, and Levels 1 and 2 languages.	1.0
Additional Electives	1.0
25 Total Credits Required for Graduation	

Course Descriptions

Literature Courses

EN0081GAE	World Literature 1	Grade 9	1 Credit
EN0095HAE	Honors World Literature 1	Grade 9	1 Credit

*[Graduation Requirement: Core English]

Honors World Literature offers students a survey of world cultures, with specific attention to Japanese, Chinese, and Middle East cultures, through the genres of the short story, drama, novel, poetry and non-fiction. The teaching approach is student-centered, with an emphasis on seminars and portfolio-writing. Students are required to make frequent presentations, engage in high-level close reading, and analytical and creative writing, and gain skills that will prepare them for the International Baccalaureate Diploma Program. This is a challenging course designed for college-bound students.

EN0082GAE	World Literature 2	Grade 10	1 Credit
EN0086HAE	Honors World Literature 2	Grade 10	1 Credit

*[Graduation Requirement: Core English]

Honors World Literature 2 offers a seminar-style investigation of world cultures through international works of literature. This accelerated English course consists of an in-depth analysis of challenging classical and contemporary texts. The course will stress the writing process and include a portfolio so that students may reflect and improve upon their own work. Students acquire the skills and develop the vocabulary necessary to read the major genres of literature: the novel, short story, drama, poetry, essay, and biography. Students study various techniques of developing and researching a topic, write papers, and develop multimedia presentations using these skills. Instruction will focus on response writing and the persuasive essay. Grammar, vocabulary, and oral communication will also be emphasized. The course will provide an intense educational opportunity for qualified, highly-motivated students.

EN0087HAE	Honors World Literature 3	Grade 11	1 Credit

*[Graduation Requirement: Core English]

World Literature 3 offers students a seminar-style investigation of world cultures through international works of literature and literary non-fiction. Through their reading, discussion, and writing, students will develop an awareness of important contemporary global social issues and will consider the impact of their own voice on the world. Students will develop research skills and use the writing process to develop creative, analytical, and persuasive pieces, culminating in a final portfolio.

EN0084HAE	Honors World Literature 4	Grade 12	1 Credit

*[Graduation Requirement: Core English]

This course will consist of a concentrated study of world literary selections using a thematic approach. Emphasis will be placed on analysis of the works of major poets, playwrights, novelists, essayists, and public speakers as a basis for written and oral interpretation. Students will design and facilitate whole-school seminars and develop and have the opportunity to deliver a final CGS capstone project. In-depth reading, listening, vocabulary, and speaking skills will continue to be developed in preparation for college-level work. Students will participate in a college entrance essay-writing workshop.

EN0051ICE	IB Language and Literature HL Y1	Grades 11	1 Credit
EN0052ICE	IB Language and Literature SL Y1	Grades 11	1 Credit
EN0112ICE	IB Language and Literature HL Y2	Grades 12	1 Credit
EN0113ICE	IB Language and Literature SL Y2	Grades 12	1 Credit

*[Graduation Requirements: Core English]

The English Literature and Language course synthesizes the IB mission through the study of the English language and its linguistic structure. Through challenging, active learning this two-year college-level course develops students' understanding of both oral and written discourse, with a focus on expanding their analytic and composition skills. The course includes a wide range of literature from various global cultures. Through literary criticism and analysis, students will examine conflict and challenges within a multicultural context, providing students an opportunity to broaden their perspective on literature and humanity. In this course, students respond reflectively, speak with empathy, listen actively, and communicate with a heightened global understanding. Ultimately, the activities and tasks will underscore international awareness and develop qualities outlined in the IB learner profile. Coursework is drawn from IB prescribed text lists. Prerequisite: Honors World Literature 2.

EN0096GAC6	Global Public Speaking	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Pathway Related Course]

This practice-based course will focus on the basic rules of effective Western public speaking. Students will learn and practice different genres and forms of public speaking that range from informal to formal occasions, from informative to persuasive genres. They analyze and critique speeches taken from pop culture and from people around the world. Adjustments to technique are considered when communicating with people from other cultures (particularly Asian countries). This course will include effective communicating and speaking via technology, such as video conferencing. Topics will include cultural conventions and speech, perceptions of others, verbal and nonverbal messages, and techniques of oral presentation and persuasion. Students will learn how to research, outline, and deliver short, informal presentations as well as longer speeches.

Social Studies Courses

SS2210GAE6	Survey in World History	Grades 9, 10, 11, 12	1 Credit
SS2211HAE6	Honors Survey in World History	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: Social Studies Related Course]

This course is a survey of world history that uses comparative history as a lens for understanding the historical development of economic, political, social and religious institutions. The course emphasizes geography's impact on historical and cultural development. Students will conduct in-depth studies of themes in world history, focusing particularly on the history of China, Japan, and the Middle East. Students will learn how to conduct research, analyze primary and secondary sources, write a research paper, and/or complete a research project.

SS2238GAE6	US History in Global Contexts	Grades 9, 10, 11, 12	1 Credit
SS2239HAE6	Honors US History in Global Contexts	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: US History/Social Studies Related Course]

This course provides students with a broad survey of US History with an emphasis on international connections. Students will examine how decisions made within the US have affected and been affected by people, nations, and various movements around the world over time. This course will take a thematic approach with each topic linking to a current issue or theme, so as to best equip students to draw past-present connections. We will emphasize the need to incorporate multiple perspectives to build empathy and better understand the people and societies around us. Students taking the course for honors credit are assigned more complex and nuanced readings and are held to a more advanced rubric standard for their writing. The purpose of the Honors section is to challenge students who are interested and ready for more advanced work and give them a preview of IB courses.

SS2256GAC6	Civic Engagement	Grades 10, 11, 12	0.5 Credit
SS2267HAC6	Honors Civic Engagement	Grades 10, 11, 12	0.5 credit

*[Graduation Requirement: Civics/Social Studies Related Course]

Civic engagement introduces students to our national, state, and local governments and political organizations. Thoughtful and effective engagement in a local, regional, or national community requires an understanding of the philosophical underpinnings of political systems around the world before focusing on the Enlightenment. From there, the course focuses on the political and economic structure of the U.S. The summative assignment is a Policy Proposal Project designed to give the students the chance to explore a political or economic issue that interests them. The proposal requires the student to carry out general background research and to engage with different opinions on how best to remedy the issue they've chosen and could be turned into a capstone project. This fulfills the state requirement for Civics.

SS2257HAC6	Honors Global Engagement	Grades 10, 11, 12	0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

Honors Global Engagement is a mastery class, offering students the opportunity to learn about the design-cycle for independent projects and complete a project for a local, regional or global problem that they identify. Within the context of a supportive environment, students learn about their passions and interests and learn skills required to be independent thinkers, communicators, collaborators, and creative problem-solvers. To be successful in this course, students need to be motivated to work independently and think creatively. Students working within a global context have the opportunity to earn the Global Engagement Certificate; all students will have the opportunity to use the project for this course as their capstone project.

SS2300ICE6	IB History Y1 (CGS)	Grades 11, 12	1 Credit
SS2304ICE6	IB History Y2 (CGS)	Grade 12	1 Credit

*[Graduation Requirement: Social Studies Related Course]

This Group 3 IB history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of political, economic, social and cultural history, and students will be required to synthesize, apply, and evaluate historical concepts across cultures and time periods. Year 1 of this course will focus on specific topics and case studies in world history, with particular attention during Year 2 to a specific region. As part of the synthesis process, students will make connections to our CGS study tours to Asia and Africa. IB courses are open to all students, with the recommendation of a teacher.

SS2254HAC6	Honors Cultural Anthropology	Grades 11, 12	0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

This course encourages you to be "wakeful" to the world around you. Anthropologist Haley Duschinski describes "wakefulness" as a state of constant awareness. It is when you are not just learning about the world, but you are living on the threshold between insider and outsider; you observe, analyze, and critique a culture even as you are living within it. You will learn and practice this type of thinking through the methods of ethnographic fieldwork, which will culminate in a final, formal ethnographic research project and paper, that could be part of a capstone project. Prerequisite: Survey in World History.

SS2314GAE6	Digital Artifacts and Publications	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

According to Common Sense Media, most teenagers spend about nine hours per day interacting with a screen. To be informed and active world citizens, students should understand how digital media works on us and can work for us. The CGS digital media framework uses an integrated approach, encouraging students to make informed judgements and decisions in consuming and producing digital media in our contemporary, global society. The three major aims of the course include: systems themselves; application and practice of the creation of digital media. Additionally, students will participate in the planning and production of a bi weekly CGS news station.

AD0017CCC6	IB Theory of Knowledge	Y1	Grades 11, 12	0.5 Credit
AD0018CCC6	IB Theory of Knowledge	Y2	Grade 12	0.5 Credit

*[Graduation Requirement: Pathway Related Course]

IB Theory of Knowledge (TOK) is a college-like seminar course focused on improving students' ability to think critically about the world around them and to become global citizens who use their understanding of how humans create knowledge (how we know what we know) to make the world a better and more peaceful place. Students will explore knowledge systems of mathematics, human sciences, natural sciences, history, the arts, religious and indigenous knowledge systems, and ethics as understood through the lenses of emotion, reason, language, perceptions, imagination, faith, intuition and memory. Throughout the course, students will make presentations that explore a knowledge question raised by a real-life situation, as well as write essays that apply their understanding of knowledge systems and the ways knowledge is obtained. The course material is rigorous and requires excellent written and oral communication skills. IB Diploma students must enroll in 2 semesters of TOK. Non-diploma students must only enroll in the Y1 (spring) semester.

SS2322GAE6 African American/Black and Puerto Rican/Latino Studies Grades 10, 11, 12 1 Credit

*[Graduation Requirement: Pathway Related Course]

This course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives and collaborations of African America/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, nation and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities.

SS2284GAC6 Japanese History Grades 11, 12 0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

This course begins with an analysis of the impact of Japan's geography on its history, culture, and national character, followed by a chronological exploration of Japanese history from its ancient origins to the present. Important events and ideas will be explored through such activities as class discussions, analysis of Japanese and Western art and historical documents, and current events discussions. Whenever appropriate a comparative analysis of Japanese and U.S. history and society is included. There is a focus upon persuasive essay writing.

SS2289GAC6 Chinese History Grades 11, 12 0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

This course begins with an analysis of the impact of China's geography on its history, culture, and national character, followed by a chronological exploration of Chinese history from its ancient origins to the present. Important events and ideas will be explored through such activities as class discussions, analysis of Chinese and Western art and historical documents, and current events discussions. Whenever appropriate a comparative analysis of Chinese and U.S. history and society is included. There is a focus upon persuasive essay writing.

SS2320GAC6 Asian History Grades 11, 12 0.5 Credit

*[Graduation Requirement: Social Studies Related Course]

This course begins with an analysis of the impact of geography on history, culture, and national character of China, Japan, and countries within the Middle East. Students will focus on the surrounding areas, followed by a chronological exploration of the history of these countries from their ancient origins to the present. Important events and ideas will be explored through such activities as class discussions, analysis of Chinese, Japanese, Middle Eastern, and Western art and historical documents, and current events discussions. Whenever appropriate a comparative analysis of East Asian and US History and society is included. There is a focus upon persuasive essay writing.

SS2241ACE Advanced Placement United States History (CGS) Grades 10, 11, 12 0.5 Credit

*[Graduation Requirement: US History]

This one-year course will cover the history of the United States from the colonial period through the modern age in accordance with the College Board requirements for Advanced Placement United States History course. Focus will be placed on the major developments in political-constitutional economic and diplomatic history, as well as tracing developments in social, cultural and intellectual history through each major time period. Emphasis will be placed on drawing meaning from a wide variety of primary and secondary source documents and on the clarity of written expression. A college-level text will be used. Students are expected to take the Advanced Placement exam. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. Students responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade.

SS2242CCE	UConn ECE US History (CGS)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: US History]			

Surveys political, economic, social, and cultural developments in American history through the Civil War and Reconstruction. Offered through our partnership with BMHS. Covers: UConn ECE HIST 1501 0.5 Credit UConn ECE HIST 1502 0.5 Credit

SS2271GAC	Psychology 1 (CGS)	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a one-semester introductory survey of the field of human behavior. Topics include sensory awareness, perception, self-esteem, dreams, mediation, motivation, and the unconscious. Students use readings, experiments, roleplays, small and large group discussion, and projects to explore these areas of human behavior.

SS2283ACE	Advanced Placement Psychology (CGS)	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Social Studies Related Course]			

The purpose of the Advanced Placement Psychology course is to introduce students to the systematic and scientific study of behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. Students are responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade.

World Languages Courses

WL4485GAE	Japanese 1	Grades 9, 10, 11, 12	1 Credit
WL4490HAE	Honors Japanese 1	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: World Languages]

This beginning course stresses the fundamental skills: listening, speaking, reading, and writing. Cultural aspects are explored at all levels. Students complete individual projects on selected cultural topics. Students should be prepared for frequent class presentations and reflection on their own performance.

WL4486GAE	Japanese 2	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: World Languages]

Continuation of the beginning course stresses the fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Students further develop their cultural understanding. Students will complete individual projects on selected cultural topics. Prerequisite: Japanese 1.

WL4491HAE	Honors Japanese 2	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: World Languages]

This class has an emphasis on further development of language skills. Students understand and are able to use some formulaic and onomatopoeic expressions in oral and written sentences. They start individual reading to develop skimming and scanning skills in order to get the gist of stories. Students complete individual projects on cultural topics. Prerequisite: Japanese 1.

WL4487GAE	Japanese 3	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: World Languages]

In addition to the reinforcement and advancement of fundamental skills, students read a variety of documents in Japanese and are expected to primarily use Japanese in the classroom. Students complete individual projects on selected cultural topics. Prerequisite: Japanese 2.

WL4488GAE	Japanese 4	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: World Languages]

Students completing Japanese 4 are able to handle any real-life situation in Japanese. Reading and writing are emphasized, and students are expected to primarily use Japanese in the classroom. Prerequisite: Japanese 3.

WL4526ICE	IB Japanese Y1 ab initio / SL	Grades 11, 12	1 Credit
WL4492HAE	Honors Japanese 3	Grade 10	1 Credit
WL454ICE	IB Japanese Y2 ab initio / SL	Grade 12	1 Credit

*[Graduation Requirement: World Languages]

Ab Initio: The IB Japanese ab initio / SL course is a two-year course. The main focus of this Japanese course is to continue developing students' abilities in the four skill areas of second language acquisition (listening, speaking, reading and writing) across the three modes of communication (interpretive, interpersonal & presentational). This course is organized into multiple themes, which provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Students will develop linguistic communicative skills and this course will provide ample opportunities for students to practice the language skills of listening, speaking, reading and writing. Students will continue to understand and appreciate cultural diversity and develop insight into divergent ways of viewing the world. For SL, in addition to gaining an understanding of history, politics, literature, music & art, current events, linguistic variations, students will also be able to critically analyze issues that directly or indirectly impact the world community. Prerequisite: Honors Japanese 2.

WL4498GAE	Chinese 1 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
WL4503HAE	Honors Chinese 1 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages			

This beginning course stresses the fundamental skills: listening, speaking, reading, and writing. Cultural aspects are explored at all levels. Students complete individual projects on selected cultural topics. Students should be prepared for frequent class presentations and reflection on their own performance.

WL4499GAE	Chinese 2 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

Continuation of the beginning course stresses the fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Students further develop their cultural understanding. Students will complete individual projects on selected cultural topics. Prerequisite: Chinese 1.

WL4504HAE	Honors Chinese 2 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course develops the fundamental skills with greater emphasis on the natural use of language in everyday situations. Readings are selected to enhance vocabulary skills. Culture is further developed, and students complete projects on selected topics. Prerequisite: Chinese 1.

WL4500GAE	Chinese 3 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

In addition to the reinforcement and advancement of fundamental skills, students read a variety of documents in Chinese and are expected to primarily use Chinese in the classroom. Students complete individual projects on selected cultural topics. Prerequisite: Chinese 2.

WL4501GAE	Chinese 4 (Mandarin)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

Students completing Chinese 4 are able to handle any real-life situation in Chinese. Reading and writing are emphasized, and students are expected to primarily use Chinese in the classroom. Prerequisite: Chinese 3.

WL4525ICE	IB Chinese Y1	ab initio / SL	Grades 11, 12	1 Credit
WL4505HAE	Honors Chinese 3		Grade 10	1 Credit
WL4546ICE	IB Chinese Y2	ab initio / SL	Grades 12	1 Credit
*[Graduation Requirement: World Languages]				

The IB Chinese ab initio / SL course is a two-year course. The main focus of this Chinese course is to continue developing students' linguistic communicative skills in the four skill areas of second language acquisition (listening, speaking, reading and writing) across the three modes of communication (interpretive, interpersonal & presentational). This course is organized into multiple themes, which provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Students will continue to understand and appreciate cultural diversity and develop insight into divergent ways of viewing the world. For SL, in addition to gaining an understanding of history, politics, literature, music, art, current events, and linguistic variations, students will also be able to critically analyze issues that directly or indirectly impact the world community. Prerequisite: Honors Chinese 2.

WL4510GAE	Arabic 1	Grades 9, 10, 11, 12	1 Credit
WL4515HAE	Honors Arabic 1	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This beginning course stresses the fundamental skills: listening, speaking, reading, and writing. Cultural aspects are explored at all levels. Students complete individual projects on selected cultural topics. Students should be prepared for frequent class presentations and reflection on their own performance.

WL4511GAE	Arabic 2	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course builds upon skills learned in Arabic 1. It deals with fundamental skills and emphasizes basic conversation. A higher level of proficiency in reading, writing, and conversation will be developed. Students will build their grammatical skills and their cultural knowledge and learn to read and interpret simple documents in Arabic. Prerequisite: Arabic 1.

WL4514HAE	Honors Arabic 2	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course builds upon skills learned in Arabic 1. This class has an emphasis on further development of language skills. Students understand and are able to use some formulaic and onomatopoeic expressions in oral and written sentences. They start individual reading to develop skimming and scanning skills in order to obtain a basic understanding of stories. Students complete individual projects on cultural topics. Prerequisite: Arabic 1.

WL4512GAE	Arabic 3	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course is designed to improve students' speaking, writing and reading skills through an in-depth applied study of grammar, increased familiarity with figures of speech and style, and development of advanced skills in pronunciation. The course aims at improving students' linguistic competence in preparation for further Arabic studies. **Prerequisite: Arabic 2.**

WL4513GAE	Arabic 4	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

This course focuses on furthering language skills through reading and writing as well as improving fluency in oral communication. It includes the study of Arabic prose and poetry texts. Oral presentations and written reports are required. The aim of this course is to improve students' ability to read, write, and understand correct, simple and practical modern Arabic. Prerequisite: Arabic 3.

WL4513GAE	Arabic 4	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: World Languages]			

The IB Arabic ab initio course is a two-year course. The main focus of this Arabic course is to continue developing students' abilities in the four skill areas of second language acquisition (listening, speaking, reading, writing) across the three modes of communication (interpretive, interpersonal and presentational). This course is organized into multiple themes, which provide the students with opportunities to practice and explore the language, as well as to develop intercultural understanding. Students will develop linguistic communicative skills and the course provides ample opportunities for students to practice the language skills of listening, speaking, reading and writing. Students will continue to understand and appreciate cultural diversity and develop insight into divergent ways of viewing the world. Prerequisite: Honors Arabic 2 or approval from the instructor.

Math Courses

MA1200GAE6	Integrated Math A Y1*	Grades 9, 10, 11, 12	1 Credit
MA1201GAE6	Integrated Math A Y2*		

*[Graduation Requirement: Core Math and STEM]

Students focus on linear equations in one variable, linear functions, linear equations in two variables, systems of two linear equations in two variables, linear equalities in one or two variables, linear regressions, and equivalent transformations, inequalities, and nonlinear inequalities. Students are introduced to data analysis, including ratios, rates, proportional relationships and units; percentages. They also begin learning quadratic and exponential functions and rational functions. Students are introduced to probability and statistics, including simple probability, conditional probability, and probability systems, and inference from sample statistics and margin of error. Students find and make arithmetic and geometric patterns and sequences. Students are introduced to radical equations. **Prerequisite:** Pre-Algebra or equivalent**. This course is the equivalent of Algebra 1.**

MA1217GAE6	Integrated Math B Y1	Grades 9, 10, 11, 12	1 Credit
MA1203GAE6	Integrated Math B Y2		

*[Graduation Requirement: Core Math and STEM]

Students continue their study of linear equations, revisiting linear equations and inequalities in one or two variables. Students continue study of data analysis, with one-variable data and two-variable data, including a focus on models and scatter plots, and further develop their understanding of quadratic and exponential functions, and simple rational functions. Students are introduced to radical equations. Geometric concepts are further explored, such as area and volume; lines, angles, and triangles; right triangles and trigonometry; circles; complex numbers, and the Pythagorean theorem. Prerequisite: Algebra 1 or equivalent. **This course is the equivalent of Algebra 2.**

MA1202HAE6	Honors Integrated Math C Y1	Grades 9, 10, 11, 12	1 Credit
MA1204HAE6	Honors Integrated Math C Y2		

*[Graduation Requirement: Core Math and STEM]

Students continue their study of linear equations, revisiting linear equations and inequalities in one or two variables. Students continue study of data analysis, with one-variable data and two-variable data, including a focus on models and scatter plots. Geometric concepts are further explored, such as area and volume; lines, angles, and triangles; right triangles and trigonometry; circles and volumes of 3D shapes; complex numbers, and the Pythagorean Theorem. Students also practice using quadratic and exponential functions, simple rational functions, and radical equations. Students learn to use trigonometric concepts, including logarithms, and sine and cosine, and trigonometric functions and identities. Prerequisite: Honors Geometry or equivalent. **This course is the equivalent of**

IB Group 5: Math

MA1190ICE6	IB Analysis and Approaches HL Y1 (CGS)	Grades 11, 12	1 Credit per year
MA1191ICE6	IB Analysis and Approaches HL Y2 (CGS)		

*[Graduation Requirement: Math Core, Math Elective; STEM Elective]

Mathematics HL is a two-year course covering many topics. During year one, students will learn probability and statistics, algebra, functions, circle functions, trigonometry, and vectors. At the end of year one, students will complete an internal assessment (math exploration of their choosing). Year two gives an in-depth look into calculus (equivalent to AP Calculus BC). Students will develop the attributes helpful to an internationally-minded individual seeking to create a better and more peaceful world, with a focus on problem solving and mathematical inquiry. Students are expected to have a TI-84 graphing calculator at all times. The course will culminate with an external assessment consisting of three parts. Prerequisite: Honors Integrated Math C.

MA1188ICE6	IB Analysis and Approaches SL Y1 (CGS)	Grades 11, 12	1 Credit per year
MA1189ICE6	IB Analysis and Approaches SL Y2 (CGS)		
*[Graduation Requirement: Math Core, Math Elective; STEM Elective]			

The IB DP Mathematics: Analysis and Approaches course is a two-year course and is intended for students who wish to pursue studies in mathematics at a university of subjects that have a large mathematical content. It is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology. Topics include algebra, geometry, trigonometry, statistics, probability, and calculus. At the end of year one, students will start their internal assessment (math exploration of their choosing) which offers the students the opportunity to develop independence in their mathematical learning. Students are expected to have a TI-84 graphing calculator at all times. Prerequisite: Integrated Math B or Honors Integrated Math C.

MA1186ICE6	IB Applications and Interpretations SL Y1	Grades 11, 12	1 Credit per year
MA1187ICE6	IB Applications and Interpretations SL Y2		
*[Graduation Requirement: Math Core, Math Elective; STEM Elective]			

Application and Interpretation SL is a two-year mathematical sequence course that focuses on a vast array of mathematical concepts including algebra, function modeling using technology, probability and statistics, geometry, trigonometry, and calculus. Students will approach problems through application and using technology to advance understandings of each topic. Students will need to have knowledge of basic mathematical concepts and be knowledgeable enough to apply mathematical concepts. Over the course of two years, students will be exposed to international mindedness, Theory of Knowledge (TOK – as it relates to mathematics), and be required to complete an internal assessment (math exploration of their choosing), and IB Math External Exams (Paper 1 and Paper 2 in May of Y2). All of this focuses on how well students can apply the knowledge they have acquired throughout the course. Aligning with the IB Syllabus, a TI-84 graphing calculator is an essential tool for this course. Prerequisite: Integrated Math B or Integrated Math A.

MA1147GAE	Applied Statistics	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Math Credit, Math Related Course; STEM Related Course; fulfills STEM digital literacy]			

Most adults use statistics everyday, whether they are planning their budget, monitoring the growth or weight curve of their child, or checking out the stats of a favorite team. Most careers use statistics: predicting disease, working in finance, managing political campaigns, analyzing student achievement, predicting the weather … In this practical course, students become comfortable analyzing data with graphs, distributions, histograms, and explore probability topics that include probability rules and distributions. Emphasis is placed on using digital tools to help "run numbers" and learning practical applications. Prerequisite: Honors Integrated Math CY1 or Integrated Math A or B Y2.

MA1208GAC	Money Math	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: STEM related course and STEM digital literacy]			

What is my money actually worth? This course integrates components of digital literacy and research and some of the applications of math associated with money in our society. This course will include topics such as planning and budgeting for the future, including aspects such as college and travel, following international currency and exchange rates, and ideas of interest in terms of savings and debt. While doing short-term financial planning, students will use cloud-based systems to utilize spreadsheets and slideshows to demonstrate their research and understanding. At least one research project can be turned into a capstone project. Prerequisite: Algebra 1 or Integrated Math A Y1.

MA1164GAC	Computer Science (CGS)	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Math Related course; STEM related course and digital literacy]

Topics covered will allow students to study programming methodology and design data structures and algorithms. Upon completion of this course, students will have an extensive introduction to the language of Java. *This course fulfills the digital literacy requirement. Prerequisite: Algebra 1. Recommendation: Algebra 2 or Honors Math C. Offered through our partnership with BMHS.

MA1168ACE	Advanced Placement Computer Science Principles (CGS)	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: Math Related course; STEM related course and digital literacy]

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. It will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Students are expected to take the Advanced Placement exam. *Offered through our partnership with BMHS.*

MA1166AC	Advanced Placement Computer Science A	(CGS)	Grades 11, 12	1 Credit

*[Graduation Requirement: Math Related course; STEM related course and digital literacy]

The College Entrance Examination Board syllabus will be followed. JAVA language will be used. Topics covered will be object-oriented programming (OOP), features the programming language, data types and classes, algorithms, application of computing, computer systems and social implications of computers, and a case study designated by the College Board. Students are expected to take the Advanced Placement exam. ***This course fulfills the digital literacy requirement.** *Offered through our partnership with BMHS.*

MA1223HAC6	Honors Logical Reasoning	Grades 11, 12	.5 Credit

[Graduation Requirement: STEM Related Course and STEM digital literacy]

Formal logic and logical reasoning are the cornerstones of academic scholarship and mathematical and analytical thinking. This course will have three major components: students will examine and analyze the construction and analysis of logical definitions and classifications and the extent to which the foundations of logical thinking are static and dynamic across cultures; students will learn and apply symbolic logic notation used in both philosophical and mathematical fields and explore the consistency of this notation across cultures; and finally, students will practice and refine effective digital research techniques and create digital presentations that demonstrate their ability and understanding of logical fallacies across multiple technological modalities.

Fine Arts Courses

AR8805GAC	Drawing 1 (CGS)	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This course is designed for all students who would like the opportunity to increase their drawing skills in an intense half-year course. Students explore a wide variety of drawing techniques, materials, subjects and styles. Drawing will be based on observation and imagination that will lead students to self-discovery and awareness of their environment. A sketchbook/journal is required to plan and think through composition ideas. Prerequisite: Middle School Art Teacher Recommendation.

AR8805GAC	Drawing 2 (CGS)	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This course is designed for all students who would like the opportunity to increase their drawing skills in an intense half-year course. Students explore a wide variety of drawing techniques, materials, subjects and styles. Drawing will be based on observation and imagination that will lead students to self-discovery and awareness of their environment. A sketchbook/journal is required to plan and think through composition ideas. Prerequisite: Middle School Art Teacher Recommendation.

AR8807GAC	Painting 1 (CGS)	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

This class is designed for the student who wishes to explore and improve in all forms of painting media, techniques, and subjects. Media will include: Watercolor, Gouache, and Acrylics. Art styles will be the focus as students learn the basics of color media. As with other classes, a sketchbook is required, as the student will be using it to render sketches for painting subjects. Prerequisite: Art 1 or Art 2 or Middle School Art Teacher Recommendation.

AR8808GAC	Painting 2 (CGS)	Grades 10, 11, 12	0.5 Credit
*[Graduation Requirement: Fine Arts]			

Students who would like to add to their portfolio will be challenged in this advanced painting course. They will be asked to create thematic, meaningful and current paintings; which will expose intent and mastery of media. Opportunities to work independently and to make personal choices for materials and techniques will be given throughout the semester. Prerequisite: Painting 1.

AR8859GAE6	Graphic Art and Design (CGS)	Grades 9, 10, 11, 12	1 credit
*[Graduation Requirement: Fine Arts]			

This semester-long course focuses on photography, graphic art, and digital design techniques for each. Students learn the history of photography and graphic art across time periods and cultures, and create a small portfolio of their own work. Prerequisite: Art 1, recommendation by middle school teacher, or permission of the instructor.

AR8822GAE6	Projects in Contemporary Art	Grades 10, 11, 12	1 credit
*[Graduation Requirement: Fine Arts]			

Students study contemporary art through the lens of art history, and then create contemporary art installations in and around their local communities. Students leave with a portfolio of work.

AR8809GAC	Printmaking 1 (CGS)	Grades 9, 10, 11, 12	.5 Credit

Students in this course will be able to make multiple copies and editions of artwork rendered in a variety of printmaking media, techniques, and subjects. Media include: stencil, monoprint, collagraph, linoleum, woodcut, dry-point etching, and embossed prints as well as found object printmaking. In addition to making prints, students will engage in these media through historical and conceptual topics. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

AR8844HAE	Honors Portfolio (CGS)	Grades 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This class is designed for art students who want to build a superior portfolio for higher educational review. Portfolio students can be preparing for AP Studio Art, taking AP concurrently, or have finished AP Studio Art class. Students are expected to be proficient in 2D

Processes. Students create a substantial (20-24 pieces) portfolio of finished artwork which could be part of a capstone project. Prerequisite: Two years of art classes.

IB Group 6: The Arts

BMHS ONLY		Grades 11, 12	1 credit per year
AR8856ICEIB	IB Visual Art HL Y1		
AR8904ICEIB	IB Visual Art HL Y2		
AR8905ICEIB	IB Visual Art SL Y2		
*[Graduation Requirement: Fine Arts]			

IB Art is a studio-based art course that highlights the creative process as a method for learning. Students develop 2D, 3D, or time-based art products as a result of skill development and artistic inquiry. Students focus on their own thinking and art making processes. Students document their learning in written and visual formats as evidence of in-depth research into chosen areas of interest. Throughout the course emphasis is placed on all stages of the creative process: plan and practice; create; revise; present; reflect. Students are encouraged to be independently motivated, as they investigate the history and practice of a chosen art form. Students form a thesis across cultures, time periods, and disciplines to unite their work throughout the course. Students will learn how to connect research and art creation that expresses personal meaning within a cultural, historical and discipline-based context. In addition to learning how to appreciate and evaluate their own work and that of others, students will be encouraged to stretch and explore their own work and share it with an audience through critiques, exhibitions, and presentations.

SL IB ART: Over the course of the year, students experiment with various media, techniques, processes, and styles. Gradually, they are asked to identify themes in their own work and determine an area of focus. Through various teacher-driven assignments, students will gain practice in taking ideas and ways of knowing from other disciplines as inspiration for artistic expression.

HL IB ART: Students concentrate their work in one or two media and focus on developing a strong, cohesive portfolio of art that explores a central thesis that shows evidence of depth and breadth of research and investigation. Thematic series are strongly recommended and occur naturally in most cases.

The IB program recommends that the class be 60 percent art production and 40 percent related research (Option A). (Or as an alternative for students interested in Art History and Research, 60 percent research and 40 percent art production (Option B)). IB Art student's summative Art exam in Studio Work is an individual art show of 10 to 15 works. Students are expected to participate in all educational field experiences, and in gallery exhibitions, especially during their senior year.

BMHS ONLY		Grades 11, 12	1 credit per year
AR8913ICEIB	IB Film HLY1		
AR8915ICEIB	IB Film SLY1		
AR8914ICEIB	IB Film HLY2		
AR8916ICEIB	IB Film SLY2		
*[Graduation Requirement: Fine Arts]			

The creation, presentation and study of film requires courage, passion and curiosity: courage to create individually and as part of a team, to explore ideas through action and harness the imagination, and to experiment; passion to communicate and to act communally, and to research and formulate ideas eloquently; curiosity about self and others and the world, about different traditions, techniques and knowledge, about the past and the future, and about the limitless possibilities of human expression through the art form. At the core of the IB film course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis that is achieved through practical engagement in the art and craft of film.

Science Courses

SC3445HAE6	Honors Cosmic Evolution (Lab Science)	Grades 10, 11, 12	1 Credit

*[Graduation Requirement: Chemistry / Physical Science (Lab)]

How did we get here? Where did the universe come from? How is it that we are just a blip on the 14 billion year history of existence? Honors Cosmic Evolution is an integrated science course about the story of the formation of the universe and the Earth, with a focus on the study of how systems develop and change in the assembly and composition of radiation, matter, and life throughout the history of the Universe. There are interdisciplinary intersections with Honors Survey of World History.

SC3447GAE6	Science of Sustainability (Lab Science)	Grades 11, 12	1 Credit

*[Graduation Requirement: Biology/Life Science (Lab)]

This environmental science course offers the opportunity to learn about the scientific underpinnings of sustainability and about sustainability practices around the world. In addition to studying and researching sustainability, students will also practice sustainability through lab experiences in our garden, kitchen, and local and global communities. Some years, this course will run in conjunction with Eco-Study Tours to various countries.

SC3326GAE	Biology (Lab Science) (CGS)	Grades 9, 10, 11, 12	1 Credit
SC3329HAE	Honors Biology (Lab Science) (CGS)	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: Biology/Life Science (Lab)]

Biology allows students to explore real-world problems and develop potential solutions using critical thinking, inquiry and constructive collaboration skills. Students will explore biological concepts that include: the structure and function of cells, how organisms use matter, genetics, ecology, how organisms adapt and develop over time and global change. Each unit will focus on a central phenomena that students will create solutions for using the information they learn throughout the unit. Students will learn to appreciate and respect the ideas of others, gain ethical-reasoning skills and further develop their sense of responsibility as members of local and global communities.

SC3348GAE	Chemistry with EIPS (Lab Science) (CGS)	Grades 10, 11, 12	1 Credit
SC3341HAE	Honors Chemistry with EIPS (Lab Science) (CGS)	Grades 10, 11, 12	1 Credit

*[Graduation Requirement: Chemistry/Physical Science (Lab)]

How were we made from stardust? What role does chemistry play in our everyday lives? How is human activity impacting chemical processes in the natural world? Chemical science will cover the fundamentals of chemistry, including the electronic structure of atoms, various types of reactions, and bonding. Emphasis is placed on a concept-based approach with a high level of inquiry that drives independent thinking and global citizenship. Recommended C or better in the prerequisite courses. Prerequisite: Integrated Math A Y1 or Algebra 1 or equivalent.

SC3446HAE6	Honors Applied Physics Lab (CGS)	Grades 11, 12	1 Credit

*[Graduation Requirement: Chemistry/Physical Science (Lab)]

Real-world applications of physics and engineering are inseparable. However, typical high-school physics classes hardly ever take full advantage of the linkages between the two. Applied Physics Laboratory (APL) builds on the foundation of basic physical theory. The theoretical curriculum is streamlined to allow ample class time for hands-on, applied projects emulating engineering industry standards. The fundamental goal of this course is to convey "textbook" knowledge through applied examples by creating an internship-like environment in the classroom. This class will meet all NGSS Physics DCIs and crossflow into engineering DCIs, while pulling in the SEPs and CCs. An unparalleled alternative to standard high school Physics designed directly by Fortune 500 engineers in the spirit of MIT's Conceive-Design-Implement-Operate (CDIO) initiative.

IB Group 4: Science

SC3430ICE	IB Physics HL Y1 (CGS)	Grades 11, 12	1 credit per year
SC3432ICE	IB Physics HL Y2 (CGS)		BMHS ONLY
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Physics HL is an in-depth and rigorous Physics course in which students will learn concepts and methods of physics and develop analytical and experimental skills. Topics of study include mechanics, oscillations and waves, optics, heat and thermodynamics, fluid physics, electricity and magnetism, atomic and nuclear physics, relativity, etc. This course will be algebra and trigonometry based. Lessons will consist of lecture, group work, problem solving and experimentation, enabling students to develop their thinking, reflection, inquiry and communication skills while developing their knowledge of physics as well as their knowledge of the world through physics. Prerequisites: Honors Integrated Math C Y2 or teacher recommendation.

SC3431ICE	IB Environmental Systems and Societies SL Y1 (CGS)	Grades 11, 12	1 credit per year
SC3433ICE	IB Environmental Systems and Societies SL Y2 (CGS)		BMHS ONLY
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Environmental Science is an extensive two-year study of human interactions with planet earth, through a global and multicultural lens. This course will maintain the rigor and expectations of an introductory environmental science course at any higher learning institution. In addition to traditional instruction and labs, students will be challenged to become self-guided learners, developing their own projects and research activities throughout the course. The goal of this course is to: (1) provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, and (2) to require students to think critically about information and issues, and to problem solve, with the foresight to weigh the risks, rewards, and ethics of any solution. Core topics will include earth systems and resources, ecosystem structures, diversity, and resiliency, population dynamics, sustainability of modern land and water use, energy resources and consumption, pollution, global climate change, and international environmental law. Finally, this course will get students outside of the classroom and into the natural world, visiting locations, interacting with the environment, and addressing contemporary issues in the proper setting.

SC3438ICE6	IB Biology SL Y1 (CGS)	Grades 11, 12	1 credit per year
SC3439ICE6	IB Biology SL Y2		BMHS ONLY
*[Graduation Requirement: Science Related Course; STEM Related Course]			

IB Biology is a Standard Level course that fulfills the science requirement for the International Baccalaureate Diploma Programme (DP). The Biology SL course will provide students with higher-order investigative experiences and activities to promote a deeper understanding of critical concepts in Biology. Such concepts will include basic biochemistry, cell structure and function, genetic patterns of inheritance, plant form and function, evolution, ecology, animal physiology and the international nature of science. It will emphasize the development of inquiry skills and higher order thinking via experiential learning in both a classroom and laboratory settings. Students will be required to demonstrate knowledge in experimental methodology, data collection, and the interpretation of experimental data. The classroom environment will stimulate student open-mindedness by providing authentic application to the biology content, thus enabling students to make broad connections to how these biological concepts are applicable to the global community. Theory of Knowledge concepts and global connections will be discussed and integrated throughout the course.

SC3452ICE6	IB Sports, exercise and health science SL Y1	Grades 11, 12	1 credit per year
SC3453ICE6	IB Sports, exercise and health science SL Y2		BMHS ONLY
*[Graduation Requirement: Science Related Course; STEM Related Course]			

Sports, exercise and health science (SEHS) is an experimental science that combines academic study with the acquisition of practical and investigative skills. It is an applied science course with aspects of biological and physical science being studied in the specific context of sports, exercise and health. Moreover, the subject matter goes beyond the traditional science subjects to offer a deeper understanding of the issues related to sports, exercise and health in the 21st century. Apart from being worthy of study in its own right, SEHS is a good preparation for courses in higher or further education related to sports fitness and health and serves as useful preparation for employment in sports and leisure industries. Offered through our partnership with BMHS.

SC3385GAC	Forensics (CGS)	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Science Related Course; STEM Related Course]			

Forensics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Discussion in this course will be limited to only those areas of chemistry, biology, physics, and geology that are useful for determining the value of crime scene and related evidence. Work in this course will center around the science and technology of evidence collection. This course will be a comprehensive review of biology, chemistry, physics and other science topics. Topics covered will include fingerprinting, body fluids, DNA typing, fire tread analysis, hair and fiber analysis, metallurgy, polygraph testing, ethics, and legal issues. **Prerequisite: Biology and Chemistry.** Offered through our partnership with BMHS.

Physical Education and Wellness / Health Education and Safety

PE9001GAC	Physical Education (CGS)	Grades 9, 10, 11, 12	0.5 Credit
PE9002GAC	Physical Education (CGS)	Grades 9, 10, 11, 12	0.5 Credit
*[Graduation Requirement: Physical Education and Wellness]			

This course is a comprehensive program that teaches students the skills and concepts necessary to lead a healthy lifestyle via learning how to use various fitness equipment as well as learning how to develop and complete challenging workouts with one's own body based on the individual's level of fitness. Students will also participate in group fitness games and activities, especially games enjoyed by our sister schools around the globe. There is an emphasis on valuing physical activities for health, enjoyment, challenge, self-expression and/or social interaction.

PE9105GAC	Health Education 1 (CGS)	Grades 9, 10	0.5 Credit
PE9106GAC	Health Education 2 (CGS)	Grades 11, 12	0.5 Credit
*[Graduation Requirement: Health and Safety]			

The health courses develop the concept that a person's health is greatly influenced by the kind of information that a person has and the way this information is used in making decisions about the individual's life. Life skills integrated throughout coursework are: accessing reliable information, advocacy, analyzing influences, decision making, goal setting, and not limited to student self-management. The Health Curricula focuses on Four State standards: Healthy and Active Life, Injury and Disease Prevention, Human Growth and Development, Substance Abuse Prevention.

Specialized Education

BMHS ONLY			
PE9009GAC6	Peer Assisted PE (CGS)	Grades 9, 10, 11, 12	.5 Credit
AR8814GRE	Peer Assisted Art (CGS)	Grades 9, 10, 11, 12	1 Credit
AR8815GRE	Integrated Culinary Arts (BMHS)	Grades 9. 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Students with disabilities are integrated into Physical Education, Health, Art, therefore providing access to adapted coursework supported by the teaching team and peer mentors in consultation with special educators. In addition, peer mentors receive valuable experience in career exploration for those students interested in pursuing a career in general or special education, physical/occupational therapy, and other health related fields. Prerequisite for peer mentors: previous art course or PE/Health Course or previous culinary arts course.

NK9408GRE	Academic Assistance (CGS)	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement per PPT]			

Students will receive small group supplementary instruction focusing on the IEP goals in the areas of executive functioning skills, academic self-management skills, self-advocacy, note taking, research and written, oral or visual presentation skills. Time management skills are addressed to support independent completion of coursework, projects and homework assignments as applied across general education curriculum areas. Placement in this course is based on the recommendation of The Planning and Placement Team as designated in the students' Individual Educational Plan consistent with goals and objectives.

Enrichment Opportunities

Additional Course Offerings

CGS students are eligible to take all IB classes through BMHS. In addition to music classes, JROTC classes, and additional World Languages classes, additional courses may be offered in cooperation with BMHS, if enough CGS students are interested in a particular course.

AD9355GAC6	Study Tour	Grades 10, 11, 12	0.5 Credit

For those students who attend a CGS Study Tour, a grade will be given based on the student's study tour project, including participation in the study tour seminars, after school meetings, the study tour itself, the research project, and keeping up with work missed while on the study tour, among other things.

AD5590GAE6	Capstone Experience	Grades 9, 10, 11, 12	1 Credit

All students must complete a Capstone project in order to graduate. CGS Students will have several avenues through which they can complete their capstone project: study tours, hosting, global engagement action project, IBDP or IBCP, or through opportunities within specific courses. Grade 9 and 10 capstone modules will appear in World History, World Literature, and Levels 1 and 2 languages.

Pathways in Technology Early College

P-TECH Norwalk is a high school that fosters an inclusive culture and embraces diversity, civility and multiculturalism. P-TECH prepares its graduates to solve problems and apply new technologies within an interconnected and evolving global environment and will strive to ensure that every student has access to engage in a free, authentic, education-based work experience so they may become fundamental, functioning members of a diverse, ever-changing global economy.

The mission of P-TECH is to build an academic community whose members have diverse cultures, backgrounds and life experiences. We will educate them in ways that lead to fulfilling careers and develop skills to become lifelong, passionate investigators. At P-TECH, we will work to educate the nation's future leaders in information technology and software engineering while preparing them for professions that don't yet exist. Further, we will seek to expand the frontiers of computer systems and encourage technological innovation while fostering academic excellence and scholarly learning in a project-based, culturally relevant, inclusive learning environment.

P-TECH Norwalk's goal is to prepare students for the ever-changing workplace by developing professional skills and STEM knowledge. Our students have access to a great support system with the help of counselors, teachers, IBM mentors, and like minded classmates. These professional mentors allow students to interact with like-minded adults working in a particular field and to learn about the modern workforce. Along with encouraging student interests, mentors also help students understand what they want to do after college.

P-TECH Norwalk allows students the opportunity to graduate from high school and earn an Associate in Applied Science (AAS) degree from Norwalk Community College in as little as four years. P-TECH Norwalk offers three possible associate degrees in Computer Science: Software Engineering, Web Development, and Mobile Programming. These degrees are some of the most sought-after in the job market today and are very beneficial to anyone looking for a job.

HIGH SCHOOL PATHWAYS

Network Systems

In this pathway future Computer Hardware Engineers will research, design, develop, and test computer systems and components such as processors, circuit boards, memory devices, networks, and routers. These P-TECH engineers will discover new directions in computer hardware, which generate rapid advances in computer technology.

Web and Digital Communications

In this pathway future Computer Software Engineers will focus on discovering, creating, and designing a practical solution to a problem with a system. Future Software engineers will learn the process of analyzing user needs and designing, constructing, and testing end-user applications that will satisfy these needs through the use of software programming languages. Here, P-TECH learners will apply engineering principles to software development.

Skills Build

In this pathway P-TECH students will learn a combination of abilities, qualities and experiences that they can apply to perform tasks well and better support the discrete skill learned across the other pathways. Students will learn soft skills such as interpersonal skills, organization and leadership as well as hard skills technical skills such as research, computer programming, accounting, excel, professional writing and more.

Programming and Software Development

The programming and software development pathway will prepare future programmers to design, develop, implement and maintain computer systems and software. P-TECH graduates will be prepared for computer engineering careers or degrees that require knowledge of computer operating systems, programming languages, and software development.

Individual Studies

In this pathway, P-TECH Students pursuing the Individual Studies in Computer Studies pathway can build a comprehensive concentration in the area of Computer Science and Technology in order to be proficient in a broad range of programs, such as Computer Science, Cyber Security, Information Technology, Information Systems, Web Development, and Software Engineering.

Network Systems	Programming and Software Development	Web and Digital Communications	Skills Build	Individualized P-TECH Studies
4 Courses	4 Courses	4 Courses	4 Courses	4 Courses
Computer Science Essentials TEALS Drone Engineering & Operations Introduction to Java Introduction to Robotics Computer Construction and Repair	Exploring Computer Science Computer Science Essentials TEALS Software Design and Integration I AP Computer Science Principles TEALS AP Computer Science A TEALS Video Game Design	Exploring Computer Science AP Computer Science Principles Introduction to Java Cybersecurity TEALS Two-Dimensional Design (ART 121) Graphic Design (GRA 151) Web Development (CST 153)	Workplace Learning 1 Workplace Learning 2 Workplace Learning 3 Cooperative Work Experience Honors Venture Capital: Business Development Principles of Financial Literacy Excel-erate Money Wise, Future Ready Sports and Entertainment Marketing	Students in the General Studies Pathway take a multidisciplinary approach to education.

NCC AAS DEGREES

Mobile Programming

The Mobile Programming degree teaches students fundamental concepts as well as fosters preparation for tomorrow's programming needs. Course work is focused on programming in heterogeneous platform environments through multiple programming languages, and development of both written and verbal communication skills needed in all areas of the business community.

Software Engineering

The Software Engineering degree emphasizes the complete lifecycle of the software development process. Students learn how to design, develop, test, deploy, and maintain software using rigorous software engineering practices. Students are taught how to leverage technology to create flexible applications and to address the challenges that arise during the development process.

Web Development

The Web Development degree focuses on coding and design aspects of web development. Students gain the skills to implement all facets of web development from design through implementation and are prepared for technical positions within the Computer Science field. Course work is focused on creating web sites and programs that use an integrated development environment (IDE) to create web sites and other programs.

NCC CERTIFICATES

Computer-Aided Design (CAD)

The CAD certificate prepares students for the career options in industry that requires CAD skills. Students will learn to prepare 2D drawings and create 3D solid models using computer applications widely used by the industry. Students will be able to interpret and read engineering drawings, demonstrate an understanding of orthographic projection and create 2D drawings for solid objects, and create 3D models and assemblies and convert 2D drawings to a 3D model. (6 College Credits)

Smartphone App Development

This Smartphone App Development certificate prepares students to plan, design, code, test, and debug solutions to programming problems using a variety of programming languages. Students completing the program will be able to create applications on a variety of devices and programs on the device of their choice on platforms that include Apple iPhone & Google Android OS. (14 College Credits)

Web Developer

The Web Developer certificate provides students with training in the emerging technologies of the Internet. Upon successful completion of all program requirements, students will possess the ability to build a commercial or generic website, develop web pages using low level code and development software packages, and support web pages with server-side java programming and other products. (16 College Credits)

Course Descriptions

Business

Workplace Learning 1	Grade 9	.5 Credit

Workplace Learning 1 (WPL 1) supports students in college and career-readiness. In this course, students develop essential critical thinking, problem-solving, communication and leadership skills that are necessary for success in both their college and career paths. Workplace Learning also develops students' social-emotional skills, such as: self-confidence, grit, persistence, optimism, self-motivation, initiative and resilience. Through WPL, students have the opportunity to communicate with IBM Mentors via an on-line forum, attend guest lectures and visit IBM sites. The essential skills developed in Workplace Learning 1 include: Communication (interpersonal, presentation, interpretative, verbal), Collaboration (demonstrate active listening, ask questions, share resources, stay on task), Analytical Thinking (research, interpret data, solicit expert advice, input and opinions, brainstorm), Self-Management (demonstrate empathy, practice time management, mindfulness and self-care, demonstrate accountability for commitments and actions, demonstrate self-regulation), Entrepreneurship (ask questions), Responsible Leadership (show empathy, exhibit integrity), and Agility and Cognitive Flexibility (exhibit a growth mindset). [Graduation Requirement: Related Course]

Workplace Learning 2	Grade 10	.5 Credit

Workplace Learning 2 (WPL 2) builds on the topics and skills covered in WPL 1. In this course, students continue to develop essential critical thinking, problem-solving, communication and leadership skills that are necessary for success in both their college and career paths. Workplace Learning also develops students' social-emotional skills, such as: self-confidence, grit, persistence, optimism, self-motivation, initiative and resilience. Through WPL, students have the opportunity to communicate with IBM Mentors via an on-line forum, attend guest lectures and visit IBM sites. The essential skills developed in Workplace Learning 1 include: Communication (non-verbal), Collaboration (critique constructively , delegate, manage meetings, stay on task), Analytical Thinking (organize and integrate information, make decisions based on evidence including research, data and expert input , set and test theories, problem solve), Self-Management (demonstrate cultural awareness and intelligence, mindfulness and self-care), Entrepreneurship (exhibit curiosity (ask questions and probe deeper), demonstrate a willingness to learn, show enthusiasm), Responsible Leadership (demonstrate accountability to self and others, foster collaboration), and Agility and Cognitive Flexibility (react proactively to change). Prerequisite: Workplace Learning 1 [Graduation Requirement: Related Course]

Workplace Learning 3	Grade 11	.5 Credit

Workplace Learning 3 (WPL 3) builds on the topics and skills covered in WPL 1 and WPL 2. Students continue to develop and practice critical thinking, problem-solving, communication and leadership skills. Key areas of focus in WPL 3 are the practical application of employment related skills and an understanding of the real-world work environment, as well as career options and pathways. Students enrolled in WPL 3 gain first-hand knowledge of the nature of the work force with their experiences integrated into the curriculum. This final course in the WPL series, prepares students for a paid, skills-based internship with IBM or other industry partners. Students are eligible for internship based on several factors, including but not limited to, successful completion of the WPL course sequence and enrollment in college courses. The essential skills developed in Workplace Learning 3 include: Collaboration (delegate, manage meetings, build consensus/negotiate), Analytical Thinking (set and test theories, problem solve), Self-Management (practice prioritization or professional and personal commitments, mindfulness and self-care), Entrepreneurship (take initiative to research (act) independently, test new ideas, demonstrate perseverance, innovate and create), Responsible Leadership (demonstrate a service-mindset, led by example (attitudes, behaviors, follow-through), imitative action for self and/or teams, inspire), and Agility and Cognitive Flexibility (seek out new learning, adapt, iterate on deliverables and solutions). Prerequisite: Workplace Learning 2 [Graduation Requirement: Related Course]

Cooperative Work Experience (CWE)	Grade 11, 12	1 Credit
Cooperative Work Experience Lab		**.5 Credit**

This course allows students an opportunity to assess and identify career interests, aptitudes, and options in developing a career plan. They will identify skills, aptitudes, and ethics required for employment acquisition in a competitive marketplace. Students will demonstrate mastery of the entry-level employment skills, competencies, and character of education essential for success in the workplace, including issues of diversity, expectations, trends, and labor regulations, as well as demonstrate how academic knowledge and skills are applied to the workplace, personal life, and life-long learning, while gaining an understanding of economic concepts that influence personal, business, and government decisions. [Graduation Requirement: Related Course]

Excel-erate!	Grade 10, 11, 12	.5 Credit

Upon successful completion of this course, you will be able to create and develop Excel worksheets and workbooks in order to work with and analyze the data that is critical to the success of your organization. Students will be able to perform calculations, modify and format a worksheet, print and manage workbooks. [Graduation Requirement: STEM credit, Related Course]

Honors Venture Capital: Business Development	Grade 10, 11, 12	.5 Credit

This course covers the development process of a new venture. It begins on a conceptual level, then addresses the fundamentals such as financing the new venture, competitive positioning, branding and imaging, insurance and regulatory requirements, marketing, protecting intellectual property, the legal entity structure, the website development components and cost, product sourcing, etc. The class will teach how to pitch the new venture for competitions or to capital providers. [Graduation Requirement: Related Course]

Money Wise - Future Ready	Grade 9, 10, 11, 12	.5 Credit

This course will help students develop a thorough understanding of the concepts and theories that apply to stock market trading of stocks, bonds and mutual funds. Through an on-line investment simulation, students will learn how to research financial information about corporations, develop and manage an investment portfolio, buy and sell stocks on an exchange, and to evaluate market performance with market indexes. In this course students will also plan for financial success with a focus on credit and insurance: types of credit, managing credit, paying for college, insurance, and behavioral finance/financial pitfalls. Students will develop decision-making and goal setting skills, understanding the relationship between career choices and income, and utilizing credit wisely. Students will also learn the most effective way to make their money grow with the help of compound interest and intelligent investing. [Graduation Requirement: Financial Literacy; Related Course]

Principles of Financial Literacy	Grade 9, 10, 11, 12	.5 Credit

This course prepares students to plan for financial success with a focus on budgeting and banking: taxes, saving/investing, checking accounts and budgeting. Students will develop decision-making and goal setting skills, understanding the relationship between career choices and income, creating budgets, analyzing paychecks. Students will also learn the most effective way to make their money grow with the help of compound interest and intelligent investing. [Graduation Requirement: Financial Literacy; Related Course]

Sports and Entertainment Marketing	Grade 10, 11, 12	.5 Credit

Students will be introduced to marketing concepts as they relate to the ever-changing sports and entertainment industries. This course examines the business of sports in the professional, college, and amateur fields, as well as the vast field of entertainment, focusing on their impact on companies, players, and consumers. Topics will include all 7 Marketing functions and focus on the Marketing 4 P's; Price, Product, Promotion and Place. Students will also discuss other related topics such as imaging, licensing, branding and market research. The course will offer field trips, guest speakers and self-directed projects which allow students to apply creativity in creating marketing campaigns to help a business succeed. [Graduation Requirement: Related Course]

Freshman Seminar - NCC FYE 101 College & Career Success (CCS 1001)	Grade 10, 11, 12	.5 Credit

This course prepares students for success in college and beyond. Students will develop self-awareness and an understanding of how to navigate college, value diversity, develop skills and strategies for success, and explore career options. Essential academic skills including information literacy, critical thinking, and effective communication will be addressed. By the end of this course, students will create a personalized academic and career success plan.

Computer Science and Technology

Exploring Computer Science	Grade 9, 10, 11, 12	.5 Credit

Exploring Computer Science prepares students for learning a programming language. The course will develop students ability to problem solve through programming. Topics covered will include an overview of computer architecture, computer hardware, different types of software, flowcharts, pseudocode, and algorithms. In addition, students will learn how to solve very basic problems using JAVA. [Graduation Requirement: STEM Related Course; Digital Literacy]

Computer Construction and Repair	Grade 10, 11, 12	.5 Credit

This course is interactive and provides students with the opportunity to assemble a multimedia computer. An overview of available career and certification options will be provided through a heavy emphasis on technical readings and practice exams. topics covered will include the different types of operating systems, motherboards, CPUs, power supplies, expansion cards, and memory. Students will also research current industry standards for computer construction as older components are updated or become obsolete. [Graduation Requirement: STEM Related Course; Digital Literacy]

Cybersecurity - TEALS	Grades 10, 11, 12	.5 Credit

A course that explores the fundamental concepts or applied skills of cybersecurity and may involve project-based labs in a secure environment or virtual range. [Graduation Requirement: STEM Related Course; Digital Literacy]

The Realities of Artificial Intelligence	Grade 10, 11, 12	.5 Credit

A semester course that explores the fundamental concepts or applied skills of data science, Machine Learning, and Artificial Intelligence. You will learn about training data, and how to use a set of data to discover potentially predictive relationships. As you build the movie recommendation system, you will learn how to train algorithms using training data so you can predict the outcome for future datasets. You will also learn about overtraining and techniques to avoid it such as cross-validation. All of these skills are fundamental to machine learning. [Graduation Requirement: STEM Related Course]

Drone Engineering and Operation	Grade 9, 10, 11, 12	.5 Credit

Drone Engineering is a dynamic course designed to immerse students in the world of unmanned aerial vehicles (UAVs) through a hands-on, project-based experience. Students will gain a comprehensive understanding of the components, systems, and operational principles that define UAVs. This includes aerodynamics, propulsion systems, flight dynamics, and payload integration This course integrates principles from Science, Technology, Engineering, and Mathematics (STEM) to equip students with foundational knowledge and practical skills essential for drone design, operation, and application in various industries. Throughout the course, emphasis will be placed on developing critical workforce skills such as project management, teamwork, communication, and presentation skills to better prepare students for college and career. [Graduation Requirement: STEM Related Course]

Honors Introduction to Engineering Design (PLTW)	Grades 9, 10, 11, 12	1 Credit

This course introduces students to the basics of sketching. Lettering, orthographic projection, and 3D Modeling. Students will practice these skills on the drafting board and be introduced to Computer Aided Drafting (C.A.D.). The knowledge and skills developed can be applied to any of the fields of engineering including civil, electrical and mechanical. Topics include the design process, research and analysis, teamwork, communication methods and engineering standards and technical documentation. This course follows the Project Lead the Way curriculum which will allow students who meet the requirements to receive college credit. [Graduation Requirement: STEM Related Course; Digital Literacy]

Introduction to Java	Grade 9, 10, 11, 12	.5 Credit

This introduction to the programming language JAVA covers the basics along with programming logic. A history of the development of programming languages and the Java language will be covered. [Graduation Requirement: STEM Related Course; Digital Literacy]

Introduction to Robotics	Grade 10, 11, 12	.5 Credit

Robotics is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots in addition to learning the fundamentals of open loop systems using analog and digital sensors. Course information will be tied to lab experiments; students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robot contest. We will be using a VEX Robotic Design System as our platform. Students will complete a variety of robot construction and programming activities. [Graduation Requirement: STEM Related Course]

Software Design and Integration 1	Grade 9, 10, 11, 12	.5 Credit

Software Design and Integration will introduce students to how corporate software projects are developed, managed, integrated and fielded. An interface-oriented approach to software development eliminates the need for any prior coding experience. Students will navigate this multifaceted world following a project-based road map and acquire key professional skills after creating apps, games, and control algorithms. Software Design & Integration students will establish a solid foundation in software development and more importantly, will gain a big-picture understanding of interface management and the engineering process at large. [Graduation Requirement: STEM Related Course; Digital Literacy]

Video Game Design	Grade 9, 10, 11, 12	.5 Credit

This course will introduce students to the world of video game design and development, learning all aspects of the creative, business, and technological components. Students will examine history, structure, and strategy of game development. Overall creation of the computerized video game will include storytelling, characters, game play, levels, and audio content. Participants will learn key programming constructs using Game Maker software. By the end of the course, students will have created a computerized video game. This course is an introductory-level course that does not require a background in computer programming. [Graduation Requirement: STEM Related Course; Digital Literacy]

AP Computer Science Principles-TEALS	Grades 9, 10	1 Credit

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Prerequisite: Algebra 1 [Graduation Requirement: Math; STEM Related Course; Digital Literacy]

AP Computer Science A -TEALS	Grades 10, 11	1 Credit

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures.. [Graduation Requirement: Math; STEM Related Course; Digital Literacy]

Web Development and Design I – NCC CST 153 (CSC 1271) **1 Credit**

This course provides the entry into the fast-moving website development industry. With its heavy hands-on mode of delivery, students will learn HTML 5, Cascading Style Sheets 3 (CSS 3), and be exposed to JavaScript. Adhering to standards, specifically from the World Wide Web Consortium (W3C) and the European Computer Manufacturers Association (ECMA), will play a dominant role in the creation of web pages that are both platform and browser independent. Programming laboratory projects in a closed laboratory environment are supervised by the instructor. Three hours lecture; two hours of laboratory. Prerequisite: eligibility for ENG 1010 [Graduation Requirement: Math; STEM Related Course; Digital Literacy]

Web Development and Design II – NCC CST 252 (CSC 2272) **1 Credit**

As a continuation of the Web Development and Design I class, this course continues the knowledge and skills development of a web developer. The course covers advanced CSS and JavaScript in detail. CSS skills include mobile first design principles, positioning elements, and CSS frameworks. JavaScript fundamentals such as data types, functions, arrays, loops, and conditional statements are included. Asynchronous JavaScript and XML (AJAX) is included. A large website project will be built. Three hours lecture; two hours of laboratory. Prerequisite: CST 153 [Graduation Requirement: Math; STEM Related Course; Digital Literacy]

Web Development with PHP– NCC CSC 257 (CSC 2275) **1 Credit**

This course will introduce students to web development using PHP. Students will learn how to design web sites according to the MVC model. Object-oriented PHP will serve as the means by which the model component of the MVC- based web application is implemented. Session management will be used to deliver customized content. Students will also use the MySQL database in conjunction with PHP to create dynamic web applications. 3 hours lecture, 2 hours lab.. Prerequisite: CSC 226 (CSC 2213) [Graduation Requirement: STEM Related Course; Digital Literacy]

Database Development and Design I– NCC CSC 233 (CSC 1231) **1 Credit**

Relational database development including data modeling, database design and database implementation. The student learns to create and alter tables, retrieve, insert, update, and delete data using a fourth generation language in a supervised laboratory setting. Uses of database technology, understanding DBMS and RDBMS concepts, normalizing designs, transforming of logical design into physical databases, embedded SQL, and the role of the DBA are also covered. Three hours lecture; two hours of laboratory. Prerequisite: eligibility for ENG 1010 [Graduation Requirement: STEM Related Course}

Database Development and Design II– NCC CSC 234 (CSC 2233) **1 Credit**

This course is designed to teach student the architecture (logical and Physical) structure of the Modern Database Management Systems. As each student is required to have a working knowledge of the Relational Database Model as well as SQL programming skills, this course focuses on the administration of a DBMS administrator including creation, management, maintenance, and operation of a database management system. 3 hours lecture, 2 hours lab Prerequisite: CSC 234 (CSC 2233) [Graduation Requirement: STEM Related Course}

Programming Mobile Devices I – NCC CSC 262 (CSC 2252) **1 Credit**

The course will introduce students to the various platforms in use on small and mobile devices. Platforms will include Apple iPhone and Google Android OS as well as web development in the context of the small device. Students will create cross-platform applications for each platform. 3 hours lecture, 2 hours lab. Prerequisite: CSC 108 (CSC 1201) [Graduation Requirement: STEM Related Course}

Programming Mobile Devices II – NCC CSC 263 (CSC 2253) **1 Credit**

This course enables the student to specialize in development on a single device. The device is chosen prior to offering the class. All aspects of the development are covered in the context of the device. Three hours lecture; two hours of laboratory. Prerequisite: CSC 262/CSC 2252 ([Graduation Requirement: STEM Related Course}

Introduction to Programming – NCC CSC 108 (CSC 1201) **1 Credit**

This course covers Fundamentals of programming and program development techniques. Topics include data types, functions, storage class, selection, repetition, pointers, arrays, and file processing. Programming laboratory projects in a closed laboratory environment are supervised by the instructor. Prerequisite: Placement in MAT 172 [Graduation Requirement: Math; STEM Related Course; Digital Literacy]

Object Oriented Programming – NCC CSC 226 (CSC 2213) **1 Credit**

The features and tools of an object-oriented programming language like Java will be covered in detail. The object- oriented model will be used in developing object-based and object-oriented programs. Environment, classes, arrays, strings, inheritance, graphics, exceptions, I/O streams, and the APIs will be discussed. Programming laboratory projects in closed laboratory environment, supervised by the instructor, will be assigned. Three hours of class work, two hours of laboratory per week. Prerequisite: CSC 108 (CSC 1201) [Graduation Requirement: STEM Related Course; Digital Literacy]

XML for the Worldwide Web – NCC CST 255 (CSC 2276) **1 Credit**

The features and tools of an object-oriented programming language like Java will be covered in detail. The object- oriented model will be used in developing object-based and object-oriented programs. Environment, classes, arrays, strings, inheritance, graphics, exceptions, I/O streams, and the APIs will be discussed. Programming laboratory projects in closed laboratory environment, supervised by the instructor, will be assigned. Three hours of class work, two hours of laboratory per week. Prerequisite: CSC 108 (CSC 1201 or CST 252 (CSC 2272)) [Graduation Requirement: STEM Related Course; Digital Literacy]

Introduction to Operating Systems – NCC CST 121 (CIS 1104) **1 Credit**

The objective of the course is to provide the student with an understanding of how an operating system works. Students will learn operating systems concepts, how to use Windows advanced features, and how the operating systems interact with hardware both locally and on a network. Topics covered will include troubleshooting and customizing Windows, how to set up a local network, security strategies, and an overview of the more popular operating systems on the market today.. Prerequisite: none [Graduation Requirement: STEM Related Course; Digital Literacy]

Introduction to Bioinformatics - NCC CSC 111 (CSC 2219) **1 Credit**

This class is the intersection between volumes of genetic information, information technology, a bit of math and molecular biology. This is an introduction to the processes that are historically, currently and with some effort - possibly predictive expression information of DNA, RNA and proteins found in organisms. Molecular biology topics will be covered beyond the college biology course with the goal to help the student understand what information is available to any cell to adapt to stay alive. This class is designed as a "projects" course where students will work as individuals within teams to answer specific questions. The computing and mathematical processes that allow this work to be completed will be examined to appreciate the thought process required to address specific topics. Prerequisites: CSC 108, MAT 172 OR MAT 201, or permission of the instructor. Corequisite: BIO 121 [Graduation Requirement: STEM Related Course; Digital Literacy]

Software Engineering Methods - CSC 265 (CSC 2218) **1 Credit**

This course explores the methods of software application development following the software processes required for the production of high-quality software. Techniques for creating documentation and using software development tools will be presented. Students will understand and apply the practices of lean and agile development, including stakeholder feedback, use cases, user stories, iterative development, stable/consumable code, continuous integration, test driven development, and value stream maps. Prerequisite: CSC 262 or CST 252 or CSC 226 [Graduation Requirement: STEM Related Course; Digital Literacy]

Introduction to Artificial Intelligence **1 Credit**

This course introduces students to artificial intelligence and machine learning programming. Topics include the history of AI, programming in Python, data structures, algorithm analysis, agile development, web frameworks, and more. Both theory and implementation of AI will be covered. Students will create programs using the fundamentals of artificial intelligence for desktop, mobile, and web. 3 hours lecture, 2 hours lab. Prerequisite: CSC 108 Introduction to Programming and CSC 233 Database Development I [Graduation Requirement: STEM Related Course; Digital Literacy]

Artificial Intelligence II – Machine Learning **1 Credit**

A continuation of Introduction to Artificial Intelligence, this course teaches students the key concepts of supervised and unsupervised learning algorithms. Students will learn how to master common methods of data processing and feature engineering, process text and images, and gain hands-on experience in programming machine learning algorithms. 3 hours lecture, 2 hours lab. Prerequisites/co-requisites: CSC 2XX Introduction to Artificial Intelligence [Graduation Requirement: STEM Related Course; Digital Literacy]

Internet Commerce Technology – NCC CSC 111	1 Credit

As a continuation of the Web Development and Design I class, this course continues the knowledge and skills development of a web developer. The course covers JavaScript in detail. Fundamentals such as data types, functions, arrays, loops, and conditionals are included. AJAX and Web 2.0 programming skills are developed. Prerequisite: Eligibility for ENG 101 [Graduation Requirement: STEM Related Course; Digital Literacy]

English

English 1	Grade 9	1 Credit

This course is an exploration of the reading-writing connection. Students will use the writing process and technology to develop writing proficiency using four core and four ancillary titles of world literature selections. Students will also work on speaking and listening, vocabulary development, comprehension strategies, and logical thinking and study skills. All students will be required to maintain a writing portfolio, keeping on file a variety of writing assignments to be reviewed periodically. [Graduation Requirement: English Credit]

Honors English 1	Grade 9	1 Credit

This accelerated English course will consist of an in-depth examination of both fiction and nonfiction. An emphasis will be placed on the various forms of discourse (e.g., persuasive, expository, narrative, and descriptive). Students will learn the components and skills associated with creating an analytical paper and close reading techniques. Students will read the required four core texts and multiple ancillary texts. All students will maintain a writing portfolio for self- and teacher-assessment of writing progress. This course will provide an intensive educational opportunity for qualified, highly-motivated students. Students are required to complete a summer reading and writing assignment in advance of taking this course. Prerequisite: Eighth-grade teacher recommendation based on student's interest and motivation. [Graduation Requirement: English Credit]

English 2	Grade 10	1 Credit

In this course, students will acquire the skills and develop the vocabulary necessary to read the major genres of literature: the novel, short story, drama, poetry, essay, and biography. Four core and four ancillary titles will be studied. Students will study the various techniques of developing and researching a topic and will write papers and develop multimedia presentations using these skills. Instruction will focus on response writing and the persuasive essay. Grammar, research, vocabulary, and oral communication skills will also be emphasized. Representative written assignments will be kept in their portfolios for periodic review. [Graduation Requirement: English Credit]

Honors English 2	Grade 10	1 Credit

This accelerated English course will consist of an in-depth analysis of challenging classical and contemporary short stories, drama, novels, poetry, non-fiction, and biographies. Selections will include, but are not limited to, the four core and four ancillary books for 10th grade. In addition, the course will stress the writing process and include an emphasis on expository, research and thesis writing. Work will be collected in a portfolio to be examined periodically. Other activities will include the acquisition of grammatical skills, the development of vocabulary, the application of literary terminology, and the development of oral communication skills. The course will provide an intensive, educational opportunity for qualified, highly- motivated students. Students are required to complete a summer reading and writing assignment in advance of taking this course. [Graduation Requirement: English Credit]

English 3	Grade 11	1 Credit

Students in this course will read major writers of American Literature from the early colonial period to the present to become aware of their cultural traditions. All students will read four core and four ancillary titles. Through their reading, discussions, vocabulary work, and writing, students will develop an awareness of their place in society and their value as an individual. Students will develop research skills and use the writing process to develop creative, analytical, and persuasive pieces. Students will maintain a portfolio of written work. [Graduation Requirement: English Credit]

Honors English 3	Grade 11	1 Credit

Students in this accelerated English course will develop the ability to examine the growth of American Literature from the colonial to the contemporary period. Through a critical analysis of the works of major American writers, students will achieve knowledge of their cultural traditions, an understanding of the development of American literary thought, and an awareness of their place in society. Titles will include, but are not limited to, the four core and four ancillary titles of the 11th grade curriculum. Students will write papers and produce multimedia presentations to increase their skills in the techniques of expository, narrative, and research writing. Work

will be collected and maintained in individual portfolios, which will be reviewed periodically. Students do intensive vocabulary study and will make use of literary terminology in their discussions and written work. This course will provide an in-depth, challenging study of American Literature for the qualified, highly motivated student. Students are required to complete a summer reading and writing assignment in advance of taking this course. [Graduation Requirement: English Credit]

Senior English Core Related Courses (2 courses required) [Graduation Requirement: English Credit]	Grade 12	.5 Credit each

- **Multimedia Journalism** - This course will introduce you to the techniques of journalism in digital media and offer you conceptual and practical tools with which to join the fray (vlog, blog, podcast, tic-toc, digital storytelling etc). By the end of the course, you should have a clear sense of the various ways journalists have taken up digital media and a sense of how you might use those media yourself. Multimedia Journalism is a collaborative production course, so by the end of the semester you will have learned a number of technical skills that will help you produce and publish online
- **Science Fiction -** This course explores the world of modern science fiction and the role it has played in our cultural imaginations over the last two centuries. Science fiction reflects humanity's relationship to technology, the environment, and the great unknown. Through reading, active discussion, and research, students will engage with the science fictional thought experiments of the past, borrowing from the genre's imaginative imperatives, and purportedly logical frameworks, to assess the potential repercussions of real-world events and of emerging technologies.

SAT Prep	Grades 9, 10, 11	.5 Credit

This course is intended to prepare students for the evidenced-based reading, writing, and math segments of the SAT. Teachers will provide students with activities in analytical thinking and with the skills and strategies associated with the evidence-based reading and writing section and the math section of the redesigned SAT. Topics covered include developing a study plan, vocabulary, sentence completion strategies, reading comprehension, and essay-writing strategies, as well as time management, scoring procedures, and strategies for managing test anxiety. Course materials may include SAT review materials, current assessment software programs, and previous standardized examinations. This course does not fulfill the graduation credit in English or mathematics. [Graduation Requirement: Related Course]

Digital Storytelling	Grades 10, 11, 12	.5 Credit

Storytelling will be a great option for any student who wants to learn more about the conventions of filmmaking and how to use various forms of technology to tell interesting and compelling stories. The course will introduce elements of storytelling and will encourage creativity and teamwork through a variety of projects such as video narratives, memoirs, poetry, short films, and more. [Graduation Requirement: Related Course]

Approaches to Film and Media Study	Grades 10, 11, 12	.5 Credit

This one-semester English related course teaches students to view, discuss, and write about films critically in order to understand the ways in which films convey meaning, express points of view, influence public opinion, and reflect the time period. Students will learn about the history of film, the basics of film theory, and the critical analysis of film. Although films will be viewed in class, students will be expected to view films at home and in the movies. Genres and movements of film include, but are not limited to, Film Noir, Impressionism, montage, science fiction/fantasy, westerns, Cinema Verite, and silent films. Possible readings include film analyses, directors' notes, texts on which films are based, screenplays, and reviews. Students will use a variety of media to respond to their viewing. [Graduation Requirement: Related Course]

Composition – NCC ENG 101	1 Credit

This course develops students' abilities to write effective essays and to reason critically. A review of grammar and syntax, as needed, is included. The goals of unity, coherence and logical development are pursued through analysis of professional and student essays and through practice of prewriting, writing and revision techniques. Students learn various organizational patterns. Students will write and revise several essays. A portfolio is required. Prerequisites: Placement determined by college entrance exam, completion of ENG 088 with a grade of B (ENG 101 traditional) or with a grade of C- or better for ENG 101/ENG 101W (Workshop), or by recommendation of ESL faculty [Graduation Requirement: English Credit]

Literature and Composition – NCC ENG 102	1 Credit

This composition course is a continuation of work on skills begun in ENG 101. Students receive further instruction in composition and write frequently in and out of class. The analytical and critical essays they produce focus on fiction, drama, and poetry. To prepare for these writing tasks, students learn how to read and appreciate various literary genres, how to interpret literature, and how to explain and support their ideas in writing. Prerequisite: ENG 101 [Graduation Requirement: English Credit]

Public Speaking – NCC COM 173	1 Credit

The course introduces students to the communication techniques needed to organize and deliver oral messages in a public setting, with emphasis on extemporaneous speeches that inform, demonstrate and persuade. Basic communication theory, including reasoning patterns and logical fallacies, is covered. Prerequisites: Eligibility for ENG 101 [Graduation Requirement: Related Course]

The Creative Voice – NCC IDS 210 (INDS 2010)	1 Credit

Defining art in its broadest sense to include visual, performance and media arts, as well as literature, music and philosophy, this course encourages students to explore the nature of creative expression. Students will learn to identify and evaluate these art forms, and, in the process, they will be asked to see relationships and make connections between various forms of creative expression. In addition to theoretical discussion of the humanities, students will engage in and explore their own creative processes. Prerequisite: ENG 102 (ENG 1020) [Graduation Requirement: English Credit]

Great Books – NCC IDS 230 (INDS 2030)	1 Credit

Recommended for Honors Program Candidates, this interdisciplinary Great Books seminar focuses on a variety of questions that are central to the human condition, such as What is Justice? What is Beauty? and What is Race? The methodology of textual close reading and Socratic discussion is emphasized, including the shared responsibilities of an inquisitive, dialogue-centered learning community and the communication of complex ideas that emerge from the reading of foundational texts. Prerequisite: ENG 102 (ENG 1020) [Graduation Requirement: English Credit]

Health Education and Safety

Health Education 1	Grades 9, 10	.5 Credit

The health courses develop the concept that a person's health is greatly influenced by the kind of information that a person has and the way this information is used in making decisions about the individual's life. Life skills integrated throughout coursework are: accessing reliable information, advocacy, analyzing influences, decision making, goal setting, and not limited to student self-management. The Health Curricula focuses on Four State standards: Healthy and Active Life, Injury and Disease Prevention, Human Growth and Development, Substance Abuse Prevention. Students must pass 1 credit of health and safety to graduate. [Graduation Requirement: Health and Safety]

Health Education 2	Grades 11, 12	.5 Credit

The health courses develop the concept that a person's health is greatly influenced by the kind of information that a person has and the way this information is used in making decisions about the individual's life. Life skills integrated throughout coursework are: accessing reliable information, advocacy, analyzing influences, decision making, goal setting, and not limited to student self-management. The Health Curricula focuses on Four State standards: Healthy and Active Life, Injury and Disease Prevention, Human Growth and Development, Substance Abuse Prevention. Students must pass 1 credit of health and safety to graduate. [Graduation Requirement: Health and Safety]

JROTC

The mission of the Air Force Junior Reserve Officer Training Corps (AFJROTC) is to develop citizens of character dedicated to serving their nation and community. All Aerospace Science courses strive to build better and more successful citizens through academic classes, leadership and community service opportunities, physical fitness classes, and co-curricular activities. Students who take full advantage of the program, inside and outside the classroom, will finish with experience and skills that make them highly competitive for higher education and scholarship opportunities or employment.

Cadets are required to wear the uniform once a week to all classes. In uniform, the student is required to meet USAF grooming standards as they relate to hair, jewelry, earrings, facial hair, etc. Prospective cadets should make certain they know these requirements prior to enrollment. Failure to wear the uniform or meet grooming standards will result in failure of the course.

Aerospace Science and Leadership 1:	**Grades 9, 10, 11, 12 (New Cadets Only)**	
AR9281GAE5	**Milestones in Aviation History Traditions, Wellness, and Foundations of Citizenship**	**1 Credit**

This course is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The leadership course will introduce cadets to the history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and examines the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. The Wellness program seeks to motivate cadets to lead active, healthy lifestyles beyond high school and into their adult lives.

Aerospace Science and Leadership 2:	**Grades 10, 11, 12 (Returning Cadets)**	
AR9282GAE5	**The Science of Flight, Principles of Management**	**1 Credit**

AS-200: The Science of Flight is an introductory course that focuses on how airplanes fly, how weather conditions affect flight, and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses. LE 400: Fundamentals of Management provides an introduction to basic management concepts and skills, especially as they relate to managing in a JROTC unit. Along the way, you will learn some of the history of management studies and encounter elements of more recent management research. This is a two semester course for all returning cadets.**Prerequisite: Aerospace Science and Leadership 1**

Note: Our curriculum changes annually based on a four-year cycle. Aerospace Science 1 is for new cadets and offered every year. The following are the additional academic courses covered over the cycle for returning cadets:

- Aerospace Science 2: The Science of Flight; Principles of Management
- Aerospace Science 3: Cultural Studies; Life Skills
- Aerospace Science 4: Exploring Space; Communications, Awareness, and Leadership

Mathematics

Intensified Algebra 1	Grades 9	2 Credits

In this course students examine real world problems using tables, graphs, and equations. Topics include number patterns, linear equations, proportions and percent, positive and negative numbers, writing formulas, slopes and intercepts, data analysis, systems of linear equations, common laws of exponents and probability and statistics. Successful completion gives the student one credit in mathematics and one credit for a math related course. The one additional math related credit or STEM credit does not fulfill graduation credit in mathematics. [Graduation Requirement: 1 credit Math credit and 1 credit Math Related Course]

Algebra 1	Grades 9, 10, 11, 12	1 Credit

In this course students examine real world problems using tables, graphs, and equations. Topics include number patterns, linear equations, proportions and percent, positive and negative numbers, writing formulas, slopes and intercepts, data analysis, systems of linear equations, common laws of exponents and probability and statistics. In addition, students will engage in an extensive study of systems of linear equations as well as an introductory study of quadratic equations and expressions. [Graduation Requirement: Math credit; STEM Related Course]

Integrated Algebra and Geometry	Grades 10, 11, 12	1 Credit

This course is designed with two goals. First, it develops a solid understanding of Algebra 1 material, while building foundational conceptual understanding of Geometry and Algebra 2 concepts. Second, it cultivates the essential skills and habits required to make use of mathematics, including the ability to approach challenging problems and to communicate mathematical ideas clearly. The mathematical content of the course includes more advanced applications of material from Algebra I, as well as material drawn from the traditional content of Geometry and some Algebra 2. Topics are woven throughout the course to build a deeper understanding. Prerequisite: Algebra 1 or Intensified Algebra [Graduation Requirement: Math Credit; Math Related Course; STEM Related Course]

Geometry	Grades 9, 10, 11, 12	1 Credit

This course is fully aligned to the new Connecticut Core Standards. Topics include: Transformations and the Coordinate Plane; Congruence, Proof and Constructions; Polygons; Similarity, Proof, and Trigonometry; Circles, and other Conic Sections; Extensions to Three Dimensions; and Applications of Probability. Prerequisite: Algebra 1 [Graduation Requirement: Math Credit; STEM Related Course]

Algebra 2	Grades 10, 11, 12	1 Credit

The major theme of this course is functions. The concept of functionality will be developed fully, and the course includes a study of linear, quadratic, exponential, and polynomial. Also included in this course is content with probability and statistics. Prerequisite: Intensified Algebra 1 or Algebra 1; May be taken concurrently with Geometry. [Graduation Requirement: Math credit; STEM Related Course]

Honors Algebra 2	Grades 9, 10, 11, 12	1 Credit

The operations of the complex number system, linear, polynomial, quadratic, cubic, and quartic equations, logarithms and exponents, permutations, combinations, probability, coordinate geometry, conic sections and sequences and series, will be included in the course. Students will have the opportunity to enhance their mathematical experience through various forms of technology. The topics covered in this course will help prepare students for future college math courses. Prerequisite: Intensified Algebra 1 or Algebra 1. [Graduation Requirement: Math Credit; STEM Related Course]

Precalculus	Grades 10, 11, 12	1 Credit

This course will expand the student's knowledge of functions. Polynomial, exponential, logarithmic, and trigonometric functions and their applications will be studied in depth. Also included are other topics in trigonometry, sequences and series, probability and some analytic geometry. Students will have the opportunity to enhance their mathematical experience through various forms of technology. The topics covered in this course will help prepare students for future college math courses. Prerequisite: Algebra 2 [Graduation Requirement: Math credit; STEM Related Course]

Honors Precalculus	Grades 10, 11, 12	1 Credit

All of the topics of Precalculus will be covered, with a more theoretical emphasis. In addition, the student will study rational functions, polar and parametric equations, and vectors. Prerequisite: Algebra 2 [Graduation Requirement: Math credit; STEM Related Course]

Computational Mathematics	Grades 11, 12	1 Credit

Computational mathematics focuses on developing algorithms and computational techniques to solve mathematical problems. Computers can be programmed to use the computational algorithms to perform calculations and modeling. Computational mathematicians may pursue areas of technical specialization, such as numerical analysis, optimization, and computer-aided design. Prerequisite: Algebra 2 [Graduation Requirement: Math credit; STEM Related Course]

Statistics	Grades 10, 11, 12	1 Credit

Statistics topics studied include describing data with graphs, distributions, histograms, and other graphical techniques. Students will also use statistical measures of center and spread to analyze data and graphical displays. Probability topics include: probability rules, probability distributions-discrete, binomial, Poisson, and normal distributions. Other topics studied are sampling design, sampling distributions, hypothesis testing and confidence intervals for one mean and one proportion samples using z-tests and t-tests. Prerequisite: Algebra 2 Graduation Requirement: Math Credit; Math Related Course; STEM Related Course]

SAT Prep	Grades 9, 10, 11	.5 Credit

This course is intended to prepare students for the evidenced-based reading, writing, and math segments of the SAT. Teachers will provide students with activities in analytical thinking and with the skills and strategies associated with the evidence-based reading and writing section and the math section of the redesigned SAT. Topics covered include developing a study plan, vocabulary, sentence completion strategies, reading comprehension, and essay-writing strategies, as well as time management, scoring procedures, and strategies for managing test anxiety. Course materials may include SAT review materials, current assessment software programs, and previous standardized examinations. This course does not fulfill the graduation credit in English or mathematics. [Graduation Requirement: Related Course]

Intermediate Algebra –NCC MAT 136 (MATH 1010)	1 Credit

Includes a study of functions, relations, and graphs; applications; linear functions and inequalities; quadratic and other polynomial functions; exponents and radical expressions; rational expressions and equations; and systems of equations. Department exit assessment is required. Students must earn a C- or higher to move to the next level course, MAT 146, MAT 172 or MAT 201. Prerequisite: High School Algebra 2 and appropriate placement test score [Graduation Requirement: Math credit; STEM Related Course]

College Algebra – NCC MAT 172 (MATH 1600)	1 Credit

TI graphing calculator is required. Topics include concepts of functions; numeric, algebraic, and graphic techniques as applied to the following functions: polynomial, piecewise, rational, radical, exponential, logarithmic; complex numbers; applications; and systems of equations. Topics that might be included are recursively defined functions and topics in analytic geometry. Department exit assessment is required. Prerequisite: MAT 136E or MAT 136 with a grade of C- or higher or appropriate placement test score [Graduation Requirement: Math credit; STEM Related Course]

Pre-Calculus - NCC MAT 186 (MATH 1610)	1 Credit

TI graphing calculator required. Topics include concepts of functions; numeric, algebraic, and graphic techniques applied to the following functions: polynomial, radical, rational, exponential, logarithmic, and circular/trigonometric; right triangle trigonometry and applications; trigonometric identities and equations; applications; topics in analytic geometry. Department exit assessment is required. Prerequisite: MAT 172 with a grade of C- or higher or equivalent [Graduation Requirement: Math credit; STEM Related Course]

Statistics – NCC MAT 201	1 Credit

TI graphing calculator required. Concepts of population and sample, basic experimental designs, introduction to data collection methods; organizing and describing data with graphical techniques and numerical methods; basic probability theory; discrete and continuous probability distribution; normal curves and applications; making inferences about populations (a) point estimates (b) interval estimates (c) hypothesis tests; relationships between two variables, (a) scatter plots (b) correlation (c) regression. Department exit assessment is required. Prerequisite: MAT 136E or MAT 136 with a grade of C- or higher or appropriate placement test score; eligibility for ENG 101 or permission of instructor. [Graduation Requirement: Math credit; STEM Related Course]

Discrete Math – NCC MAT 210 (MATH 1200) **1 Credit**

This course is designed to prepare math, computer science and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, proof techniques, mathematical induction, graph theory, combinatorics, discrete probability, recursion relations, elementary number theory and graph theory. Prerequisite: MAT 186 with a grade of C- or higher or appropriate placement test score; eligibility for ENG 101 or permission of instructor. [Graduation Requirement: Math credit; STEM Related Course]

Calculus I - NCC MAT 254 (MATH 2600) **1 Credit**

TI graphing calculator required. Topics include limits and continuity; derivatives; techniques of differentiation; applications of differentiation; anti-derivatives; Fundamental Theorem of Calculus and the definite integral; applications of the integral; trapezoidal and Simpson's rules. Department exit assessment is required. Prerequisite: MAT 186 with a grade of C- or higher [Graduation Requirement: Math credit; STEM Related Course]

Multilingual Learner (MLL) Education

The Norwalk Public Schools' (NPS) Family Center identifies Multilingual Learners (MLLs) through the Home Language Survey and administers the English LAS Links, Spanish LAS Links (if applicable) to determine appropriate course placement and services. Once designated as MLLs, students are tested annually on the LAS Links until they reach the State of CT Department of Education Multilingual Learner Exit Criteria. The NPS Family Center, in collaboration with school administrators, takes into consideration a student's prior educational history as individual student transcripts are reviewed for credit transfers. Recommendations are approved by the Assistant Principal in charge of registration at each high school. All MLLs and their families are invited to attend an orientation meeting to welcome them into the NPS school community and to discuss placement recommendations, services, and accepted credit transfers. In case families are unable to make said orientation, families are informed in writing by the school's Assistant Principal or their designee.

Below are the placement recommendations for MLL students in English and Math courses. Entry points may vary based on the students' transferred credits and LAS Links Placement scores.

MLL Course Placement Process for English

- New Arrivals with 0-1 years/LAS Level 1 will go into **English Foundations**. New Arrivals with LAS Level 2 will go into **English Development and/or English Literature.** New Arrivals with LAS Levels 3 or 4 go into **Transition English or English 1,** co-taught with an MLL teacher**.** Then, MLL students will proceed by following the English course sequence.
- Multilingual Learners with 2 years or more in the United States will be placed in English 1 or Transition English and co-taught with a MLL teacher.

MLL Course Placement Process for Content-area Subjects

- It is highly recommended that placement of bilingual content-area teachers be used to support MLL students. In the absence of a bilingual content-area teacher, school administrators can staff content-area classes using a co-teaching model with an MLL teacher or with a Bilingual Paraeducator.
- Bilingual Paraeducators should be assigned to a content area teacher that is not bilingual or not an MLL teacher to best support MLLs in learning the content and provide MLLs access to the curriculum.

MLL Course Sequence by Content

Subject Area	First Course (Newcomers)	Second Course	Third Course	Fourth Course
English (New Arrivals, 0-1 year completed in the U.S.)	**English Foundations** (2 credits) *1 credit goes to a Humanities elective	**English Development** (1 credit) **English Literature** (Can be taken concurrently with English Development) (1 credit)	**Transition English (grades 11-12)** (1 credit) *co-taught with MLL teacher	**English 2** (1 credit) *co-taught with MLL teacher *or* **Senior Core English Course** (1 credit)
English	**English 1** (1 credit) *co-taught with MLL teacher *or* **Transition English (grades 9-10)** (1 credit) *co-taught with MLL teacher	**English 2** (1 credit) *co-taught with MLL teacher	**English 3** (1 credit)	**Senior Core English Course** (1 credit)
Math	**Bilingual Math Foundations** (2 credits) Bilingual/Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Intensified Algebra 1** (2 Credits) Bilingual/Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Integrated Algebra/Geometry** *or* **Algebra 2** *or* **Principles of Algebra 2** (1 credit) *Dual certified Math teacher, or co-taught with MLL teacher or Bilingual Aide	**Geometry** (1 credit)
Social Studies	**Bilingual (Spanish) World History** *Dual certified SS *or* **World History** (1 credit) *Co-taught with Bilingual Aide	**Bilingual (Spanish) US History** *Dual certified SS *or* **US History** (1 credit) *Co-taught with Bilingual Aide	**Civics** (0.5 credit) *Co-taught with Bilingual Aide	**SS Related Course**
Science	**Bilingual Biology** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Earth and Integrated Physical Science** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Chemistry** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide	**Physics** (1 credit) *Dual certified Science teacher, or co-taught with Bilingual Aide
World Languages	MLL Foundations with Spanish Language gaps placed in Native Language Spanish 1 **OR** Other Native Language Spanish *or* other WL courses based on prior education, placement test, and/or Dept. Chair recommendation.			

EL4300GAG	English Foundations	Grades 9, 10, 11	2 Credits
*[Graduation Requirement: 1 credit Core English and 1 credit Pathway Related Course]			

This course provides intensive English language instruction with emphasis on school routines, oral skills, and literacy development. **Successful completion gives the student one credit in English and one Pathway Related Course credit. The one related course credit does not fulfill the graduation requirement in English. Prerequisite: Students identified as Multilingual Learners.**

EL4461GAE	English Development	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: 1 credit Core English]			

The course focuses on the continued linguistic development of listening, speaking, reading, and writing skills in formal and social settings. Through a content-based approach, students will engage in tasks that will support the development of reading, writing, speaking, and listening skills. **Successful completion gives the student one credit in English. Prerequisite: Students identified as Multilingual Learners.**

EL4463GAE	English Literature	Grade 9, 10, 11	1 Credit
*[Graduation Requirement: 1 credit Core English]			

This course may be taken concurrently with English Development. Emphasis is placed on learning academic English - reading, writing, and mechanics. **Successful completion gives the student one credit in English. Prerequisite: Students identified as Multilingual Learners.**

EN0017GAE	Transition English	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: 1 credit Core English]			

This course follows the English I curriculum standards and is designed for MLL students. The course is co-taught between an English teacher and an MLL teacher. Teachers use instructional strategies that are effective with MLLs to prepare students for the mainstream English II course that is next in the English core sequence. The curriculum is an exploration of the reading-writing connection and students will incorporate the writing process as they develop their communication skills and engagement in academic discourse. Successful completion gives the student one credit in English. **Successful completion gives the student one credit in English.**

EL4301GAG	EL Math Foundations	Grades 9, 10, 11	2 Credits
*[Graduation Requirement: 1 credit Core Math and 1 credit Math Related Course or STEM Related Course]			

This course provides intensive Basic Math instruction with emphasis on the English and Math skills needed to prepare students for Algebra, conducted in Spanish and English. **Successful completion gives the student one credit in Mathematics and one STEM Related Course credit. The one related course credit does not fulfill graduation requirements in Mathematics. Prerequisite: Students identified as Multilingual Learners with gaps in their education. Prerequisite: Participation in the Bilingual (Spanish) program.**

EL4471GAE	Bilingual World History	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: Social Studies Related Course]			

This course is a survey of World History from its origins to the 21st century, conducted in Spanish and English. It includes historical development of economics, and political, social and religious institutions with an emphasis on geography's impact on historical and cultural development. **Prerequisite: Participation in the Bilingual (Spanish) Program.**

EL4472GAE	Bilingual US History	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: US History Requirement]			

This course surveys the development of the American political, socio-cultural, and economic landscapes beginning with the exploration of the Americas until today, conducted in Spanish and English. Students concentrate on specific time periods through American history with emphasis on important events and critical ideas. **Prerequisite: Participation in the Bilingual (Spanish) program.**

EL3320GAE	Bilingual Biology	Grades 9, 10, 11	1 Credit
*[Graduation Requirement: Biology/Life Science (Lab)]			

Emphasis of study will be placed on the biochemical, physiological, morphological, ecological, bacteriological, embryonic, nutritional, pathological and biographical natures of life, conducted in Spanish and English. Upon completion of this course a student will have a knowledge of the principles on which all life depends, and an awareness of the interdependence of organisms in the biological world with reference to the balance of nature and conservation. **Prerequisite: Participation in the Bilingual (Spanish) program.**

EL0013GAC	MLL Culture and Career Seminar 1	Grade 9 (10, 11, if newly arrived)	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This one semester interdisciplinary course is designed as an introductory course for Multilingual Learners. They will learn and apply 21st century skills, laying a foundation which will be used during their high school years and are applicable in the real world. In addition to an introduction to career exploration, the curriculum will focus on 'skills for success' including: communication skills, organizational skills, civic responsibility, problem solving, personal development (such as collaboration and self-advocacy), technology skills, and researching skills. Students will be learning how to succeed in high school and how these skills can be applied throughout life.

EL0014GAC	MLL Culture and Career Seminar 2	Grade 10, 11	0.5 Credit
*[Graduation Requirement: Pathway Related Course]			

This one semester interdisciplinary course continues to develop Multilingual Learners' skills for success with emphasis on post-secondary options. Students explore their passions and interests and how these interests might influence their career choices. They will start thinking about internship options and develop skills for resume writing and job interviews. They will also learn about the college application process and explore what different colleges have to offer. **Prerequisite: MLL Culture and Career Seminar 1**

EL5503GAC3	MLL Career Exploration Internship	Grades 11, 12	0.5 Credits
*[Graduation Requirement: Pathway Related Course]			

This one semester internship provides students with real-world career experiences and an opportunity to connect learning in the Culture and Careers Seminar 1 and 2 with the workplace. With support from the MLL Career Pathways Facilitator, students will be able to hone their work and life skills within American culture. The experience will enhance students' opportunities for post- secondary success in the job world. **Prerequisite: successful completion of Culture and Careers Seminar 1 and 2 or Teacher Recommendation.**

Music

AR8936GAC Introduction to Theatre Studies 1 **Grades 9, 10** **0.5 Credit**
***[Graduation Requirement: Fine Arts]**

Theatre Studies I is an introduction to the techniques, vocabulary, etiquette, and history of the art of theatre. Students will learn fundamental theatre skills through introductory modules that explore ensemble building, stage movement, dramatic literature, playwriting, the various roles and careers in the theatre, theatre history, and acting techniques for the stage. This course emphasizes daily participation and values process over product. Students' will engage in daily activities, reading and writing assignments, and summative assessments involving performances and projects.

AR8918GAE Theatre Studies 2 **Grades 9** **1 Credit**
***[Graduation Requirement: Fine Arts]**

Theatre Studies II is an accelerated introduction to the techniques, vocabulary, etiquette, and history of the art of theatre for students with previous theatre experience. Students will practice foundational theatre skills through modules that explore ensemble building, stage movement, musical theatre, playwriting, Shakespeare, technical theatre, and acting techniques for the stage. Students will engage in daily activities, reading and writing assignments, and summative assessments involving performances and projects. Theatre Studies II students will be required to participate in performances open to the community. **Requires teacher recommendation.**

AR8920GAC Acting I **Grades 10, 11, 12** **1 Credit**
***[Graduation Requirement: Fine Arts]**

Acting I is for experienced theater students who wish to develop as performers and are seeking performance opportunities. Students will deepen performance technique by engaging in daily vocal and physical training. They will study a wide range of acting skills and forms including classical and contemporary stage acting, improvisation, musical theater, script analysis, and film acting. Students will also develop an audition portfolio and participate in a scene study in front of an invited audience. Prerequisite: Theatre Studies 1 or teacher recommendation.

AR8937HAE Honors Acting II **Grades 10, 11, 12** **1 Credit**
***[Graduation Requirement: Fine Arts]**

Acting II is an honors level course for advanced theatre students who are seeking pre-college acting training and competitive performance opportunities. Students will continue to develop performance technique by engaging in daily vocal and physical training as well as learn techniques to refine speech and diction. They will participate in acting competitions, auditions, and compose a portfolio of work as preparation for college auditions. Acting II students will perform frequently throughout the course, including a culminating performance of a one-act play. **Requires Theatre Studies I or II and Acting I or instructor approval.**

AR8938HAE Honors Play Production **Grades 11, 12** **1 Credit**
***[Graduation Requirement: Fine Arts]**

Play Production is an honors level, culminating theatre course that allows experienced theatre students to apply what they have learned in previous coursework to creating full productions. In the first semester, students will design, produce, and perform a one-act play directed by the instructor. During the second semester, students will self-select the work and a student director to lead a second production. This course is designed to support student capstones. It is only available to upperclassmen who have taken at least two credits of theatre.

AR8927HAE5 Honors Musical Theatre Performance **Grades 10, 11, 12** **1 Credit**
***[Graduation Requirement: Fine Arts]**

This course is designed to immerse students into the study of musical performance including voice for the stage, which will be studied and practiced. Musical instructional and interpretation are the focus of the course. Focus will also include performance and preparation for auditions including the development of an audition portfolio and resume. Students learn by participating in a theatrical musical production, as cast and production staff. Students will be utilized in the cast according to their desires and abilities. The student will be responsible for the study and style of musical theatre in greater depth through research and presentation. **Prerequisite or corequisite: Acting 1**

AR88935GAE	Technical Theatre and Production	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Technical Theatre and Production is a practicum that will introduce students to the essential elements of lighting, scenic, costume, prop, and sound design as well as how to organize and support a production through scheduling, budgeting, and advertising. Students will be given hands-on experience with set construction, scenic painting, hanging and focusing lighting equipment, and creating and editing sound cues. They will be given extra-curricular opportunities to apply those skills to concerts and productions throughout the school year. This course requires a prerequisite of Theatre Studies I and teacher approval.

AR8851GAE	Beginning Choir	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Beginning choir is a mixed group of students with a desire to learn the fundamentals of voice production and to improve their natural vocal abilities.. It is designed for students with a desire to learn the fundamentals of voice production and to improve their natural voice abilities. There should be a demonstrated desire to learn basic music reading. Through the use of voice drills and the singing of solo and ensemble repertoire, students develop an awareness of the voice as an expressive and resonant instrument. Through this group, students can attain the necessary experience for singing in other auditioned choral ensembles. Areas of study include: basic music theory, music reading skills, voice production, and musical interpretation. A variety of music literature is studied, both sacred and secular. Choir members are required to participate in all scheduled school and community performances.

AR8852GAE	Advanced Choir	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Advanced choir is a group of experienced singers who have participated in other performing organizations including choir, band or orchestra. Areas of study are: basic music theory, voice production, solo and ensemble singing, and artistic interpretation. A variety of music literature is studied, including sacred and secular compositions from the master works to contemporary. Advanced choir members are required to participate in all activities that include: school assemblies, public concerts, contests, CMEA events, and exchange concerts. Prerequisite: Beginning Choir or teacher recommendation.

AR8862HAE	Honors Chamber Singers	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a serious study of artistic music for the select chorus musician. Music will be selected by the instructor for its aesthetic content, historical importance and variety of style. Whenever possible, the pieces will be performed in original content with regard to language and accompaniment. Students will be selected through an audition-based criterion. This group is a performance-oriented organization and the students are required to participate in all school, community, and county performances. Prerequisite: Audition or teacher recommendation.

AR8863GAE	Chorale	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Chorale is composed of experienced singers who have previously performed in music ensembles such as choir, advanced choir, chamber singers, band or orchestra. Students will be selected through an audition-based criterion. This is a performance-based organization; therefore, students are required to participate in all designated school, community and county performances, as well as after school rehearsals. Prerequisite: Audition

AR8871GAE	Prelude Orchestra	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of the middle school orchestra program at a more advanced level. The orchestra plays at special programs, in other schools in the system, and at public concerts. Emphasis is placed upon good rhythm, intonation, tone, and technique. String quartets and small ensembles are offered. Students will be required to attend weekly pull-out lessons. Prerequisite: Orchestra in middle school or audition. Prerequisite: Orchestra in middle school or audition

AR8872GAE	Philharmonia Orchestra	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of course 8871 (Prelude) at a more advanced level. The Philharmonic Orchestra plays at special programs, at other schools in the system, and at public concerts. Emphasis is placed upon refining tone quality, artistic interpretation of music, and application of music theory and music history to informed performance practice. String quartets and small ensembles are offered. Students are encouraged (but not required) to audition for music festivals (CMEA, NEMFA, etc.). Students will be required to attend weekly pull-out lessons. Prerequisites: Completion of Prelude Orchestra and audition.

AR8873HAE	Honors Principal Orchestra	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

This course is a continuation of 8871 (Prelude) at a more advanced level. The Principal Orchestra plays at special programs, at other schools in the system, and at public concerts. Emphasis is placed upon elevating all elements of performance practice to the highest level in order to create a truly artistic interpretation. String quartets and small ensembles are offered. Students in Principal Orchestra are expected to participate in the Norwalk All-City Orchestra and are encouraged (but not required) to audition for music festivals (CMEA, NEMFA, etc.). Students will be required to attend weekly pull-out lessons. Prerequisites: Completion of 8871 Prelude Orchestra and audition.

AR8881GAE	Symphonic Band	Grades 9, 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Symphonic Band is the initial band instrumental course. This course will survey the basic idiomatic concepts of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, and parade band. Within the confines of the course tone production, embouchure development, intonation, rhythmic reading and accuracy and musical expression will be stressed. Public appearances are required in the venues of marching band, symphonic band, and combined bands. All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. Prerequisite: Participation in middle school band or an audition.

AR8883GAE	Wind Ensemble	Grades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Students will have an in-depth study of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, and parade band. Special emphasis will be placed on advanced knowledge of timbre, intonation, rhythmic reading, musical expression, sight-reading, musical interpretation, and idiomatic styles. Public appearances are required in venues of marching band, wind ensemble, and combined bands. All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. **Prerequisite: Participation in Symphonic Band and an Audition.**

AR8895HAE	Honors Wind Symphony	GrGrades 10, 11, 12	1 Credit
*[Graduation Requirement: Fine Arts]			

Wind Symphony is the premiere performing organization of the band instrumental department. Instrumentation is based on one person per part except doubling in clarinet, flute, and percussion. Admission into the ensemble requires previous successful participation in Symphonic Band or Wind Ensemble and an audition. Students will have an intensive study of marching band, theatrical band, harmony and theory, classical concert band, contemporary concert band, solo repertoire, individualized regional and state adjudication, small ensemble performances, and parade band. Knowledge of timbre, intonation, rhythmic reading, musical expression, sight-reading, musical interpretation, and stylistic understanding of idiomatic styles will be coupled with an analysis utilizing nationally accept rubrics. Public appearances are required in the venues of marching band, wind symphony, combined bands, small ensembles, and soloists. All participants are required to rehearse two weeks prior to the commencement of school (band camp) for the purpose of advanced participation in the curricular area of marching band. Out of school practice for marching band occurs in September through November. Students will be required to attend weekly pull-out lessons. Prerequisite: Participation in Symphonic Band/Wind Ensemble and an Audition.

AR8896GAC	Color Guard	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Fine Arts]

This is an intensive outdoor study of body, dance, staging, drill, saber, rifle, and flag styles. These seven styles will be assimilated into a singular performance idiom. Exploration, analysis, demonstration, and evaluation of contemporary performances styles will be examined utilizing nationally accepted rubrics. Public appearances are required in the venue of the marching band.

All participants are required to rehearse the two weeks prior to the commencement of school (band camp) for the purpose of advanced preparation in the curricular area of marching band. Out of school practice with the marching band occurs in September through November. Prerequisite: Membership in the marching band and an Audition.

AR8882GAE	Jazz Ensemble	Grades 9, 10, 11, 12	1 Credit

*[Graduation Requirement: Fine Arts]

Students will build upon their knowledge from their participation in pre-required courses and through the study of jazz, rock, gospel, blues and fusion idioms. Emphasis will be placed upon the performance and interpretation of various jazz styles, rhythms, harmony and theory, and improvisation. Public performances are required. Prerequisite: Concurrent enrollment in Symphonic Band, Wind Ensemble, or Wind Symphony and an Audition.

AR8897GAC	Winter Guard	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Fine Arts]

This is an intensive indoor study of body, dance, staging, drill, saber, rifle, and flag styles to prerecorded music. These seven styles will be assimilated into a singular performance idiom. This performance idiom is referred to as winter guard. Exploration, analysis, demonstration, and evaluation of contemporary performances styles will be examined utilizing nationally accepted rubrics by Winter Guard International and Musical Arts Conference. Public appearances are required in the venue of winter guard. Out of school practices and performance occur in January through April. Prerequisite: Membership in the marching band and an Audition.

AR8866GAC	Winter Percussion Ensemble	Grades 9, 10, 11, 12	0.5 Credit

*[Graduation Requirement: Fine Arts]

This is an intensive study of percussion through the use of performance, instruction and evaluation. The students will be exposed to a variety of musical instruments, including but not limited to, traditional marching percussion, concert percussion, pitched and non-pitched instruments. A broad range of musical styles will be explored, including but not limited to, classical, contemporary, rudimental and theatrical. Assessments will be given based on the nationally accepted rubrics from Winter Guard International and locally through the Musical Arts Conference. Public performances are required as part of the course. Out of school rehearsals and performances will occur from December through May. Prerequisite: Membership in the marching and concert band program or by audition to the director of bands.

Physical Education and Wellness

Physical Education	Grades 9, 10, 11, 12	.5 Credit

Physical Education is a comprehensive program that teaches students the skills and concepts necessary to lead a healthy lifestyle. Adaptive PE will be provided in accordance with the student's Individualized Educational Plan. Credit earned in physical education counts toward honor roll, graduation, and rank-in-class. Students must pass 1 credit of physical education and wellness to graduate, which includes the state required physical fitness test. [Graduation Requirement: Physical Education and Wellness]

The program is designed to develop physically educated students who:

- Demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities
- Demonstrate understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities
- Participate in regular physical activity
- Achieve and maintain a health-enhancing level of physical fitness
- Exhibit responsible personal and social behavior that respects self and others in physical activity settings
- Value physical activities for health, enjoyment, challenge, self-expression and/or social interaction

Aquatic Fundamentals (Swimming)	Grades 9, 10, 11, 12	.5 Credit

Whether you are only in, on, or around the water in the summer, you live near the beach or have a pool, you want to swim for exercise or pleasure, already know the basics or are beginning, this semester course is for all grades and abilities. Designed for all levels, classes allow swimmers to develop good habits in, on, and near water, become comfortable in the water, learn and refine new strokes, and become stronger, safer swimmers. [Graduation Requirement: Physical Education and Wellness]

Lifeguarding	Grades 10, 11, 12	.5 Credit

The American Red Cross lifeguarding classes are designed with your learning style in mind. Students must be at least 16 years old to enroll. The American Red Cross Lifeguard Manual contains skills sheets and references to help you understand the importance of water safety and arm you with all of the knowledge necessary to help save lives and avoid injury. At the culmination of the course, students will take the lifeguarding test for the opportunity to be a certified lifeguard. [Graduation Requirement: Physical Education and Wellness]

Yoga and Meditation Practices	Grades 9, 10, 11, 12	.5 Credit

This course will focus on the achievement of optimal mental health through the proven practices of Yoga and Meditation. It will include gathering background knowledge of both Yoga and Meditation as well as practical application with a certified teacher. Students will be challenged to look within themselves through meditation and then they will use skills to begin Yoga practice where mind and body come together to form a peaceful experience that can be very transformative. Students will be expected to document their experiences through journaling and will also be asked for proof of learning when it comes to different styles of meditation and different yoga poses. Though this will be a more cerebral PE experience, students will also be challenged physically through Yoga practice. [Graduation Requirement: Physical Education and Wellness]

Science

Biology (Lab Science)	Grades 9, 10, 11, 12	1 Credit

Emphasis of study will be placed on the biochemical, physiological, morphological, ecological, bacteriological, embryonic, nutritional, pathological and biographical natures of life. Upon completion of this course a student will have a knowledge of the principles on which all life depends, and an awareness of the interdependence of organisms in the biological world with reference to the balance of nature and conservation. [Graduation Requirement: Biology/Life Science]

Honors Biology with EIPS (Lab Science)	Grades 9	1 Credit

Honors Biology will cover topics similar to those covered in the college prep biology class: the principles and inter-relationships of living forms with reference to the balance of nature and a realistic concern for the environment. These topics will be covered in greater depth, placing more emphasis on the self-reliance of the student. Biochemistry will be emphasized, and students will be expected to write science papers and work on science projects. Strongly Recommended: grades of "A" 7th and 8th grade science and 8th grade science teacher recommendation (based on student's interest and motivation); students taking and obtaining a grade of "B" or better in Algebra in 8th grade. [Graduation Requirement: Biology/Life Science (Lab)]

Earth and Integrated Physical Science	Grade 10	1 Credit

Emphasis of study will be placed on students' understanding of the interconnections and feedbacks among the geosphere, hydrosphere, atmosphere, and anthroposphere as well as the physical aspects of motion, energy, forces, and waves and technology. Students will study climate systems and climate change, the human impacts on Earth systems and issues of human sustainability, current global and regional data sets, the systems and transfer of energy, laws of force and motion, and waves and technological applications. Students will make projections for the future, analyze space systems and research, and use engineering design concepts to evaluate future societal choices in the earth, space, and physical sciences. Upon completion of this course a student will have a knowledge of principles including but not limited to: energy futures, resource management, space exploration and structures, land use, environmental impacts, pollution regulation, and applications of motion, waves, and energy. Prerequisite: Biology and Chemistry. [Graduation Requirement: Chemistry/Physical Science; Science Related Course; STEM Related Course]

Chemistry (Lab Science)	Grades 10, 11, 12	1 Credit

This course covers the following topics: properties of materials, the transformations which matter undergoes, the conditions

affecting those transformations and the nature and amount of energy released or absorbed in these changes, the uses of materials and creation of new substances. Emphasis is placed upon mathematical application to chemistry and an extensive degree of laboratory work. Recommended C or better in the prerequisite courses. Prerequisite: Intensive Algebra 1 or Algebra 1 and Biology [Graduation Requirement: Chemistry/Physical Science (Lab)]

Honors Chemistry with EIPS (Lab Science)	Grades 10, 11	1 Credit

This course is for students in the accelerated science sequence and provides an in-depth concentrated study of topics studied in high school chemistry. The work is rigorous and challenging and laboratory activities constitute a major part of this course's curriculum. Prerequisite: Biology; Co-requisite: Algebra 2. [Graduation Requirement: Chemistry/Physical Science (Lab)]

Physics	Grades 11, 12	1 Credit

Physics is the study of matter and energy including an introduction to the mechanics of solids, liquids and gasses, wave motion, sound, heat, magnetism, electricity, light and other concepts in modern physics. The fundamental principles and concepts of each topic are studied and applied through problem-solving and laboratory experimentation. Emphasis is placed on experience integrating physics and mathematics, as well as physics for engineering. Prerequisites: Biology and Algebra 2 or Geometry [Graduation Requirement: Science Related Course; STEM Related Course]

Honors Physics	Grades 11, 12	1 Credit

Honors Physics is an in-depth study of physics. Demands will be placed on the student to work independently in the classroom as well as the laboratory. The student will be expected to complete both long and short term outside projects and research as well as to master the use of sophisticated equipment including computers. The honors course will emphasize quantitative physics.Problems involving several physical relationships will be stressed as well as derivation of physical relationships. **Prerequisites: Biology and Algebra 2 or Geometry; [Graduation Requirement: Science Related Course; STEM Related Course]**

Astronomy	Grades 10, 11, 12	.5 Credit

A rigorous study of astronomy to provide an understanding of the order of the universe and an awareness of man's place in this order. This course includes such diverse topics as the modern concept of the origin of the universe, the life and death of the stars, galactic evolution, pulsars, quasars and black holes. Prerequisites: Intensified Algebra 1 or Algebra 1, and Biology. [Graduation Requirement: Science Related Course; STEM Related Course]

Environmental Science	Grades 9, 10, 11, 12	.5 Credit

An introduction to the biological and non-biological factors of the environment and their effects on environments and inter-environmental relationships, including an investigation into methods of control and management of human-populated environments. Environmental outdoor laboratory sessions in the Norwalk area are part of the course. Prerequisite: Biology [Graduation Requirement: Science Related Course; STEM Related Course]

Everyday Chemistry	Grades 11, 12	.5 Credit

This course is a project-based, consumer chemistry course that will examine the chemistry behind everyday life: movie special effects, toys, foods, art, and forensic chemistry. This course takes a hands-on approach with each unit beginning with a challenge task. Students will perform experiments and investigations to meet their unit challenge. This semester related course is not a substitute for a full year lab Chemistry class. [Graduation Requirement: Science Related Course; STEM Related Course]

Forensics	Grades 11, 12	.5 Credit

Forensics is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Discussion in this course will be limited to only those areas of chemistry, biology, physics, and geology that are useful for determining the value of crime scene and related evidence. Work in this course will center around the science and technology of evidence collection. This course will be a comprehensive review of biology, chemistry, physics and other science topics. Topics covered will include fingerprinting, body fluids, DNA typing, fire tread analysis, hair and fiber analysis, metallurgy, polygraph testing, ethics, and legal issues. Prerequisite: Biology and Chemistry [Graduation Requirement: Science Related Course; STEM Related Course]

Advanced Placement Chemistry (Lab Science)	Grades 11, 12	1 Credit

The AP Chemistry course covers topics such as the structure of matter, kinetic theory, chemical equilibrium, chemical kinetic and basic thermo-dynamics. Prerequisite: Chemistry; Co-requisite: Algebra 2 or Precalculus. [Graduation Requirement: STEM Related Course; Science Credit]

Advanced Placement Environmental Science	Grades 9, 10, 11, 12	1 Credit

This course is designed to be the equivalent of an introductory university course in environmental science. It is an incredibly interesting, complex applicable science that is constantly changing and expanding. It is a rigorous laboratory science course that stresses scientific principles, process, and analysis while also providing opportunities to explore the many social, political, economic, and ethical issues that are relevant to the environmental topics studied. Prerequisite: Biology and Chemistry. [Graduation Requirement: Science Related Course; STEM Related Course]

Introduction to Biology – NCC BIO 105	1 Credit

A course for non-science majors. Representative topics include the chemistry of life, genetics, structure and function of cells and tissues, and selected plant and animal systems. Labs may involve dissection of plant and animal specimens, microscope work, and elementary biochemistry experiments. Three hours of class work, three hours of lab per week. Prerequisites: Eligibility for ENG 101 and eligibility for MAT 136 [Graduation Requirement: Science; STEM Related Course]

Introduction to Nutrition– NCC BIO 1011	1 Credit

A study of the science of nutrition including the chemical structure, function, digestion, absorption, and metabolism of nutrients. Class discussion will emphasize how poor dietary habits and decreased physical activity contribute to the formation of diseases associated with the Western lifestyle. Students critically analyze their own diets with respect to nutritional content and adequacy.This course will not meet program requirements for the Dietetic Technician program. Prerequisite: Eligible for ENG 1010 [Graduation Requirement: Science; STEM Related Course]

Introduction to Environmental Science – NCC ENV 1010 **1 Credit**

Introductory environmental science course is suitable for science and non-science majors. Students will survey natural systems, humans' impacts on natural systems, and potential solutions to current and future environmental issues on global, regional, and local scales. Embedded in the course are explorations of interdisciplinary topics including, but not limited to, process of science; environmental ethics, attitudes, and laws; resource consumption; climate change; biodiversity loss; forests and soils; food systems, agriculture, and fisheries; land use planning; pollution and toxicology; mining and energy; water and waste management; sustainable development; ecological economics; and environmental justice. Active learning is an essential component of this course.. Prerequisite: Eligible for ENG 1010 [Graduation Requirement: Science; STEM Related Course]

General Biology I – NCC BIO 121 **1 Credit**

This course offers a comprehensive study of fundamental biological concepts. The nature of scientific inquiry, water and carbon chemistry, cell structure and function, metabolism, photosynthesis, genetics and evolution are studied. Lab may include dissection of animal species. Prerequisites: Eligibility for ENG 101, high school biology recommended [Graduation Requirement: Science; STEM Related Course

Survey of Science – NCC SCI 114 **1 Credit**

This course fulfills the IDS requirement. This course explores basic concepts of physics, chemistry and biology, focusing on the interrelatedness of these disciplines through lecture demonstrations, computer simulations, group collaborations and may include field trips. The topics covered include chemistry (atomic structure, elements, periodic table and simple reactions), biology (characteristics of living things, cell cycle, DNA and genetics, ecology and the environment) and physics (energy, heat, temperature and light). The laboratory portion of the course is tied closely to the lecture and will use analytical techniques to explore questions from the perspective of chemists, biologists and physicists. Prerequisite: ENG 101, eligibility for MAT 136 or the equivalent. [Graduation Requirement: Science; STEM Related Course]

Social Studies

African American/Black and Puerto Rican/Latino Studies **Grades 10, 11, 12** **1 Credit**

The course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, national, and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities. [Graduation Requirement: Social Studies Related Course]

American Studies and Pop Culture **Grades 10, 11, 12** **.5 Credit**

This course is for students who are interested in studying American History using popular culture. Students will be able to examine cultural products such as film, television, music, art, advertisement and study its relevance and connection to the society which produced them. This class requires students to analyze and critique historical events and values that influenced popular culture. [Graduation Requirement: Social Studies Related Course]

Civics **Grades 10, 11, 12** **.5 Credit**

The course surveys the origins and institutions of the US Government. Emphasis is placed on the political organization and structure of our national, state and local governments as well as their development. The Constitution and its interpretation will be studied through the use of Supreme Court decisions. Analysis and interpretation of outside readings will be required. Students are encouraged to actively participate in the democratic process and will be given an opportunity to participate in the governmental process through fieldwork projects. [Graduation Requirement: Civics]

Honors Civics **Grades 10, 11, 12** **.5 Credit**

This course studies the origin, institutions, and influence of the US government on its citizens and the world at large. The course lays the groundwork of understanding the functions and purpose of federal, state and local governments so that students may more easily find themselves as active citizens. Topics of study will include both concrete knowledge such as familiarity of the Constitution and more

abstract discussions about the government's role in society and the meaning of justice. Analysis and interpretation of historical concepts as well present-day political issues will help guide students in the course. Students are encouraged to actively participate in the democratic process and will be given an opportunity to participate in the governmental process through fieldwork projects. [Graduation Requirement: Civics]

Computer Ethics	Grades 9, 10, 11, 12	.5 Credit

This course is an introduction to the major issues surrounding the use of computers in our society, with a special focus on fields related to computer science and information technology management. The course will cover an analysis of major trends in emerging computer technology and their potential effects on work, leisure, government, and human relations. Students will examine the assumptions which underlie our culture's relation to technology and the relation between their own ethics and the values and ethics implicit in our uses of technology and information. [Graduation Requirement: Social Studies Related Course]

World History	Grade 9	1 Credit

This course is a survey of World History from its origins to the 21st century. It will include historical development of economics, political, social and religious institutions with an emphasis on geography's impact on historical and cultural development. [Graduation Requirement: Social Studies Related Course]

Honors World History	Grade 9	1 Credit

This course is a survey of World History from its origins to the 21st century. It will include historical development of economics, political, social and religious institutions with an emphasis on geography's impact on historical and cultural development. Students will conduct some in-depth studies of themes in World History including conducting research, analyzing primary and secondary sources, writing a research paper, and/or completing a research project. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Strongly Recommended: B or better in grade 8; standardized assessment scores will be considered in teacher recommendation; strong writing and reading skills; ability to do independent writing and research [Graduation Requirement: Social Studies Related Course]

US History	Grades 10, 11, 12	1 Credit

This course surveys the development of the American political, socio-cultural, and economic landscapes during the post-Civil War period and investigates the role of the United States in world affairs. Provision may be made for students to concentrate on and/or specialize in areas of interest through classroom projects and writing assignments. [Graduation Requirement: US History]

Honors US History	Grades 10, 11, 12	1 Credit

This course surveys the development of the American political, socio-cultural, and economic landscapes with an emphasis on the post-Civil War period and investigates the role of the United States in world affairs. Provision may be made for students to concentrate in special areas of interest through classroom projects, formal essays, and research papers. The student is responsible for obtaining their summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. Strongly Recommended: B or better in World History; standardized assessment scores will be considered in teacher recommendation; strong writing and reading skills; ability to do independent writing and research. [Graduation Requirement: US History]

Yearbook in Design	Grades 11, 12	1 Credit

In this class, students will study the function, techniques, and responsibilities of journalism design. The course will include instruction and lab activity. Students will assist with the preparation and publication of the senior yearbook. This course is recommended for students whose writing skills are firmly grounded. Students will have Photoshop lessons to design page layouts. Students will also have instructions on marketing and advertising to sell and distribute the final product. Yearbook is a permanent Legal Document: it gives students opportunities to gather points toward college admissions. It also will give students a good understanding of how to use Photoshop, Windows, and the Adobe Suite in creating pages and advertisements. Students will be assigned deadlines and tasks to complete for grading purposes. Prerequisite: Teacher recommendation. [Graduation Requirement: Related Course]

Advanced Placement US Government and Politics	Grades 11, 12	1 Credit

This course explores the political theory and everyday practice that direct the daily operation of our government and shape our public policies. The express purpose of this course is to prepare students to take the AP Exam for U.S. Government and Politics. The course is for all intents and purposes taught on a college level and it requires a substantial amount of reading and preparation for every class. The objectives of this course go beyond a basic analysis of how our government "works." Students will develop a critical understanding of the strengths and weaknesses of the American political system, as well as their rights and responsibilities as citizens. This course fulfills the Civics graduation requirement. Students are expected to take the Advanced Placement exam. [Graduation Requirement: Civics; Social Studies Related Course]

Advanced Placement United States History	Grades 10, 11, 12	1 Credit

This one-year course will cover the history of the United States from the colonial period through the modern age in accordance with the College Board requirements for Advanced Placement United States History course. Focus will be placed on the major developments in political-constitutional economic and diplomatic history, as well tracing developments in social, cultural and intellectual history through each major time period. Emphasis will be placed on drawing meaning from a wide variety of primary and secondary source documents and on the clarity of written expression. A college text will be used. Students are expected to take the Advanced Placement exam. [Graduation Requirement: US History]

United States History I – NCC HIS 201	Grades 10, 11, 12	1 Credit

This survey of American history studies the diverse roots of American politics, society, culture, and the economy. The Colonial period, the American Revolution and the formation of the republic are discussed. The evolution of opposing socioeconomic systems, sectionalism and sectional conflict, the Civil War and Reconstruction are also examined. Prerequisite: Eligibility for ENG 101 [Graduation Requirement: US History]

Fine Arts

Foundations of Art	Grades 9, 10, 11, 12	1 Credit

This class is the department foundation full-year class designed to introduce students to the principles and elements of art. This course teaches students a wide variety of materials and techniques for creating art. Drawing skills, essential to the creative process, are stressed as well as painting, printmaking, and sculpture. Students are introduced to the computer lab and the Adobe Creative Suite. Students build a large art vocabulary while learning how to critique their own and others' artwork. Students are required to keep a sketchbook for homework and design ideas.[Graduation Requirement: Fine Arts]

Advanced Foundations of Art	Grades 9, 10, 11, 12	1 Credit

Students taking Advanced Foundations of Art create advanced drawing, painting and collage projects while learning advanced applications of the principles and elements of art and design. Students look at, write about, discuss and create artworks influenced by master artists to guide their artistic choices as well as deepen their visual literacy. Advanced Middle School art students can by-pass Art I and register for Art II with a Middle School art teacher recommendation.Prerequisite: Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

Applied Arts 1	Grades 9, 10, 11, 12	.5 Credit

In this class, students create products for a "client or company" by learning and utilizing fine art concepts and skills in; product/ industrial, marketing/advertising, interior, textile, environmental and set design. This class is open to freshmen taking Art 2 the other semester. Students are required to keep a sketchbook for homework and design plans. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation *[Graduation Requirement: Fine Arts]

Applied Arts 2	Grades 10, 11, 12	.5 Credit

This course teaches students advanced fine art concepts in; product/ industrial, marketing /advertising, interior, textile, environmental and set design. Students will work with various methods and materials to create new products for the marketplace. Through theory, practice and reflection, students will develop original approaches to solve multiple rigorous design challenges. A sketchbook for design plans and homework is required. Prerequisite: Applied Arts 1 [Graduation Requirement: Fine Arts]

Digital Illustration and Design 1	Grades 9, 10, 11, 12	.5 Credit

In this course, students will learn the principles and elements of art as they apply to digital art and design. Students will create projects modeled after real-world industry assignments, developed in Adobe Photoshop and Illustrator. Students will present a final project at the conclusion of the course. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

Digital Illustration and Design 2	Grades 9, 10, 11, 12	.5 Credit

In this course, students will learn advanced principles and elements of art as they apply to digital art and design. Students will create advanced real-world projects modeled after industry assignments developed in Adobe Photoshop and Illustrator. Students will create digital art projects utilizing advanced Adobe tools. Students will create a mock company, logo and website. Students will learn copyright and fair use policies for Internet imagery and digital design. At course end, students will present a final project as an animated graphic advertisement for their company. Prerequisite: Digital Illustration and Design 1 [Graduation Requirement: Fine Arts]

Drawing 1	Grades 9, 10, 11, 12	.5 Credit

This course is designed for all students who would like the opportunity to increase their drawing skills in an intense half-year course. Students explore a wide variety of drawing techniques, materials, subjects and styles. Drawing will be based on observation and imagination that will lead the student to self-discovery and awareness of his/her environment. A sketchbook/journal is required to plan and think through composition ideas. Prerequisite: Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

UConn ECE Drawing 2	Grades 10, 11, 12	.5 Credit

This course challenges students' technical and creative skills, learning advanced principles of drawing from observation. Students create artworks in a variety of genres including: still life, perspective drawings, landscapes, and portraiture. Students use a variety of mediums including graphite, charcoal, and ink. Students will be required to submit drawing assignments to complete a portfolio. Students can earn three college credits for this course. Prerequisite: Drawing 1 & Foundations of Art or Advanced Foundations of Art [Graduation Requirement: Fine Arts]

Modern and Contemporary Art	Grades 9, 10, 11, 12	.5 Credit

In this class, students will look at, read, talk about, and create a variety of modern and contemporary global art styles including but not limited to: Impressionism, Post-Impressionism, Cubism, Abstract Art, Surrealism, Abstract Expressionism, Pop Art, Photo Realism, Folk Art, Contemporary Crafts, Performance Art and more! Students will learn about the history of art while creating Modern and Contemporary art styles with a variety of art making methods and materials including: drawing, painting, printmaking, sculpture, and crafts. Homework is required. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation. [Graduation Requirement: Fine Arts]

Painting 1	Grades 9, 10, 11, 12	.5 Credit

For the student who loves to paint, this class is designed for the student who wishes to explore and improve in all forms of painting media, techniques, and subjects. Media to include: Watercolor, Gouache, and Acrylics. Art styles will be the focus as students learn the basics of color media. As with other classes, a sketchbook is required, as the student will be using it to render sketches for painting subjects.Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Recommendation [Graduation Requirement: Fine Arts]

Painting 2	Grades 10, 11, 12	.5 Credit

Students who would like to add to their portfolio will be challenged in this advanced painting course. They will be asked to create thematic, meaningful and current paintings; which will expose intent and mastery of media. Opportunities to work independently and to make personal choices for materials and techniques will be given throughout the semester. Prerequisite: Painting 1 [Graduation Requirement: Fine Arts]

Photography 1	Grades 9, 10, 11, 12	.5 Credit

This class is an introductory course covering the basics of black and white photography. Students begin with non-camera darkroom imagery, build and use pinhole cameras, and learn how to create Images using a film camera. Students learn how to make contact sheets and to enlarge images from negatives. Students learn Digital Photography and Photoshop. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

Photography 2	Grades 9, 10, 11, 12	.5 Credit

This class is an extension of Photo 1 that offers students a more in depth look into how to take good quality photographic images. In this course students will learn how to process their own film and learn more advanced darkroom techniques such as using the filter system. Students will be introduced to lighting techniques both natural and manipulative. Students learn advanced Digital Photography and Adobe Suite applications. Prerequisite: Photography 1 [Graduation Requirement: Fine Arts]

Honors Portfolio	Grades 11, 12	1 Credit

This class is designed for Art Students who want to build a superior portfolio, a body of work, for higher educational review. Portfolio students can be preparing for AP Studio Art, taking AP concurrently, or have finished AP Studio Art class. Students are expected to be proficient in 2D Processes. Students create a substantial (20-24 pieces) portfolio of finished artwork. Prerequisite: Two years of art classes. [Graduation Requirement: Fine Arts]

Printmaking 1	Grades 9, 10, 11, 12	.5 Credit

Students in this course will be able to make multiple copies and editions of artwork rendered in a variety of printmaking media, techniques, and subjects. Media include: stencil, monoprint, collagraph, linoleum, woodcut, dry-point etching, and embossed prints as well as found object printmaking. In addition to making prints, students will engage in these media through historical and conceptual topics. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

Printmaking 2	Grades 10, 11, 12	.5 Credit

Students in this course will learn advanced printmaking techniques and processes building on previous techniques and media covered in Printmaking 1. Students work in a variety of media including; reduction printmaking, multiple layer stencil, woodcut, embossing and collage transfer. Students can independently research new methods and materials. This class encourages both collaborative and independent work. Prerequisite: Printmaking 1 [Graduation Requirement: Fine Arts]

3D Sculpture 1	Grades 9, 10, 11, 12	.5 Credit

This course is a 3-dimensional art or sculpture class. Students learn to make artworks in a variety of media including; folded paper/ cardboard, papier-mâché, clay, wood, assemblage, wire, and plaster. Students learn clay/ ceramics hand building techniques. Students will learn to visualize and create artworks from 2D plans in 3D form using a sketchbook for homework and design plans. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation [Graduation Requirement: Fine Arts]

3D Sculpture 2	Grades 10, 11, 12	.5 Credit

This class offers students advanced clay hand building and wheel thrown pottery techniques. Students problem solve building sculptures using more challenging applications of the principles and elements of art and design. Students create 3D artworks from a variety of methods and materials including; paper, papier-mâché, clay, wire, wood and assemblage. Students must be able to work independently and collaboratively. Students will learn to visualize and create artworks from 2D plans in 3D form using a sketchbook for homework and design plans. Prerequisite: 3D Media 1, 3D Sculpture 1 [Graduation Requirement: Fine Arts]

Advanced Placement Studio Art	Grades 11, 12	1 Credit

This class is designed for students pursuing art in their higher-level educational choices. A rigorous course with art school foundation level expectations, AP Studio requires a portfolio review and summer work for acceptance. Students create a concentration of (30) quality works for review and scoring by the College Board. Students with passing exam scores earn college credits. Students are expected to take the Advanced Placement exam. The student is responsible for obtaining their summer assignments and submitting the completed work on time. **Prerequisite**: Two years of art classes. [Graduation Requirement: Fine Arts]

Textile Arts 1	Grades 9, 10, 11, 12	.5 Credit

This course is designed to teach students textile making, designing and fiber arts. Students will learn a variety of hand and machine sewing techniques as well fiber arts including; knitting, crocheting, weaving, macramé, embroidery, paper craft including silk screening. Students will learn historical and cultural connections to craft based techniques. Students create sketchbooks and are required to submit unit design plans. Prerequisite: Foundations of Art, Advanced Foundations of Art or Middle School Art Teacher Recommendation *[Graduation Requirement: Fine Arts]

Textile Arts 2	Grades 10, 11, 12	.5 Credit

This course is designed to teach students advanced textile making, designing and fiber arts. Students will learn a variety of advanced hand and machine sewing techniques as well as advanced fiber arts including; knitting, crocheting, weaving, macramé, embroidery and paper craft. Students will learn historical and cultural connections to craft based techniques. Students create sketchbooks and are required to submit unit design plans. Students will visit a Design studio or place of employment to learn about vocational educational opportunities. Students will create a final project or a Capstone experience.
Prerequisite: Textile Arts 1 *[Graduation Requirement: Fine Arts]

Two-Dimensional Design – NCC ART 121 (ART 1210)	1 Credit

This introductory course focuses on the basic elements and principles of design such as line, texture, space, balance, unity and scale. Students are responsible for purchasing supplies. Prerequisites: Eligibility for ENG 088 or ESL 152 or permission of Art coordinator [Graduation Requirement: Fine Arts]

Graphic Design I: Skills and Principles – NCC GRA 151 (GRA 1501)	1 Credit

An introductory course focusing on the fundamental nature, skills and principles of graphic design. Students will learn about composition, communication and technology. Classes consist of lectures, demonstrations, applied practice and critiques. Students are responsible for purchasing supplies. Prerequisite: Eligibility for ENG 101 and MAT 136 or permission of the Graphic Design coordinator [Graduation Requirement: Fine Arts; STEM Related Course; Digital Literacy]

Digital Imaging: Adobe Photoshop – NCC GRA 231 (GRA 2300)	1 Credit

Students expand upon their graphic design skills and knowledge of procedures learned in GRA 151. Through lectures, demonstrations, exercises and real-world projects, the focus will be on Adobe Photoshop. Students will learn to create as well as edit digital images. Students will apply these techniques to solve design problems in print and web environments. Students are required to have basic knowledge of graphic design before registering for this course. Prerequisite: GRA 151 or ART 111, ART 121 or permission of the Graphic Design coordinator [Graduation Requirement: Fine Arts; STEM Related Course; Digital Literacy]

World Languages

Expectations for Each Level in All World Languages

- **Level 1** The beginning course emphasizes the fundamental skills of listening, speaking, reading and writing. These skills are developed through a thematic approach that stresses themes such as sports, family, shopping, school, travel, and meals. Geography is also included. Individual cultural projects will be assigned at the teacher's discretion.
- **Level 2** Continuation of the beginning course deals with fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Culture is further developed. Students will complete individual projects on selected topics. **Prerequisite: Level 1.**
- **Level 3** The intermediate course reinforces and advances fundamental skills. There is a greater emphasis on reading, listening, and speaking. Cultural themes are developed. Writing becomes expository and less structured. **Prerequisite: Level 2.**
- **Level 4** Continuation of the intermediate course deals with fundamental skills relative to general study of literature, history, and culture. Emphasis is placed on conversational approach using language in practical solutions. Refinement of grammatical skills is pursued. Works of representative authors will be read and reported on in writing. Discussion periods will be provided. Individual and/or group projects will be accomplished during the year. **Prerequisite: Level 3**.
- **Level 5** This course entails conversation, culture, grammar, oral reporting, selected readings, and writing samples. In this course, there are higher expectations on the mastery of the linguistic skills. More extemporaneous speaking in the classroom is required. **Prerequisite: Level 4.**

Spanish Level 1	Grades 9, 10, 11, 12	1 Credit

The beginning course emphasizes the fundamental skills of listening, speaking, reading and writing. These skills are developed through a thematic approach that stresses themes such as sports, family, shopping, school, travel, and meals. Geography is also included. [Graduation Requirement: World Language]

Spanish Level 2	Grades 9, 10, 11, 12	1 Credit

Continuation of the beginning course deals with fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Culture is further developed. Students will complete individual projects on selected topics. Prerequisite: Level 1. [Graduation Requirement: World Language]

Honors Spanish 2	Grades 9, 10, 11, 12	1 Credit

This accelerated course is a continuation of the beginning course dealing with fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Culture is further developed. Students will complete individual projects on selected topics. Prerequisite: Level 1. [Graduation Requirement: World Language]

Spanish Level 3	Grades 10, 11, 12	1 Credit

This intermediate course reinforces and advances fundamental skills. Students review previous structures as well as learn more advanced structures. More emphasis is placed on developing a proficiency of expression using a variety of tenses with more expanded vocabulary and grammatical structures. Emphasis is placed on using the language in a meaningful way through continued use of paired/group activities, cooperative learning, hands on projects, presentations, discussion, games, music, and communicative activities. Prerequisite: Level 2. [Graduation Requirement: World Language]

Honors Spanish 3	Grades 10, 11, 12	1 Credit

Level III Honors is an advanced course that focuses on the continued development of fluency, reading of authentic texts, development of conversational ease, and understanding and use of more complex grammatical structures. Increased emphasis is placed on the use of idioms, on the mastery of tense usage, and on the enhancement of independent writing skills. In addition, Level III Honors stresses oral/aural proficiency, the ability to manipulate language structures, to define vocabulary, identify derivations, to use grammar functionally and accurately, to understand written texts, to think in the chosen language, and complete original writing with reasonable facility. This course is taught at an accelerated pace. Prerequisite: Level 2 Honors. [Graduation Requirement: World Language]

Spanish Level 4	Grades 10, 11, 12	1 Credit

Continuation of the intermediate course places emphasis on developing speaking and writing skills. Students review previously learned structures and more emphasis is placed on developing a proficiency of expression using a variety of tenses with more expanded vocabulary and grammatical structures. Appreciation and knowledge of the Spanish-speaking world is emphasized in a meaningful way through continued use of reading, paired/group activities, cooperative learning, hands-on projects, presentations, discussion, games, music, and communicative activities. Students continue with writing assignments designed to improve proficiency to a higher level. Senior students can take the Seal of Biliteracy Exam. Prerequisite: Level 3. [Graduation Requirement: World Language]

Honors Spanish 4	Grades 10, 11, 12	1 Credit

Level IV is an advanced course that stresses oral/aural proficiency, the ability to manipulate language structures, to define vocabulary, identify derivations, to use grammar functionally and accurately, to understand written text, to think in the chosen language, and complete original writing with reasonable facility. Using excerpts from Spanish, Italian, and/or French literature along with other selected cultural and historical readings, students are expected to write original compositions using vocabulary appropriate to the materials. In this course, students continue with a focus on listening, speaking, reading and writing at the intermediate ACTFL proficiency level. This course is taught at an accelerated pace. Senior students can take the Seal of Biliteracy Exam. [Graduation Requirement: World Language]

AP Placement Spanish Language	Grades 11, 12	1 Credit

This college-level course provides opportunities for students to demonstrate their proficiency in the modes of communication (Interpretive, Interpersonal, and Presentational) from the Intermediate to the Pre-Advanced range. When communicating, students in the AP Spanish Language and Culture course will demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings. The AP Spanish Language and Culture course is conducted exclusively in Spanish. Students are expected to take the Advanced Placement exam. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining his or her summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. [Graduation Requirement: World Language]

AP Placement Spanish Literature and Culture	Grades 12	1 Credit

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their

critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism). Students are expected to take the Advanced Placement exam. Advanced Placement (AP) classes are rigorous college courses that are offered in the high school setting. 154 AP courses require summer assignments that are due on the first day of school. The student is responsible for obtaining his or her summer assignments and submitting the completed work on time. Any student who fails to meet the due date for summer assignments will receive a failing grade. [Graduation Requirement: World Language]

Native Language Spanish 1	Grades 9, 10, 11, 12	1 Credit

This course is for students who are fluent speaking Spanish but have basic skills in reading and writing and require support in those areas. Students will build on their competency in speaking, writing and reading their native language. To further enhance their understanding of the culture, special activities are developed. Students read-translate exercises, read-analyze stories and write Latin sentences. Emphasis is placed on Greek myths and daily life in ancient Rome. The impact of Latin and classical literature and history upon modern literature and current events is emphasized in all sequences of Latin Study 1-4. [Graduation Requirement: World Language]

Native Language Spanish 2	Grades 9, 10, 11, 12	1 Credit

This course is designed to further develop the students' basic four literacy skills: Reading, Listening, Speaking, and Writing. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World. [Graduation Requirement: World Language]

Honors Native Language Spanish 2	Grades 9, 10, 11, 12	1 Credit

This course aligns to the AP Language and Culture (NHS) and IB (BMHS) course outlines. This course is designed to further develop the students' reading and writing skills. Native 2 Honors is a reading and composition course that engages Native/Heritage learners in exploring social and contemporary topics with a variety of readings from newspapers, magazines, essays and online media. One of the main objectives of this course is to develop strong writing & reading skills in Spanish. Students will practice not only argumentative writing, but also practical writing, such as writing a letter or an article. In this course, students will continue reviewing and recycling the most challenging grammar topics and vocabulary to continue building confidence and skill in writing & reading in Spanish. This course is taught at an accelerated pace. [Graduation Requirement: World Language]

Native Language Spanish 3	Grades 10, 11, 12	1 Credit

This course is designed to expand the students' knowledge of Spanish through readings, written essays, and oral presentations. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World. [Graduation Requirement: World Language]

Honors Native Language Spanish 3	Grades 10, 11, 12	1 Credit

This course aligns to the AP Language and Culture (NHS) and IB (BMHS) course outlines. Students are expected to engage in spoken interpersonal communication, engage in written interpersonal communication, synthesize information from a variety of authentic audio, visual, and audiovisual resources, synthesize information from a variety of authentic written and printed resources, plan, produce, and present spoken presentational communication; and plan and produce written presentational communication. This course is significantly more demanding to develop those skills measured on the Advanced Placement Examination in Spanish Language. This course is taught at an accelerated pace. Senior students can take the Seal of Biliteracy Exam. [Graduation Requirement: World Language]

Native Language Spanish 4	Grades 10, 11, 12	1 Credit

This course is designed to focus on the development of techniques for written and oral formal public presentations in a variety of contexts and themes: organizing and presenting information for clear and successful presentations in Spanish. This course aims to strengthen students' ability to communicate orally and in writing through an intensive grammar review, vocabulary building, spelling and punctuation rules of the Spanish Language. At the end of the course, students present small research projects on different aspects and issues related to the linguistic and cultural variation of the Hispanic World. [Graduation Requirement: World Language]

Chinese 1 (Mandarin)	Grade 9, 10, 11, 12	1 Credit

This beginning course stresses the fundamental skills: listening, speaking, reading, and writing. Cultural aspects are explored at all levels. Students will complete individual projects on selected cultural topics. [Graduation Requirement: World Language]

Chinese 2 (Mandarin)	Grade 10, 11, 12	1 Credit

Continuation of the beginning course stresses the fundamental skills with greater emphasis on the natural use of the language in everyday situations. Reading selections are used to enhance vocabulary skills. Students further develop their cultural understanding. Students will complete individual projects on selected cultural topics. Prerequisite: Chinese 1. [Graduation Requirement: World Language]

American Sign Language 1	Grades 9, 10, 11, 12	1 Credit

This full-year course will introduce students to the basics of American Sign Language. It counts as a World Languages credit and is offered as an additional pathway related course. [Graduation Requirement: World Language]

American Sign Language 2	Grades 10, 11, 12	1 Credit

This course continues the study and practice of basic skills initiated in American Sign Language 1. It emphasizes comprehending, signing, and developing receptive skills. The course will focus on grammar and syntax, vocabulary, and culture of the Deaf. Prerequisite: American Sign Language 1 with a grade of C or better. [Graduation Requirement: World Language]

American Sign Language 3	Grades 11, 12	1 Credit

This course builds on skills learned in American Sign Language 2, adding more complex ASL grammatical features and vocabulary, short stories, narratives and dialogues. Learn discourse skills including description of general surroundings, appropriate sequencing, temporal aspects and conditionals, the deaf community and culture. Prerequisite: American Sign Language 2 with a grade of C or better. [Graduation Requirement: World Language]

Future Ready Programs

Providing the portal to a Future Ready education—online and in person, anytime, for all learners

Mission and Vision

Future Ready Programs offer equitable access to high-quality, individualized education, through the integration of direct instruction, the internet, and other distance learning technologies to students. This environment provides the flexibility of time and location and promotes the development of skills, attitudes, and self-discipline necessary to achieve success and be future-ready. Norwalk Future Ready programs offer enrollment options to allow students to earn a standard high school diploma from their school of record. Our programs allow for customization and flexibility so that every student has their own personal learning path while following the same criteria as all Norwalk Public Schools students. These programs assist to re-engage students who are under-credited and overage as well as those who need a different learning environment. Norwalk Future Ready Programs include a variety of assessment techniques that address the various learning styles and intelligence types. Embedding online learning across all programs enables students to assume increasing responsibility for their own learning.

FRP and School Choice

Norwalk Future Ready Programs are choice programs that include an application process. Applications are reviewed on an individual basis, a meeting will be held with the counselor, student, and parents/guardians. Upon acceptance an orientation is held with Future Ready, the student, and parent/guardian. Families are offered a 21-day grace period for withdrawal and counseling as alternatives for those who find the program inappropriate for their children. Students are not excluded based on any disability, language, or other academic need. If there is currently an IEP or 504, a convening of the IEP/504 team and a review of a student's current IEP/504 is held to determine the appropriateness of the potential placement.

FRP Description of Programs:

These programs offer a unique blend of learning modalities, combining the flexibility of online education with the rigor of in-person instruction in a small setting. We emphasize the development of essential skills, attitudes, and self-discipline, preparing students to thrive in a rapidly evolving future. To enhance our curriculum, we have integrated project-based learning strategies, offering students dynamic opportunities to demonstrate their mastery of content and earn credits through real-world, collaborative projects. This approach not only deepens their understanding of academic subjects but also fosters critical thinking, problem-solving, and teamwork skills, essential for success in the modern world. Our commitment to personalized learning paths, while adhering to the standards of Norwalk Public Schools, ensures that each student is equipped to meet their unique challenges and aspirations.
Please note that course options are limited due to the program's small size.

Twilight Academy

Twilight Academy is a Future Ready program for over-aged, under-credited 11th and 12th-grade high school students to earn credits towards a high school diploma. Our mission is to re-engage youth through wrap-around services in a small supportive classroom environment. Twilight Academy is held during the evening, and many of our students have commitments during the day, such as childcare, and jobs, that prevented them from finishing high school through their school of origin. Courses may be conducted in person or virtual.

- Monday through Thursday 3 PM - 7 PM. Friday asynchronous
- Open only to 11th and 12th grade students.

Virtual Academy

Virtual Academy is an opportunity for 10th - 12th-grade students to enroll in virtual classes through a lab setting for original credit or credit recovery. Students will have small group, personalized instruction through problem-based learning. Virtual Academy will mirror that of in-person instruction, such as the availability of academic and social emotional support. Students enrolled in Future Ready have the option of blending their schedule across both programs.

- Live virtual instruction, Monday through Thursday. Friday in person
- Open only to 10th - 12th grade students


FUTURE READY PROGRAMS
VIRTUAL ACADEMY
350 Main Ave, Norwalk, CT
ABOUT OUR ACADEMY
We are an online program for 10th - 12th grade students. We offer live virtual instruction Monday - Thursday with an in-person session every Friday.
Our courses are semester-based. That means you can earn a full credit for a yearlong course in one semester.
HOURS
Monday - Thursday
10:00 AM - 3:00 PM
Lunch: 12:30 - 1:00
Friday - In-person
10 AM - 1 PM
SERVICE PROJECTS
Giving back to the community is an important part of being a Future Ready Student.
Once a month we will volunteer at various local organizations. This is a wonderful Capstone opportunity!
Purpose of the Mid-Term Portfolio Assessment


FUTURE READY PROGRAMS
TWILIGHT ACADEMY
350 Main Ave, Norwalk, CT
ABOUT OUR ACADEMY
We are an after school program for 11th & 12th grade students. We offer content core classes Monday - Thursday. Fridays are asynchronous with an option for in person support 10 AM - 1 PM
Our courses are semester-based. That means you can earn a full credit for a yearlong course in one semester.
HOURS
Monday - Thursday
3:00 PM - 7:00 PM
Friday - asynchronous and In person support from 10 AM - 1 PM
SERVICE PROJECTS
Giving back to the community is an important part of being a Future Ready Student.
Once a month we will volunteer at various local organizations. This is a wonderful Capstone opportunity!

English Courses Offered in Future Ready Programs

EN0017GAE **Transition English** **1 Credit**

*[Graduation Requirement: English Credit]

This course follows the English I curriculum standards and is designed for MLL students. The course is co-taught between an English teacher and an MLL teacher. Teachers use instructional strategies that are effective with MLLs to prepare students for the mainstream English II course that is next in the English core sequence. The curriculum is an exploration of the reading-writing connection and students will incorporate the writing process as they develop their communication skills and engagement in academic discourse. Successful completion gives the student one credit in English.

EN0016GAE **English 1** **1 Credit**

*[Graduation Requirement: English Credit]

This course is an exploration of the reading-writing connection. Students will study a diverse collection of informational and literary texts and will use the writing process and technology to develop writing proficiency. Students will also work on speaking and listening, vocabulary development, comprehension strategies, and logical thinking and study skills. Emphasis will be placed on close reading strategies that develop critical reading and analytical skills development.

EN0026GAE **English 2** **1 Credit**

*[Graduation Requirement: English Credit]

In this course, students will acquire the skills and develop the vocabulary necessary to read the major genres of literature: the novel, short story, drama, poetry, essay, and biography. A combination of nonfiction and fiction works will be used in the course of study. Students will study the various techniques of developing and researching a topic and will write papers and develop multimedia presentations using these skills. Instruction will focus on response writing, persuasive essay, and reflective personal statements. Grammar, research, vocabulary, and oral communication skills will also be emphasized.

EN0036GAE **English 3** **1 Credit**

*[Graduation Requirement: English Credit]

Students in this course will read major writers of American Literature from the early colonial period to the present to become aware of their cultural traditions. Through their reading, discussions, vocabulary work, and writing, students will develop an awareness of their place in society and their value as an individual. Students will develop research skills and use the writing process to develop creative, analytical, and persuasive pieces. Informational and literary texts will be analyzed using close reading strategies as preparation for college entrance exams. Focus will also be given to the personal narrative as a way to best prepare students for college essay admission requirements.

EN0036GAE **Senior English Elective** **1 Credit**

*[Graduation Requirement: English Credit]

Students will take two semester-long English electives to complete their Senior English credit. Students will choose from the courses offered through Norwalk High School and Brien McMahon.

Social Studies Courses Offered in Future Ready Programs

SS2322GAE African American/Black and Puerto Rican/Latino Studies **1 Credit**
***[Graduation Requirement: Pathway Related Course]**

This course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives and collaborations of African America/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, nation and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities.

SS2236GAC Civics **0.5 Credit**
***[Graduation Requirement: Civics]**

The course surveys the origins and institutions of the US Government. Emphasis is placed on the political organization and structure of our national, state and local governments as well as their development. The Constitution and its interpretation will be studied through the use of Supreme Court decisions. Analysis and interpretation of outside readings will be required. Students are encouraged to actively participate in the democratic process and will be given an opportunity to participate in the governmental process through fieldwork projects.

SS2272GAC Psychology 1 * **0.5 Credit**
[Graduation Requirement: Social Studies Related Course]

This course is a one-semester introductory survey of the field of human behavior. Topics include sensory awareness, perception, self-esteem, dreams, mediation, motivation, and the unconscious. Students use readings, experiments, roleplays, small and large group discussion, and projects to explore these areas of human behavior.

SS2308GAC Social Justice **0.5 Credit**
***[Graduation Requirement: Social Studies Related Course]**

This semester course is designed to increase students' awareness, knowledge, and understanding of issues related to diversity, human rights, social and economic justice. Diversity is understood as the intersectionality of multiple factors including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation. In this course, students will explore social justice movements like Women's Rights, Civil Rights, and LGBTQ+.

SS2226GAE United States History **1 Credit**
***[Graduation Requirement: US History]**

This course surveys the development of the American political, socio-cultural, and economic landscapes during the post-Civil War period and investigates the role of the United States in world affairs. Provision may be made for students to concentrate on and/or specialize in areas of interest through classroom projects and writing assignments.

SS2206GAE World History **1 Credit**
***[Graduation Requirement: Social Studies Related Course]**

This course is a survey of World History from its origins to the 21st century. It will include historical development of economics, political, social and religious institutions with an emphasis on geography's impact on historical and cultural development.

Math Courses Offered in Future Ready Programs

MA1121GAE	Algebra 1	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]		

This course will cover many similar topics as Intensified Algebra 1, but in more depth. In addition, students will engage in an extensive study of systems of linear equations as well as an introductory study of quadratic equations and expressions.

MA1128GAE5	Integrated Algebra and Geometry	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]		

This course is designed to develop confident knowledge of the fundamentals of algebra and geometry, material that is at the core of the study of high level mathematics. It cultivates the essential skills and habits required to make use of mathematics, including the ability to approach challenging problems and to communicate mathematical ideas clearly. The mathematical content of the course includes more advanced applications of material from Algebra I, as well as material drawn from the traditional content of Geometry and some Algebra II. Topics are woven throughout the course to build a deeper understanding. Prerequisite: Algebra 1 or Intensified Algebra.

MA1122GAE	Algebra 2	1 Credit
*[Graduation Requirement: Math Credit; STEM Related Course]		

The major theme of this course is functions. The concept of functionality will be developed fully, and the course includes a study of linear, quadratic, exponential, and polynomial. Also included in this course is content with probability and statistics. Prerequisite: Intensified Algebra 1 or Algebra 1. May be taken concurrently with Geometry.

World Languages Courses Offered in Future Ready Programs

WL4430GAE	Spanish 1	1 Credit
WL4432GAE	Spanish 2	
WL4433GAE	Spanish 3	
WL4435GAE	Spanish 4	
*[Graduation Requirement: World Languages]		

Science & STEM Courses Offered in Future Ready Programs

AR5502GAC	Computer Applications	0.5 Credit
*[Graduation Requirement: STEM Related Course; Digital Literacy]		

This course is essential to each student's development of technological understanding and skills which are needed at both the high school and college level, as well as post-secondary employment. Instruction will focus on:

- 21st Century Skills - Students will focus on developing their digital literacy skills through social media literacy, digital footprint exploration, and evaluating digital sources.
- Word Processing - students will create and edit business documents as well as review and apply MLA paper formatting rules.
- Presentations - students will research, create and deliver a presentation with illustrations and shapes on a topic of their choice
- Spreadsheets - students will create a worksheet to organize data, visually present data using embedded charts and graphs, and learn to use formulas and functions.

SC3348GAE	Chemistry (Lab Science)	1 Credit
*[Graduation Requirement: Chemistry/Physical Science (Lab)]		

This course covers the following topics: properties of materials, the transformations which matter undergoes, the conditions affecting those transformations and the nature and amount of energy released or absorbed in these changes, the uses of materials and creation of new substances. Emphasis is placed upon mathematical application to chemistry and an extensive degree of laboratory work. Recommended C or better in the prerequisite courses. Prerequisite: Intensified Algebra 1 or Algebra 1 and Biology

SC3304GAE Earth and Integrated Physical Science (Lab Science) 1 Credit
***[Graduation Requirement: Chemistry/Physical Science; Science Related Course; STEM Related Course]**

Emphasis of study will be placed on students' understanding of the interconnections and feedbacks among the geosphere, hydrosphere, atmosphere, and anthroposphere as well as the physical aspects of motion, energy, forces, and waves and technology. Students will study climate systems and climate change, the human impacts on Earth systems and issues of human sustainability, current global and regional data sets, the systems and transfer of energy, laws of force and motion, and waves and technological applications. Students will make projections for the future, analyze space systems and research, and use engineering design concepts to evaluate future societal choices in the earth, space, and physical sciences. Upon completion of this course a student will have a knowledge of principles including but not limited to: energy futures, resource management, space exploration and structures, land use, environmental impacts, pollution regulation, and applications of motion, waves, and energy. Prerequisite: Biology

SC3338GAE Human Anatomy and Physiology (Lab Science) 1 Credit
***[Graduation Requirement: Science Related Course; STEM Related Course]**

Human Anatomy and Physiology includes the study of all structures within the major organ systems of the human body. The morphology of these systems will be directly correlated with how major structures are able to function. This course is designed to examine a healthy state of the human body in comparison with the abnormalities and their physiological effects that result from disease. A comprehensive review of biology, chemistry, and other biological sciences will be integrated throughout this full year course. Dissections will serve as a significant form of assessment allowing practical application of the knowledge attained throughout the semester. Course material will be covered in depth and at a demanding pace. Course material will be covered in a manner that is conducive to students of all backgrounds and abilities to learn. Prerequisite: Biology and Chemistry

SC3455GAC Certified Nursing Assistant (CNA) Certification with NCC Grades 11, 12 0.5 Credit
***[Graduation Requirement: Science Related Course; STEM Related Course] Open to Scholars at BMHS, CGS, NHS, P-TECH Norwalk, Twilight Academy & Virtual Academy. Priority Scheduling for Seniors, seats are limited based on partnership agreements.**

Certified Nurse Assistants are integral members of the health profession performing services in the care of patients, residents, and clients in healthcare settings. This course prepares scholars to work in long-term care nursing facilities, hospitals, assisted living facilities, and home care. The course includes classroom instruction combined with hours of practical hands-on training in the laboratory and clinical setting at Norwalk Hospital, which enables the scholar to deliver all aspects of personal care to patients. Scholars learn about the physical and emotional changes related to aging. Scholars will be given both the State and written clinical exams. In addition to CNA Certification, scholars may receive Red Cross Adult CPR Certification. Appropriate clinical and lab attire will be required for Norwalk Hospital clinical rotations. Graduating Seniors who have completed the CNA Certification with a passing grade and have passed all required exams may work closely with Norwalk Hospital for job placement within the Nuvance Health Network. **Scholars must be 16+ years old to participate in this course at the time of semester registration. Scholars must be fully Covid-19 vaccinated and show proof, prior to beginning hospital clinical rotations.**

Career Pathways within Norwalk Public Schools

Brien McMahon High School Career Pathways							
Art Appreciation	Business	Computer Science	Finance	Global Engagement	Healthcare & Medical Academy	Individualized Studies	International Studies
Legal Services	Marine Science Academy	Marketing	Music	NJROTC	PLTW Biomedical Sciences	PLTW Computer Science	PLTW Engineering
Politics	Visual Art	Wellness					

Center for Global Studies Career Pathways							
Computer Science	Finance	Global Engagement	Individualized Studies	International Studies	Music	NJROTC	Politics
Visual Art	Wellness						

Norwalk High School Career Pathways							
Accounting & Finance	Art	Art History	Counseling and Mental Health Services	Culinary Arts	Digital Media & Communications Academy	Entrepreneurship & Marketing	General Studies
Global Engagement	Information Support & Services	Music	Performing Arts	Programming & Software Development	ROTC	Social Justice	Therapeutic Services
Wellness							

P-TECH Career Pathways				
Individualized P-TECH Studies	Network Systems	Programming & Software Development	Skills Build	Web & Digital Communications

Brien McMahon High School Career Pathways 2024-2025

Career Pathways help to prepare students for the ever-changing workplace by developing professional skills and knowledge.

Grade levels are for suggestion only; the course catalog will determine when a scholar can take a course based on grade level

Career Cluster Career Pathway	9th Grade	10th Grade	11th Grade	12th Grade
Arts, Audio/Video Technology, Communications				
Art Appreciation Pathway *4 courses*	**Required:** Art History Or Foundations of Art	**Must Select One:** Cultural Perspectives in Art Graphic Art & Design	**Must Select One:** Cultural Perspectives in Art Graphic Art & Design IB Art History SL1 IB Visual Art Y1 IB Art History SL2 IB Visual Art Y2	**Must Select One:** Cultural Perspectives in Art Graphic Art & Design IB Art History SL2 IB Visual Art Y2
Music Pathway *6 courses*	**Required 4 Years** **Band and/or Chorus and/or Orchestra:** **Band** Symphonic Band **Chorus** Beginning Choir **Orchestra** Prelude Orchestra	**Required 4 Years** **Band and/or Chorus and/or Orchestra:** **Band** Wind Ensemble or Honors Wind Symphony **Chorus** Advanced Choir, Chorale, or Honors Chamber Singers **Orchestra** Philharmonic Orchestra or Honors Principal Orchestra	**Must Select One:** Color Guard Introduction to Music Theory Music Theory or AP Music Theory The Poetry of Music Winter Guard Winter Percussion Ensemble	**Must Select One:** Color Guard Introduction to Music Theory Music Theory or AP Music Theory The Poetry of Music Winter Guard Winter Percussion Ensemble
Visual Art Pathway *4 courses*	**Required:** Foundations of Art	**Must Select One:** 3D Sculpture 1 or 2 AP Studio Art Applied Art Design 1 or 2 Digital Media 1 or 2 Honors Portfolio Photography 1 or 2 Printmaking 1 or 2	**Must Select One:** 3D Sculpture 1 or 2 AP Studio Art Applied Art Design 1 or 2 Digital Media 1 or 2 Honors Portfolio IB Art Photography 1 or 2 Printmaking 1 or 2	**Must Select One:** 3D Sculpture 1 or 2 AP Studio Art Applied Art Design 1 or 2 Digital Media 1 or 2 Honors Portfolio IB Art Photography 1 or 2 Printmaking 1 or 2
Business Management & Administration				
Business Pathway *4 courses*	**Required:** Discovering Careers (9th grade only, not required) Principles of Business Principles of Personal Finance	**Must Select One:** Computer Applications Entrepreneurship or Honors Entrepreneurship Marketing Personal Finance	**Must Select One:** Business Law Computer Applications Entrepreneurship or Honors Entrepreneurship Marketing Personal Finance	**Must Select One:** Business Law Computer Applications Entrepreneurship or Honors Entrepreneurship Marketing Personal Finance
Finance				
Finance Pathway *4 courses*	**Required:** Principles of Personal Finance	**Required:** Principles of Investing Personal Finance	**Must Select One:** Business Law Honors Accounting 1 or 2 Honors Economics or AP Macro Economics Principles of Business	**Must Select One:** Business Law Honors Accounting 1 or 2 Honors Economics or AP Macro Economics Principles of Business

Health Sciences				
Healthcare & Medical Academy *9 courses*	**Required (must earn a C or better to be recommended for Healthcare & Medical Academy courses):** Biology or Honors Biology Earth and Integrated Physical Science, Chemistry or Honors Chemistry Physics or Honors Physics **9th Grade Introduction to Health Care (only to be taken if unsure about joining the pathway)**	**Must Select 4 Pathways Courses (must earn a C or better to advance to the next level PLTW course):** Honors Principles of Biomedical Science (PLTW) Honors Human Body Systems (PLTW) Honors Medical Interventions (PLTW) Honors Biomedical Innovations (PLTW) IB Sports, Exercise, and Health Science (year 1) IB Sports, Exercise, and Health Science (year 2) **Must earn a C or better in four Healthcare and Medical Academy courses to earn the Red Graduation cord)**	**Must Select One:** IB Biology (2 years) IB Physics (2 years) UCONN EMT Certification (ECE) UCONN Medical Terminology (ECE) UCONN EMT Certification (ECE)	**Must Select One:** IB Biology (2 years) IB Physics (2 years) UCONN EMT Certification (ECE) UCONN Medical Terminology (ECE) UCONN EMT Certification (ECE)
Human Services				
Wellness Pathway *4 courses*	**Required:** Health 1 Health 2	**Must Select One:** Functional Fitness Fundamentals of Human Performance Leadership Development Peer-Assisted Physical Education Physical Education Stress Management and Mindfulness	**Must Select One:** Functional Fitness Fundamentals of Human Performance Leadership Development Peer-Assisted Physical Education Physical Education Stress Management and Mindfulness	**Must Select One:** Functional Fitness Fundamentals of Human Performance Leadership Development Peer-Assisted Physical Education Physical Education Stress Management and Mindfulness

Information Technology				
Computer Science Pathway *4 courses*	**Required:** Computer Science 1 Computer Science 2	**Must Select One:** AP Computer Science Principles AP Computer Science A CompTIA IT Fundamentals CompTIA Core 1 CompTIA Core 2 Computer Applications Video Game Design	**Must Select One:** AP Computer Science Principles AP Computer Science A CompTIA IT Fundamentals CompTIA Core 1 CompTIA Core 2 Computer Applications Video Game Design	**Must Select One:** AP Computer Science Principles AP Computer Science A CompTIA IT Fundamentals CompTIA Core 1 CompTIA Core 2 Computer Applications Video Game Design
PLTW Computer Science Pathway *4 courses*	**Required:** Honors Computer Essentials (PLTW)	**Required:** Honors Computer Science Principles (PLTW)	**Required:** Honors Computer Science A (PLTW)	**Required:** Honors Cybersecurity (PLTW)
Law, Public Safety, Corrections, Security				
Legal Services Pathway *4 courses*	**Required:** Civics or Honors Civics Public Speaking US History	**Must Select One:** AP Government Civics or Honors Civics Street Law	**Must Select One:** AP Government AP Macroeconomics Civics or Honors Civics IB SL Global Politics Street Law	**Must Select One:** AP Government AP Macroeconomics Civics or Honors Civics Crime Literature Culture & Conflict IB SL Global Politics Immigrant Experience Street Law
Marketing				
Marketing Pathway *4 courses*	**Required:** Discovering Careers Principles of Business	**Must Select One:** Computer Applications International Business Marketing 2 Sports & Entertainment Marketing	**Must Select One:** Computer Applications International Business Marketing 2 Sports & Entertainment Marketing	**Must Select One:** Computer Applications International Business Marketing 2 Sports & Entertainment Marketing

Science, Technology, Engineering, Math				
Marine Science Academy *4 courses*	**Required:** Marine Studies 1 Marine Studies 2	**Required:** Marine Studies 1 Marine Studies 2	**Must Select One:** Environmental Science IB ESS Y1 and IB ESS Y2 IB Marine Science Y1 & IB Marine Science Y2 Marine Biology Marine Engineering & Trades 1 Marine Engineering & Trades 2	**Must Select One:** Environmental Science IB ESS Y1 and IB ESS Y2 IB Marine Science Y1 & IB Marine Science Y2 Marine Biology Marine Engineering & Trades 1 Marine Engineering & Trades 2
PLTW Biomedical Science Pathway *4 courses*	**Required:** Honors Principles of Biomedical Science (PLTW)	**Required:** Honors Human Body Systems (PLTW)	**Required:** Honors Medical Interventions (PLTW)	**Required:** Honors Biomedical Innovations (PLTW)
PLTW Engineering Pathways *4 courses*	**Required:** Honors Introduction to Engineering Design (PLTW)	**Required:** Digital Electronics (PLTW)	**Required:** Aerospace Engineering (PLTW)	**Required:** Honors Principles of Engineering (PLTW)
Individualized Studies				
Individualized Studies Pathway *4 courses*	Scholars in the Individualized Pathway take a multidisciplinary approach to education. This pathway combines study of the arts, biological and, physical sciences, social sciences, and the humanities. Scholars select courses based on their proposed Capstone Experience Topic and Career Goals.			

Center for Global Studies Career Pathways 2024-2025

Career Pathways help to prepare students for the ever-changing workplace by developing professional skills and knowledge.

Grade levels are for suggestion only; the course catalog will determine when a scholar can take a course based on grade level

Career Cluster Career Pathway	9th Grade	10th Grade	11th Grade	12th Grade
Arts, Audio/Video Technology. Communications				
Music Pathway *6 courses*	**Required 4 Years Band and/or Chorus and/or Orchestra:** **Band** Symphonic Band Wind Ensemble or Honors Wind Symphony **Chorus** Beginning Choir Advanced Choir, Chorale, or Honors Chamber Singers **Orchestra** Prelude Orchestra Philharmonic Orchestra or Honors Principal Orchestra	**Required 4 Years Band and/or Chorus and/or Orchestra:** **Band** Symphonic Band Wind Ensemble or Honors Wind Symphony **Chorus** Beginning Choir Advanced Choir, Chorale, or Honors Chamber Singers **Orchestra** Prelude Orchestra Philharmonic Orchestra or Honors Principal Orchestra	**Must Select One:** Color Guard Introduction to Music Theory Honors Intermediate Music Theory Music Theory or AP Music Theory The Poetry of Music Winter Guard Winter Percussion Ensemble	**Must Select One:** Color Guard Introduction to Music Theory Honors Intermediate Music Theory Music Theory or AP Music Theory The Poetry of Music Winter Guard Winter Percussion Ensemble
Visual Art Pathway *4 courses*	**Required:** Art 1 or Graphic Arts & Design	**Must Select One:** AP Art History AP Studio Art Drawing Honors Portfolio IB Art Year 1 IB Art Year 2 IB Film Year 1 IB Film Year 2 Painting Photography 1 or 2	**Must Select One:** AP Art History AP Studio Art Drawing Honors Portfolio IB Art Year 1 IB Art Year 2 IB Film Year 1 IB Film Year 2 Painting Photography 1 or 2	**Must Select One:** AP Art History AP Studio Art Drawing Honors Portfolio IB Art Year 1 IB Art Year 2 IB Film Year 1 IB Film Year 2 Painting Photography 1 or 2
Finance				
Finance Pathway *4 courses*	**Required:** Money Math	**Must Select One:** Applied Statistics Honors Accounting 1 or 2 Honors Economics or AP Economics IB Applications & Interpretations Year 1 IB Applications & Interpretations Year 2 IB Business Year 1 IB Business Year 2	**Must Select One:** Applied Statistics Honors Accounting 1 or 2 Honors Economics or AP Economics IB Applications & Interpretations Year 1 IB Applications & Interpretations Year 2 IB Business Year 1 IB Business Year 2	**Must Select One:** Applied Statistics Honors Accounting 1 or 2 Honors Economics or AP Economics IB Applications & Interpretations Year 1 IB Applications & Interpretations Year 2 IB Business Year 1 IB Business Year 2

Government, Public Administration				
Global Engagement Pathway *6 courses*	**Required 4 Years:** Arabic Chinese Japanese	**Must Select One:** Cultural Anthropology East Asian History French World History or Honors World History IB History Year 1 IB History Year 2 Italian Latin MLL Culture and Career Internship MLL Culture and Career Seminar 1 or 2 Native Spanish Spanish World Language Seminar	**Must Select One:** Cultural Anthropology East Asian History French World History or Honors World History IB History Year 1 IB History Year 2 Italian Latin MLL Culture and Career Internship MLL Culture and Career Seminar 1 or 2 Native Spanish Spanish World Language Seminar	**Must Participate in 20 Hours of Global Related Activities, Included But Not Limited To:** Arabic Club Bella Italian Club Chinese Club French Club Haitian Club Hosting a Scholar from a CGS Sister School J Club K Club Model United Nations NAACP Club Spanish Club **Must Complete a Global Engagement Project**
International Studies Pathway *6 courses*	**Required:** 4 Years World Language Principles of Culinary Arts	**Required:** 4 Years World Language Principles of Culinary Arts	**Must Select One:** Culinary Arts 1 Cultural Anthropology East Asian History IB History Year 1 IB History Year 2 Principles of Culinary Arts World Language Seminar	**Must Select One:** Culinary Arts 1 Cultural Anthropology East Asian History IB History Year 1 IB History Year 2 Principles of Culinary Arts World Language Seminar
Politics Pathway *4 courses*	**Required:** World History or Honors World History US History in a Global Context, Honors US History in a Global Context, or AP US History	**Required:** World History or Honors World History US History in a Global Context, Honors US History in a Global Context, or AP US History	**Must Select One:** AP Economics Civil Engineering or Honors Civil Engagement IB SL Global Politics Year 1 IB SL Global Politics Year 2	**Must Select One:** AP Economics Civil Engineering or Honors Civil Engagement IB SL Global Politics Year 1 IB SL Global Politics Year 2
Naval Junior Reserves Officer Training (NJROTC) Pathway *4 courses*	**Required:** NJROTC 1	**Required:** NJROTC 2	**Required:** NJROTC 3	**Required:** NJROTC 4

Human Services				
Wellness Pathway *4 courses*	**Required:** Health 1 Health 2	**Must Select One:** Functional Fitness Leadership Development Peer Assisted Physical Education Physical Education Principles of Culinary Arts	**Must Select One:** Functional Fitness Leadership Development Peer Assisted Physical Education Physical Education Principles of Culinary Arts	**Must Select One:** Functional Fitness Leadership Development Peer Assisted Physical Education Physical Education Principles of Culinary Arts
Information Technology				
Computer Science Pathway *4 courses*	**Required:** Computer Science 1 Computer Science 2	**Must Select One:** AP Computer Science Principles AP Computer Science A Logical Reasoning or Honors Logical Reasoning Video Game Design	**Must Select One:** AP Computer Science Principles AP Computer Science A Logical Reasoning or Honors Logical Reasoning Video Game Design	**Must Select One:** AP Computer Science Principles AP Computer Science A Logical Reasoning or Honors Logical Reasoning Video Game Design
Individualized Studies				
Individualized Studies Pathway *4 courses*	Scholars in the General Studies Pathway take a multidisciplinary approach to education. This pathway combines study of the arts, biological and physical sciences, social sciences, and the humanities. Scholars select courses based on their proposed Capstone Experience Topic and Career Goals.			

Norwalk High School Career Pathways 2024-2025

Career Pathways help to prepare students for the ever-changing workplace by developing professional skills and knowledge.

Grade levels are for suggestion only; the course catalog will determine when a scholar can take a course based on grade level

Career Cluster Career Pathway	9th Grade	10th Grade	11th Grade	12th Grade
Arts *Audio/Video Technology Communications*				
Art Pathway *4 courses*	**Required:** Foundations of Art or Advanced Foundations of Art	**Must Select One:** 3D Sculpture 1 Applied Arts 1 Digital Illustration & Design 1 Peer-Assisted Art Photography 1 Painting 1 Printmaking 1 Textile Arts 1	**Must Select One:** AP Studio Art Digital Illustration & Design 2 UCONN Drawing 2 Honors Portfolio Painting 2 Peer Assisted Art Photography 2 Printmaking 2 Textile Arts 2	**Must Select One:** AP Studio Art Digital Illustration & Design 2 UCONN Drawing 2 Honors Portfolio Painting 2 Peer Assisted Art Photography 2 Printmaking 2 Textile Arts 2
Art History Pathway *5 courses*	**Must Select One of the Following, Including Art History:** Foundations of Art Advanced Foundations of Art	**Must Select One:** Foundations of Art Advanced Foundations of Art Modern & Contemporary Arts	**Must Select One:** AP Art History Cultural Perspectives in Art Modern & Contemporary Arts	**Must Select One:** AP Art History Cultural Perspectives in Art Modern & Contemporary Arts
Digital Media Communications Academy *5 courses*	**Required Phase 1:** Media Consumption & Creation	**Required Phase 2:** Advanced Media Studies	**Must Select Two Phase 3:** Audio Design & Podcasting Digital Communications Film Production	**Required Phase 4:** Digital Portfolio/Capstone Experience

Music Pathway *6 courses*	**Required 4 Years Band and/or Chorus and/or Orchestra:** **Band,** Symphonic Band, Wind Ensemble or Honors Wind Symphony **Chorus** Beginning Choir Advanced Choir, Chorale, or Honors Chamber Singers **Orchestra** Prelude Orchestra, Philharmonic Orchestra, or Honors Principal Orchestra	**Required 4 Years Band and/or Chorus and/or Orchestra:** **Band** Symphonic Band Wind Ensemble or Honors Wind Symphony **Chorus** Beginning Choir Advanced Choir, Chorale, or Honors Chamber Singers **Orchestra** Prelude Orchestra Philharmonic Orchestra or Honors Principal Orchestra	**Must Select Two:** Music Theory or AP Music Theory Jazz Ensemble Winter Percussion Ensemble	**Must Select Two:** Music Theory or AP Music Theory Jazz Ensemble Winter Percussion Ensemble
Performing Arts Pathway *6 courses*	**Required:** Acting 1 Choir Theater Studies 1	**Participation:** Fall and/or Spring Theater Events Strongly Encouraged	**Must Select Two:** Any teacher recommended band or orchestra ensemble AP Music Theory Color Guard Jazz Ensemble Music Theory Winter Guard Winter Percussion Ensemble	**Must Select Two:** Any teacher recommended band or orchestra ensemble AP Music Theory Color Guard Jazz Ensemble Music Theory Winter Guard Winter Percussion Ensemble
Business Management & Administration Marketing				
Entrepreneurship & Marketing Pathway *4 courses*	**Required:** Entrepreneurship or Honors Entrepreneurship Marketing 1 Principles of Business	**Must Select One:** Business Law Discovering Careers Principles of Investing Sports & Entertainment Marketing	**Must Select One:** Business Law Discovering Careers Principles of Investing Sports & Entertainment Marketing	**Must Select One:** Business Law Discovering Careers Principles of Investing Sports & Entertainment Marketing

Finance				
Accounting & Finance Pathway *4 courses*	**Required:** Honors Accounting 1 Principles of Personal Finance	**Required:** Honors Accounting 1 Principles of Personal Finance	**Must Select One:** Computer Applications Personal Finance Principles of Business Principles of Investing	**Must Select One:** Computer Applications Personal Finance Principles of Business Principles of Investing
Government *Public Administration*				
Global Engagement Pathway *5 courses*	**Required 3 Years:** French Italian Latin Native Spanish or Spanish	**Must Select One:** Cultural Perspectives in Art Current Issues Ecojustice: Environmental Justice Latin American Studies	**Must Select One:** MLL Culture & Career Internship MLL Culture & Career Seminar 1 or 2 Public Health & Epidemiology World History or Honors World History	**Must be a 3-year member of one of the following NHS clubs:** Build-On Earth Club French Club French Honor Society Italian Club Latin Club Spanish Club Spanish National Honor Society STEM Travelers **Participation:** AP, Level 5 or 4 World Language Participant to sit for the Seal of Biliteracy Exam during Senior Year.
Reserves Officer Training Corps (ROTC) Pathway *4 courses*	**Required:** Aerospace Science & Leadership 1	**Required:** Aerospace Science & Leadership 2	**Required:** Aerospace Science & Leadership 3	**Required:** Aerospace Science & Leadership 4

Human Sciences				
Therapeutic Services Pathway *4 courses*	**Required:** Biology or Honors Biology Public Health & Epidemiology Human Anatomy & Physiology or Honors Human Anatomy & Physiology	**Must Select One:** AP Biology AP Statistics Chemistry or Honors Chemistry Genetics Physics or Honors Physics Sports Statistics or Statistics	**Must Select One:** AP Biology AP Statistics Chemistry or Honors Chemistry Genetics Physics or Honors Physics Sports Statistics or Statistics	**Must Select One:** AP Biology AP Statistics Chemistry or Honors Chemistry Genetics Physics or Honors Physics Sports Statistics or Statistics
Hospitality Tourism				
Culinary Arts Pathway *4 courses*	**Required:** Principles of Culinary Arts	**Required:** Culinary Arts 1	**Required:** Culinary Arts 2	**Required:** Culinary Arts 3
Human Services				
Counseling & Mental Health Services Pathway *4 courses*	**Required:** Psychology 1 Responding to Emergencies Sociology	**Must Select One:** Current Issues Genetics Human Anatomy & Physiology or Honors Human Anatomy & Physiology	**Must Select One:** Psychology 2 SCSU Psychology Social Justice Statistics	**Must Select One:** AP Statistics
Wellness Pathway *4 courses*	**Required:** Health 1 Aquatic Fundamentals, Functional Fitness or Physical Education Principles of Culinary Arts	**Must Select One:** Health 2 Lifeguarding Peer-Assisted Physical Education Public Health & Epidemiology	**Must Select One:** Health 2 Lifeguarding Peer-Assisted Physical Education Public Health & Epidemiology	**Must Select One:** Health 2 Lifeguarding Peer-Assisted Physical Education Public Health & Epidemiology

Information Technology				
Information Support and Services Pathway *4 courses*	**Required:** Computer Applications Discovering Careers Video Game Design Web Page Design	**Required:** Computer Applications Discovering Careers Video Game Design Web Page Design	**Required:** Computer Applications Discovering Careers Video Game Design Web Page Design	**Required:** Computer Applications Discovering Careers Video Game Design Web Page Design
Programming and Software Development Pathway *4 courses*	**Required:** Computer Science 1 Computational Logic Computer, Construction & Repair	**Must Select One:** AP Computer Science Principles AP Computer Science A	**Must Select One:** Computer Applications Computer Science 2 Video Game Design	**Must Select One:** Computer Applications Computer Science 2 Video Game Design
Law Public Safety Corrections Security				
Social Justice Pathway *4 courses*	**Required:** Social Justice	**Must Select One:** African American/Black & Puerto Rican/Latino Studies Current Issues	**Must Select One:** Environmental Science Public Health & Epidemiology Rethinking Gender in Literature	**Must Select One:** Environmental Science Public Health & Epidemiology Rethinking Gender in Literature
General Studies				
General Studies Pathway *4 courses*	**Scholars in the General Studies Pathway take a multidisciplinary approach to education. This pathway combines study of the arts, biological and, physical sciences, social sciences, and the humanities. Scholars select courses based on their proposed Capstone Experience Topic and Career Goals.**			

P-TECH Norwalk Career Pathways 2024-2025

Career Pathways help to prepare students for the ever-changing workplace by developing professional skills and knowledge.

Grade levels are for suggestion only; the course catalog will determine when a scholar can take a course based on grade level

Career Cluster Career Pathway	9th Grade	10th Grade	11th Grade	12th Grade
Information Technology				
Network Systems Pathway 4 courses	**Must Select 4 Courses:** Computer Construction & Repair Computer Science Essentials TEALS Drone Engineering & Operation Introduction to Java Introduction to Robotics	**Must Select 4 Courses:** Computer Construction & Repair Computer Science Essentials TEALS Drone Engineering & Operation Introduction to Java Introduction to Robotics	**Must Select 4 Courses:** Computer Construction & Repair Computer Science Essentials TEALS Drone Engineering & Operation Introduction to Java Introduction to Robotics	**Must Select 4 Courses:** Computer Construction & Repair Computer Science Essentials TEALS Drone Engineering & Operation Introduction to Java Introduction to Robotics
Programming and Software Development Pathway 4 courses	**Required:** Exploring Computer Science or AP Computer Science Principles TEALS	**Required:** Software Design and Integration 1	**Must Select One:** AP Computer Science A TEALS Computer Science Essentials TEALS Video Game Design	**Must Select One:** AP Computer Science A TEALS Computer Science Essentials TEALS Video Game Design
Skills Build Pathway 4 courses	**Must Select 4 Courses:** Cooperative Work Experience Excel-erate Honors Venture Capital MoneyWise Future Ready Principles of Financial Literacy Sports & Entertainment Marketing Workplace Learning 1 , 2 and 3	**Must Select 4 Courses:** Cooperative Work Experience Excel-erate Honors Venture Capital MoneyWise Future Ready Principles of Financial Literacy Sports & Entertainment Marketing Workplace Learning 1 Workplace Learning 2 Workplace Learning 3	**Must Select 4 Courses:** Cooperative Work Experience Excel-erate Honors Venture Capital MoneyWise Future Ready Principles of Financial Literacy Sports & Entertainment Marketing Workplace Learning 1 Workplace Learning 2 Workplace Learning 3	**Must Select 4 Courses:** Cooperative Work Experience Excel-erate Honors Venture Capital MoneyWise Future Ready Principles of Financial Literacy Sports & Entertainment Marketing Workplace Learning 1 Workplace Learning 2 Workplace Learning 3
Web and Digital Communications Pathway 4 courses	**Required:** Exploring Computer Science or AP Computer Science Principles Introduction to Java	**Required:** Exploring Computer Science or AP Computer Science Principles Introduction to Java	**Must Select One:** ART 121 CST 153 Cybersecurity TEALS GRA 151	**Must Select One:** ART 121 CST 153 Cybersecurity TEALS GRA 151
Individualized P-TECH Studies				
Individualized Studies Pathway *4 courses*	The individualized P-TECH Pathway combines the study of Information Technology systems as it relates to all aspects of computers and the digital age. Scholars select courses based on their proposed capstone topic and career goals.			

Connecticut State Seal of Biliteracy



Students may acquire proficiency in multiple languages through various pathways. Some examples include the traditional World Languages program, the traditional MLL/MLL program, and Native World Languages program (English speakers who study their parents' native language and culture) among others.

To attain the Connecticut State Seal of Biliteracy, students' use of the language must be demonstrated, rather than their knowledge about the language. Therefore, a student must demonstrate proficiency in English and another language by meeting specific criteria.

Both native and non-native speakers of English must provide comparable evidence of English language proficiency. The language performance should be demonstrated in both social and academic use of the language, in all modes of communication.

To be eligible to receive the Connecticut State Seal of Biliteracy, the following two academic requirements must be met:

1. Students must complete all English Language Arts (ELA) requirements for graduation.
2. Students must demonstrate proficiency in a language other than English in grades 10, 11, or 12 at a level comparable to "Intermediate Mid" on the ACTFL Proficiency Guidelines as demonstrated through one of the following methods:

Assessment or Evidence	Minimum Score
ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL) Measure	Intermediate level 3 in all 4 domains
International Baccalaureate (IB) World Languages Exam	Level 4
Advanced Placement (AP) World Languages Exam	Level 3
ACTFL Latin Interpretive Reading Assessment (ALIRA)	Level 3

For a student whose non-English language is low incidence and proficiency cannot be established by any of the assessments in the table above, the following steps must be taken:

a. There will be an assessment of interpersonal face-to-face communication as well as interpretive listening, presentational speaking, and reading and writing where a written code exists.

b. Certification by the principal, or designee, that a low-incidence language plan was completed.

Distribution of the Connecticut State Seal of Biliteracy

The Connecticut State Seal of Biliteracy will be affixed to a qualifying student's diploma and will also be noted on his/her high school transcript. Grade 12 students who achieve the Seal through an assessment whose results are released over the summer (e.g., Advanced Placement or IB exams), will be mailed the Seal so they can place it on their own diploma.

Out of District Special Programs

Parents and students are able to explore other educational opportunities that are offered in the school district and regionally. These options may include magnet, charter, and vocational-technical schools; inter-district programs; and vocational agriculture centers, Center for Global Studies, Regional Center for the Arts, J. M. Wright Technical High School, and the Academy of Information Technology and Engineering. Contact the Guidance Department for further information on these School Choice options.

Academy of Information Technology and Engineering (Stamford) **http://ait.echalk.com**

The Academy of Information Technology (AITE) is an interdistrict magnet college preparatory high school, welcoming students from within Stamford and the neighboring communities of Darien, Greenwich, New Canaan, Norwalk and Ridgefield. While the curriculum is demanding, it is designed to challenge high achievers and at the same time make high achievers of those who would have performed more disinterestedly elsewhere.

In addition to a challenging curriculum AITE offers a small school setting, a highly desirable student-teacher ratio, state-of-the-art computer laboratories, college collaborations and learning experiences that reach beyond the classroom. The Computer Technologies Concentration includes courses in networking, programming, Microsoft suite applications, CISCO and electives. The Digital Arts Concentration includes courses in Adobe suite applications, web design, CAD, 3D animation, digital music and electives. The Architecture and Engineering concentration consists of courses that include the survey of architecture and engineering, engineering design, digital electronics, principles of engineering and electives. Each of our areas of concentration affords students with the opportunity to obtain nationally recognized certifications, college credits and paid internships. **Students should meet with their counselor for an application.**

J. M. Wright Technical School (Stamford) **http://www.cttech.org/wright/** 203-324-7363

The mission of the Connecticut Technical High School System is to provide a world-class, unique and rigorous learning environment for high school students and adult learners that:

- Ensures both student academic success and career technical education mastery, as well as promotes enthusiasm for lifelong learning,
- Prepares students for post-secondary education, including apprenticeships and immediate productive employment,
- Engages regional, state, national and international employers and industries in a vibrant collaboration to respond to current, emerging and changing global workforce needs and expectations, and
- Pursues and participates in global partnerships that provide CTHSS students with international exposure and experience.

The administration, faculty and staff of J.M. Wright Technical High School believe that our students are unique and capable of achieving their highest potential. We believe in the importance of creating a safe and supportive learning environment for students. Our mission is to provide a dual comprehensive program of expert instruction in both a specific trade technology and core academic subjects. We hold our students to high standards so that they can achieve their personal best. We strive to endow our students with the skills to become critical thinkers and productive citizens. We believe the success of J.M. Wright Technical High School is strengthened and advanced through cooperative relationships with business, industry, alumni and the community.

- **Goal One – To Provide Students with a Safe and Supportive Environment:** Through the programs provided by the guidance department, special education services, support services, faculty and staff, all members of the school community meet the emotional, social, intellectual, and safety needs of students.
- **Goal Two – To Provide Opportunities for Students to Reach Their Highest Academic and Technical Aspirations:** Through the implementation of district-approved curriculum, academic and trade instructors provide students with appropriate learning opportunities to achieve the highest state and national standards of performance.
- **Goal Three – To Prepare Students for the Demands of 21st Century Technology:** Through the implementation of curriculum units requiring technological capabilities, all instructors provide opportunities for students to increase their ability to employ the most current technologies.
- **Goal Four – To Prepare Students to be Critical Thinkers and Productive Citizens:** Through the support of the Trade Technology Advisory Committee, Work Based Learning, College Careers Pathways, Skills USA, trade-related field experiences, critical thinking academic programs, programs in community service, travel abroad and other programs, we provide students with opportunities to thoughtfully and productively engage with their local communities and the larger world community.

Regional Center for the Arts (RCA) (Trumbull)

Regional Center for the Arts is a performing arts magnet high school program serving students in grades 9 – 12. RCA's student body serves students in the greater Norwalk region and reflects the racial, ethnic and socioeconomic diversity of students in that area. Students attend their local public high schools in the morning and attend RCA Monday through Thursday from 1:30 to 4:30 p.m. Elective high school credits, which may be applied toward graduation requirements at the discretion of the sending school district, are earned at the school through the study of dance, theater, musical theater, film/video production, and creative script writing. Through these departments, the courses provide a broad understanding of the history and criticism of the arts through interdisciplinary study. RCA's performing arts training program is designed to prepare students to pursue professional careers and post-secondary studies. The curriculum is professionally oriented, highly structured, and academically rigorous. Commitment to serious study is expected of all students. Course credit will be given in accordance with the policy of the local high school.

Who May Participate:

Placements for the Regional Center for the Arts are open to interested high school students from the school districts that participate. Students must possess a strong desire to learn and must demonstrate above-average skill or potential in the arts.

How to Participate in RCA:

Students interested in participating should complete an application and return it to the guidance department of their high school. Students should consult with their guidance counselor to obtain an application and inquire about the application deadline. Upon receipt of the application, each student will be assigned and notified of a specific placement meeting date and time. Students should see their counselors for placement procedures. The Regional Center for the Arts courses do NOT fulfill the State's requirements for physical education. Norwalk Public Schools does not provide transportation.

Stamford Regional Agriscience and Technology Center at Westhill High School (Stamford)

203-977-4974 **http://www.westhillweb.com/agriscience-program.aspx**

The Agriscience and Technology Program offers an opportunity for all in the lower Fairfield County region to explore the nation's largest commercial business – AGRICULTURE! Over 2,000 career areas in the growing agricultural industry from agrimarketing to zoology become available to the students enrolled in the program. Instruction in introductory level information, as well as more advanced technological skills, is provided. Classroom instruction, laboratory/field experience, guest speakers, leadership development through FFA, and career exploration are all areas offered through this broad program. After getting an overview of agriculture, students choose an area (or areas) of specialty during their last two years. This program follows the three-circle model of agricultural education, which includes classroom instruction, FFA, and SAE (Supervised Agricultural Experience). Students are required to participate in all three components of the program.

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

In summary, we are a college preparatory program that focuses on animal and plant related sciences (referred to as agriscience). Students graduate our program very well prepared for college and many times already have obtained credit for introductory college classes through our involvement in the UConn ECE program. In addition, students learn skills they can use in their post-college career pathway. Interest of our graduates includes horticulture, vet science, aquaculture, traditional farming, and floral design (to name a few). The competitive and intellectual advantage the students gain makes the agriscience program a good choice for any student wanting to study animal or plant related sciences. With limited space available, all students interested in the Agriscience and Technology Program must fill out an application and may be interviewed. They will receive a letter in the mail informing them of the status of their application.

Online Learning

Norwalk offers online courses credit recovery through the online learning platform ***Edgenuity***. Students' complete tasks, watch videos and lessons, take notes, practice independently…etc. both in and outside of the classroom. They have a certified teacher to assist with questions during the *Online Learning Tutorial* period within their daily schedule. There are also after school support sessions multiple times per week during the fall and spring semesters. This enables each student to meet with a certified teacher to receive support, remediation. **Administrators assign courses for credit recovery based on individual student needs and require a signed contract.**

Credit Recovery Course List

NPS Course	Edgenuity Equivalent Course	Credit
English		
English 1	ELA 9	1
English 2	ELA 10	1
English 3	ELA 11	1
English 4	ELA 12	1
Math		
Algebra 1	Algebra 1	1
Algebra 2	Algebra 2	1
Geometry	Geometry	1
Intermediate Algebra	TBD	1
Math for College Success	Math for College Success	0.5
Science		
Biology	Biology	1
Chemistry	Chemistry	1
Physics	Physics	1
Astronomy	Astronomy: Exploring the Universe	0.5
Forensics	Forensic Science: Secrets of the Dead	0.5
Marine Biology	Marine Science: Secrets of the Deep Blue	0.5
Environmental Science	Environmental Science	0.5
Earth History	Earth Science	0.5
Social Studies		
World History	Survey of World History	1
US History	US History 2	1
Civics	US Government	0.5
Psychology	Psychology	0.5
Sociology	Sociology	0.5
PE/Health		
PE	LIfetime Fitness	0.5
Health 1	TBD	0.5
Health 2	TBD	0.5
Computers		
Computer Applications	Computer Applications: Office 2016	0.5
World Languages		
Spanish 1	Spanish 1	1
Spanish 2	Spanish 2	1
Spanish 3	Spanish 3	1
French 1	French 1	1
French 2	French 2	1
French 3	French 3	1
Italian 1	Italian 1	1
Italian 2	Italian 2	1
Italian 3	Italian 3	1