

FOOTSTEPS TO THE FUTURE

Nashua High School North
Nashua High School South

Home of the
Nashua Technology Center

2025-2026



PROGRAM OF STUDIES

If you need assistance reading this document in either Spanish or Portuguese, please contact the Office of Student Services and ELL at (603)966-1010.

Si usted necesita ayuda para leer este documento, ya sea en Español o Portugues, por favor póngase en contacto con la oficina de servicios de estudiantes y ELL llamando a este numero (603)966-1010.

Caso precise de ajuda para ler esse document em espanol ou portugues, por favor entre em contato como Office of Student Services and ELL (Departamento de Servicos para Estudantes e ELL) pelo telefone (603)966-1010.

The Nashua Board of Education reaffirms its position of compliance with applicable State and Federal laws of non-discrimination on the basis of race, color, national origin, religion, sex, sexual orientation, physical or mental disability, marital status, familial status, genetic information and age in admission to, access to, treatment in, or employment in the services, programs and activities of the Nashua School District.

Program of Studies

This Program of Studies contains very specific information about courses, programs, and services offered at Nashua High School North and South. Course descriptions are presented alphabetically in Section 4.

The primary objective is to provide students and parents with the information necessary to make decisions for the next school year. The second objective is to provide the opportunity to make long-range plans and select courses in preparation for work, post-secondary education, or the armed services. This will give students the advantage of having a complete overview of their program.

This booklet should be reviewed before completing the personalized four-year education plan, a tool to assist you in selecting a sequence of courses throughout your high school career.

***Para los estudiantes que no hablan inglés o si necesita más información, para favor llame
Adriana Amador Serrano 966-1214 NHS South or Maricelo Jimenez 966-2922 NHS North.***

Table of Contents

SECTION 1	5
Introduction and Course Selection	5
Contact Information	7
Graduation Requirements	8
Advanced Computer Course or High School Digital Portfolio Requirement.....	9
Math Experience	11
Science Experience	13
Course Levels	14
NH Scholars.....	15
Competency-Based Learning	16
Student Progress and Recognition.....	20
E-Block	22
SECTION 2	23
Career Pathways	23
SECTION 3	27
Departments and Course Sequencing	27
Air Force JROTC.....	28
Computer Science.....	29
English-Language Arts.....	30
ELL – English Language Learners.....	33

Fine and Performing Arts	35
Mathematics	37
Physical Education and Health.....	41
Science	42
Social Studies	46
Special Education	49
World Languages	50
Nashua Technology Center	52
Alvirne High School Courses	61
SECTION 4	63
Course Descriptions	63
SECTION 5	111
Programs and Services.....	111
English Language Learners (ELL)	113
Library Media Services.....	113
Special Education	113
Student Extracurricular Activity Eligibility – Academic Expectations.....	113
Advanced Placement Program.....	114
Extended Learning Opportunities.....	114
Online Education.....	115
Dual Enrollment and Project Running Start Credit	115



2025-2026

SECTION 1

Introduction and Course
Selection

Nashua's High School
Contact Information

District Website: www.nashua.edu

Who do I contact with a question about my child's schedule? The best place to start is his/her school counselor.

Who do I go to if my child has questions related to curriculum or academics? We always recommend that people speak directly with the teacher about any questions they may have. Many times, the teacher in the classroom can answer the question quickly.

Who do I go to if I still have a question after speaking with the teacher? Contact the head teacher for that department (see list below for names and phone numbers).

How do I contact someone by e-mail? Most email addresses are normally the last name, first initial @nashua.edu. For example, John Smith would be smithj@nashua.edu

	Nashua High School North	Nashua High School South
General Information	www.nashua.edu/north (603)966-2500	www.nashua.edu/south (603)966-1100
Principal	Nathan Burns <i>Assistants: Jean Inzerillo/966-2502</i>	Keith Richard <i>Assistants: Moriah Hallam/966-1102</i>
Assistant Principals	Jothan Massey/966-2523 Katie Closs/966-2573 Heidi Paris/966-2923 Andrew Conrad/966-2873	Nicholas Audley/966-1213 Phil DeRosa/966-1153 Lesa McQuesten/966-1403 Dennis Hamilton/966-1343
Directors	Leslie Anton/966-2864 Instructional Leader Kate Marcotte/966-2506 School Counseling Lisa Gingras/966-1491 Athletics/HE/PE Helayne Talbott/966-1113 Nashua Tech Ctr Jackie Lesser/966-1154 Adult Education	Lori Coutu/966-1106 School Counseling Lisa Gingras/966-1491 Athletics/HE/PE Helayne Talbott/966-1113 Nashua Tech Ctr Jackie Lesser/966-1154 Adult Education
School Counselors	TBD/966-2478 Tina Hamilton/966-2545 Zach Harris/966-2544 Renee Crowell/966-2898 Denise Oujaimi/966-2872 Claudia Castano/966-2897 Sandra Bent/966-2477 Tania Isenberger/966-2522	Nancy Duffy/966-1215 Jessica Brox/966-1217 Seth O'Mahony/966-1155 Joe Miller/966-1157 /966-1406 Laura Brown/966-1404 Ann Murray-Sok/966-1345 Rebecca Goodman/966-1407
Department Heads		
Nashua Technology Center	Christopher Knoetig/966-2629	Kathryn Tremblay/966-1327
English Language Learners	Robert Cioppa/966-1010	Robert Cioppa/966-1010
English	Erin Brown/966-2512	Kate Soucy/966-1246
Health/PE	Jason Robie/966-2961	Jason Robie/966-2961
Mathematics	James Graham/966-2863	Kellie Gabriel/966-1185
Media Center	Melissa-Sue Bartolomei/966-2602	Sharon Flesher-Duffy/966-1298
Science	Cheryl Meesig/966-2670	Matt Froment/966-1369
Social Studies	Ami Rich/966-2919	James Gaj/966-1435
Special Education	Susan Chmura/966-2800	Elaine French/966-1124
World Language	Claudia Decker/966-2856	Lee Ann Arguien/966-1434
Art	Angela Walsh/966-1131	Angela Walsh/966-1131
Music	Brianne Biastoff/966-2435	Brianne Biastoff/966-2435

Graduation Requirements

The Nashua School District offers a two-tier diploma system. The standard diploma, the Academic Diploma, requires **at least 27 credits**. The majority of students will be guided to meet the requirements of this diploma. The second tier, the Core Diploma with 20 credits, is an option available through an application process to the building principal. This Core Diploma application process may begin no sooner than the fall of the student's junior year.

The following outlines the course credit requirements for high school graduation for both diplomas. Advanced Placement courses will satisfy State requirements in specific disciplines. NOTE: The Principal or designee may waive pre-requisites.

Subject Area	Grad Requirement (Credits)	Courses and notes to fulfill requirement
Art Education	0.5	Graphics Design 1 or 2 may meet the Art or ICT requirement. All Art, Drama, and Music courses meet the Art Education requirement.
Information and Computer Technology	0.5	See List of Advanced Computer Courses.
English	4	English 1, 2, 3, and either English 4 or an English elective. At least one course must be taken every year.
Mathematics	*3 <i>(Algebra 1, Part 1 and 2 or Algebra 1(H) is required.)</i>	Students must have a math experience every year of high school. *See list of 4 th year Math Experience on p.11
Science	Class of 2026: Biology and a Physical Science course are required. Class of 2027 or after: 3 courses: Biology, a Physical Science and a Science Experience	Biology and a Physical Science course are required. Conceptual Physics & Chemistry, Chemistry, Physics or AP Physics meet the Physical Science requirement. Class of 2027 and beyond: Students must earn one additional Science Experience credit. *See list of Science Experience on p.13
Social Studies	3	World Studies, Civics, Economics, and US History are required. AP World History meets World Studies requirements. AP US Government meets Civics requirements. AP Microeconomics or AP Macroeconomics meet Economics requirements. AP US History meets US History requirements. <i>Students must pass the US Citizenship and Naturalization exam in order to graduate.</i>
Physical Education	1	Sports Education is required. Fit for Life or Personal Fitness are also required.
Health	0.5	Health 1
Electives	Class of 2026: 12.5 or 5.5 Starting with Class of 2027: 11.5 or 4.5	12.5: Standard Diploma 5.5: Core Diploma
TOTAL CREDITS	27 (20 Core Diploma)	

Advanced Computer Course or High School Digital Portfolio Requirement

ED 306.42C requires high school students to complete ½ credit of Information and Communication Technology (ICT) by completing an advanced computer course or demonstrating proficiency through a digital portfolio. See the table below for a list of courses that will satisfy this requirement.

Course#	Course	Credit
5001	Accounting Fundamentals	1
5621/5627	Advanced Cinema Production	1
3045/3047	Advanced Computer Science Topics	1
5871/5877	Advanced Digital & Media Productions	1
5501/5507	Advanced Manufacturing 2	2
6311	Advanced Photography	1
3509	AP Computer Science A	1
6239	AP Music Theory	1
6259	AP Studio Art	2
5221	Automotive Technology 1	2
5231/5237	Automotive Technology 2	2
5261/5267	Biotechnology & Biomedical Science 2	2
5391/5397	Business Finance 1	1
2105/2107	Business Law	1
5271/5277	Computer Aided Drafting & Design 1 (CADD)	2
5281/5287	Computer Aided Drafting & Design 2 (CADD)	2
5027	College Accounting 1 (H)	1
5037	College Accounting 2 (H)	1
5271/5277	Computer Aided Drafting & Design 1	2
5281/5287	Computer Aided Drafting & Design 2	2
5921/5927	Computer Integrated Manufacturing	1
5561/5567	Computer Networking 1	1
5571/5577	Computer Networking 2	2
5581/5587	Computer System Design	1
5911/5917	Cybersecurity 1	1
5991/5997	Cybersecurity 2	1
5981/5987	Cybersecurity 3	1
5431/5437	Design & Visual Communications 1	2
5071	Digital Apps & Communications	1
3361	Discovering Computer Science	1

5241	Drone Technology	.5
5401	Financial Services Internship	1
5411/5417	Global Finance	1
5761	Graphic Design 1	0.5
5211	Interior Design	1
5051	Introduction to Business	0.5
5551/5557	Intro to Engineering Design	1
5531/5537	Marketing for Retail and Fashion	1
5121/5127	Marketing for Sports & Entertainment	1
5541/5547	Marketing for Social Media	2
6147	Music Theory (H)	1
6301	Photography	1
5901	Personal Finance	0.5
5931/5937	Principles of Engineering	1
5951/5957	Robotics Using Vex	1
5101/5107	Small Business Management	1
5071	Digital Apps and Communication	1
3401	Video Game Programming	1
5601/5607	Video Production & Broadcasting 1	2

Math Experience

In order to graduate, students need 3 math credits and in addition, Ed 306 requires high school students to have math experience each year of high school. The following courses will satisfy the math experience requirement.

Course#	Course	Credit
5001	Accounting Fundamentals	1
5621/5627	Advanced Cinema Production	1
3405/3047	Advanced Computer Science Topics	1
5871/5877	Advanced Digital & Media Productions	1
5491/5501/5507	Advanced Manufacturing 1 & 2	2
0631/0671	AFJROTC Exploring Space	1
4159	AP Chemistry	2
3509	AP Computer Science A	2
2569	AP Macroeconomics	1
2559	AP Microeconomics	1
4059	AP Physics 1	2
4109	AP Physics 2	1
4209	AP Physics C: Mechanics	2
2309	AP Psychology	2
5221/5231/5237	Automotive Technology 1 or 2	2
5251/5257/5261/5267	Biotechnology & Biomedical Science 1 or 2	2
5391/5397	Business Finance	1
6201	Ceramics	1
4153/4155/4157	Chemistry	1
5027/5037	College Accounting 1 (H) & 2 (H)	1
5271/5277/5281/5287	Computer Aided Drafting Design (CADD 1 or 2)	2
5921/5927	Computer Integrated Manufacturing	1
5291/5301/5307	Construction Technology 1 or 2	2
5331/5337/5341/5347	Culinary Arts 1 or 2	2
3361	Discovering Computer Science	1
2063/2065/2067	Economics	.5
5371/5381	Electrical Technology 1 or 2	2
5941/5947	Engineering Design & Development	1
5161	Exploring Contemporary Cooking	1
5401	Financial Services Internship	1
5171	Food Technology	1
5411/5417	Global Finance	1

Course#	Course	Credit
5511/5521/5527	Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR 1 or 2)	2
5761/5861	Graphic Design 1 or 2	.5
5051	Introduction to Business	.5
5551/5557	Introduction to Engineering Design	1
5821	Marine Robotics	1
5531/5537	Marketing for Retail & Fashion	1
5121/5127	Marketing for Sports & Entertainment	1
5541/5547	Marketing for Social Media	2
4303/4305/4307	Meteorology	1
5201	On Your Own	.5
5901	Personal Finance	.5
6301/6311	Photography or Advanced Photography	1
4053/4055/4057	Physics	1
5741/5841	Power Mechanics 1 or 2	.5
5931/5937	Principles of Engineering	1
5951/5957	Robotics Using Vex	1
3401	Video Game Programming	1
5601/5607	Video Production & Broadcasting 1	2
5771	Woodworking 1	.5
5781	Woodworking 2	1

Science Experience

In order to graduate, students graduating in 2027 or after need 3 science credits and in addition, Ed 306 requires high school students graduating 2027 or after to have 1 additional science experience credit. The following courses will satisfy the science experience requirement.

Course#	Course	Credit
5491	Advanced Manufacturing 1	2
5501/5507	Advanced Manufacturing 2	2
4029	AP Biology	2
4159	AP Chemistry	2
4529	AP Environmental Science	2
4059	AP Physics 1	2
4109	AP Physics 2	1
4209	AP Physics C: Mechanics	2
4423/4425/4357	Anatomy & Physiology	1
4253/4255/4257	Astronomy & Space Science	1
5251/5257	Biotechnology & Biomedical Science 1	2
5261/5267	Biotechnology & Biomedical Science 2	2
4153/4155/4157	Chemistry	1
5271/5277	Computer Aided Drafting & Design 1 (CADD)	2
5281/5287	Computer Aided Drafting & Design 2 (CADD)	2
4703/4705/4707	Contemporary Issues in Science	1
4523/4525/4527	Environmental Science	1
4603/4605/4607	Forensic Science	1
5451/5457	Health Sciences 1	2
5461/5467	Health Sciences 2	3
5551	Intro to Engineering Design	1
4303/4305/4307	Meteorology	1
5821	Marine Robotics	1
4053/4055/4057	Physics	1
5931/5937	Principals of Engineering	1
5951/5957	Robotics Using VEX	1
4507	Zoology	1

How to Select Your Courses and Develop the 4-Year Plan

Carefully read through this Program of Studies. It is time for you to think about selecting courses for next school year. Begin to develop, with your counselor, parents, advisors and teachers, individual programs which will best serve your future plans.

- Under block schedule, there are no study halls.
- Under normal circumstances, students may drop a class within the drop/add window given one of the following conditions: (1) the student failed the Pre-requisite and should not be in the course; (2) the student is physically unable to participate in the class due to injury or illness.
- Under extenuating circumstances, students may drop a class with permission of the student's parent/guardian, and the approval of the student's counselor and the principal or designee.
- Students should use this Program of Studies as a reference guide.
- Use the Career Pathways in Section 2 to help guide you in planning your future career.

Course Levels

Students have the responsibility, with the guidance of their parents, teachers and counselors, to select those courses which best meet their needs, aptitudes and abilities. The recommendations of teachers should be followed when selecting courses and levels. Leveling is a means by which the challenge of a course is determined and, according to this concept, most courses are designated by one of the following: Foundation, Extension, Honors, and Advanced Placement. Courses from the following departments are leveled and count towards the GPA: English, Mathematics, Science, Social Studies, World Languages, and Computer Science. Additionally, CTE and Music classes at the Honors level count toward GPA credit. Course numbers in each of these department indicate the level at which the course is offered.

1031 – Non-Leveled

1033 – Foundation Level

1035 – Extension Level

1037 – Honors Level

Foundation Level: Foundation level classes teach the fundamental standards for the subject matter and are designed to further develop and refine basic skills and concepts for students. Foundation level classes require some independent research beyond the classroom. Students will develop critical thinking, reading, writing, reasoning, listening, speaking, and study skills.

Extension Level: Extension level classes will challenge the student in the classroom and require independent study outside of the classroom. In many extension courses, students will be required to carry out independent research and produce a research paper or project. Students who select extension courses should demonstrate well-developed critical thinking, reading, writing, listening, speaking, reasoning and study skills.

Honors Level: Honors level classes are challenging courses of study which require extensive independent work outside of the classroom. Students who select Honors level classes should demonstrate highly developed critical thinking, reading, writing, listening, speaking, reasoning and study skills. In many courses, students will be required to carry out extensive independent research and produce research papers and projects.

Advanced Placement Level: Advanced Placement level classes give highly motivated students the opportunity to study college level material while they are still in high school. Upon successful completion of the AP examinations, students may qualify for advanced placement in college. Students must meet course pre-requisites or their equivalents as indicated in the Program of Studies. All students who participate in AP courses are expected to take the AP exam in May.



NH Scholars

New Hampshire Scholars is a community-based program that encourages students to take a more rigorous Core Course of Study in high school. It is based on a partnership between a community's local business leaders and its school district. New Hampshire Scholars is federally funded through the New Hampshire Department of Education. <https://nhscholars.org/>

Department	Requirement	Courses
English	4 years of English	English 1 English 2 English 3 or AP Language & Composition English 4 or an English Elective or AP English Literature and Composition
Math	4 years of Math	Algebra 1 or Algebra 1 Part 2 Geometry Algebra 2 Plus, one subsequent math course
Science	3 of these courses	Biology Chemistry, Physics Anatomy and Physiology Forensic Science Any AP Science Course NTC Courses: Intro to Engineering, Prin. of Engineering, Computer Integrated Manufacturing, Engineering Design and Dev. Health Sciences Biotechnology & Biomedical Sciences
Social Studies	4 Core requirements plus one elective	Social Studies Courses: Core: World Studies, Economics, Civics, US History Breaking History: Media Literacy in the Digital Age, Psychology Sociology or Anthropology Crime and Justice, Business Law Law and Ethics Global Conflicts Any AP Social Studies course NTC Courses: AFJROTC Marketing for Sports & Entertainment, Marketing for Retail & Fashion, Marketing for Management & Social Media Computer Networking Careers in Education Business Finance Global Finance
World Language	2 Years of the same language	French Spanish German Latin Spanish for Heritage Speakers

Note: Non-native English speakers are waived from the World Language requirement.

Competency-Based Learning

Purpose:

The purpose of a competency-based grading system is to improve student achievement by focusing student learning on the essential skills and content necessary for each course, as opposed to a traditional system that may have included multiple factors, like behaviors and type of assignment, to generate a student's grade. Competency-based grading will provide better communication to students, parents, teachers, and administrators on what each student knows and is able to do according to the identified course competencies.

What is competency?

Competency is defined as the ability of a student to demonstrate required content knowledge and skills for each course. In Nashua, there are two different types of competencies to assess student performance.

Course-Based: Each course in Nashua has anywhere from 2-4 course competency statements. Each of these competency statements defines what a student needs to know and be able to do to be successful in the course. These competency statements align with the standards outlined in the Common Core State Standards (English-Language Arts, Mathematics, and content-based Literacy) and other national and state standards as they apply to a specific course. These standards, along with the skills expectations of our school, establish rigorous expectations for all students: and serve as a basis for curriculum, instruction, and assessment in our school district.

Throughout the course, students will receive a score for each course competency based on the student's level of proficiency. (See grade scale below). In addition, a student will receive written feedback to help in their progress in demonstrating proficiency. At the end of the course, a student will receive an overall letter grade based on the average of the final course competency scores. This letter grade will be used to generate GPA and class rank.

Competency Grade Scale:

Score Letter Code	Type of Score			Levels of Proficiency	Descriptors
	Assignment	Competency	Course		
A+	✓	✓	✓	Proficient with Distinction	The student exceeds course competencies. The student consistently demonstrates, communicates, applies, extends, and/or transfers understanding of the course content and skills.
A					
A-					
B+	✓	✓	✓	Proficient	The student meets the course competencies. The student consistently demonstrates, communicates, and applies an understanding of the course content and skills.
B					
B-					
C+	✓	✓	✓	Partially Proficient	The student meets the course competencies. The student, with or without support, demonstrates and communicates a basic understanding of the course content and skills.
C					
C-					
IP	✓	✓	X	In Progress	The student is making progress toward meeting course competencies. Student needs to demonstrate and/or communicate a sufficient understanding of course content and skills.
NE	✓	✓	X	No Evidence	The student has not submitted evidence to demonstrate an acceptable level of competencies.
NYA		✓		Not Yet Assessed	This competency will be assessed at a later date.
D	X	X	✓		The student has scored a C- or above in all course competencies but achieved an IP or NE in a weighted Formative Assessment category.
NC	X	X	✓	No Credit	The student has scored a C- or above in at least 50% of the course competencies and is eligible to initiate a post-course recovery. Student will receive course credit upon successful completion of the recovery plan.
F	X	X	✓	No Credit Awarded Not eligible for Post- Course Recovery	A student has not achieved a C- or better in more than 50% of the course competency. The student is not eligible for post-course recovery and does not receive credit for this course.

School-Wide Competency and Rubrics: Nashua has identified four “21st Century Learning Skills,” that are based on social and civic “behavioral” expectations (problem-solving, communication, citizenship, and responsibility). These are assessed regularly by each teacher throughout a course using the common rubric and will appear on a student’s report card. These grades are NOT included in the final grade calculation for courses.

	Exceeding	Meeting	Progressing	Beginning
Problem Solving	<ul style="list-style-type: none"> I can identify, define, and restate the problem, as well as ask questions to help me solve it. I can create a plan to solve a problem, using one or more strategies. I can solve the problem effectively and adapt my plan when necessary. I can reflect on the effectiveness of my solution, and the reasonableness of my answer. 	<ul style="list-style-type: none"> I can identify, define, and restate the problem, as well as ask questions to help me solve it. I can create a plan to solve a problem, using one or more strategies. I can solve the problem effectively and adapt my plan when necessary. 	<ul style="list-style-type: none"> I can identify and restate the problem. I can create a plan to solve the problem using one strategy. I can solve the problem effectively some of the time. 	<ul style="list-style-type: none"> I can identify the problem.
Communication	<ul style="list-style-type: none"> I can communicate effectively, both verbally and nonverbally, using appropriate language in a variety of situations. I can adapt my method and style of communication to better meet the needs of my audience. I can reflect on and evaluate the effectiveness of my communication and revise it. 	<ul style="list-style-type: none"> I can communicate effectively, both verbally and nonverbally, using appropriate language in a variety of situations. I can reflect on and evaluate the effectiveness of my communication and revise it with additional support. 	<ul style="list-style-type: none"> I can communicate effectively some of the time, both verbally and nonverbally, using appropriate language. I can, with prompting, reflect on and evaluate the effectiveness of my communication. 	<ul style="list-style-type: none"> I can communicate verbally and nonverbally.
Citizenship	<ul style="list-style-type: none"> I can show respect for myself, others, and all property, and encourage others to do the same. I can follow all school and classroom rules and be an example for others. I can honor the teacher’s duty to teach and all students’ right to learn and encourage others to do the same. 	<ul style="list-style-type: none"> I can show respect for myself, others, and all property. I can follow all the school and classroom rules. I can honor the teacher’s duty to teach and all students’ right to learn. 	<ul style="list-style-type: none"> I can show respect for myself, others, and property some of the time. I can follow all school and classroom rules with prompting. I can honor the teacher’s duty to teach and all students’ right to learn with prompting. 	<ul style="list-style-type: none"> I can show respect for specific individuals and property. I can follow specific school rules.
Responsibility	<ul style="list-style-type: none"> I can come to class, be on time, and be prepared to work. I can make provisions for when I am unable to be in class. I can create, implement, and revise a plan to manage my time effectively, stay on task, and meet deadlines. 	<ul style="list-style-type: none"> I can come to class, be on time, and be prepared to work. I can make provisions for when I am unable to be in class with support. I can create and implement a plan to manage my time, stay on task, and meet deadlines with support. 	<ul style="list-style-type: none"> I can come to class, be on time, and be prepared to work with prompting. I can make provisions for when I am unable to be in class with prompting. I can, with prompting, create and implement a plan to manage my time, stay on task, and meet deadlines. 	<ul style="list-style-type: none"> I can come to class. I can create a plan to manage my time with prompting.

Demonstration of Understanding

Students will demonstrate their understanding of the knowledge and skills within each course, through numerous formative and summative assessments. Both formative and summative assignments will be reported. Parents and students will be able to view these scores on the parent/student portal.

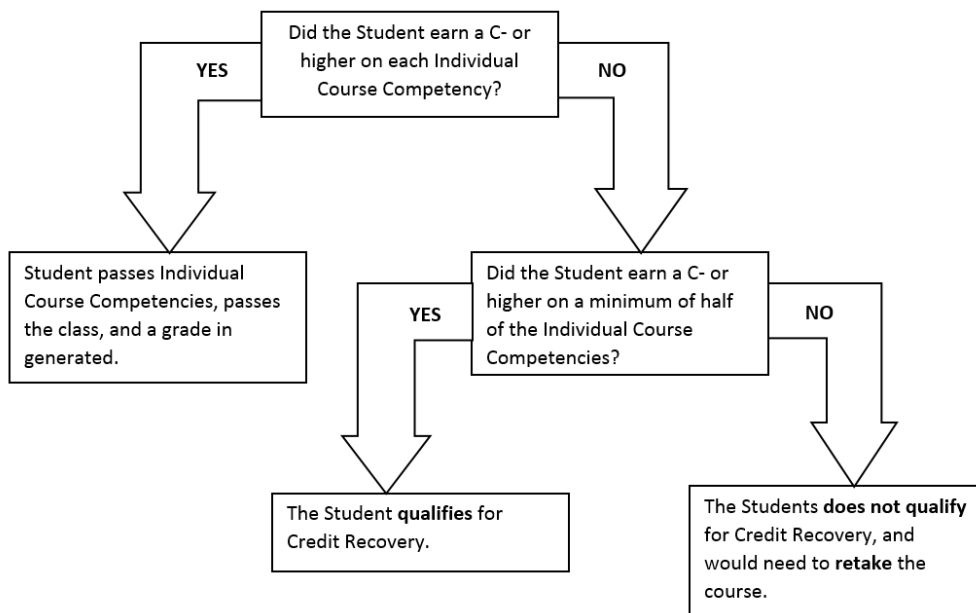
Formative Assessments: A formative assessment is used to gauge a student’s level of understanding, as well as guiding the teacher’s instruction. These are assessments that could be formal or informal and are given during the learning process as practice. Examples include practice problems, reading assignments and responses, quizzes, etc.

Summative Assessments: A summative assessment is a comprehensive measure of a student’s ability to demonstrate the concepts, skills and knowledge embedded within a course competency. These are assessments that are given to evaluate student understanding that occur at the end of an instructional period (unit). Examples include: labs, inquiry tasks, test, projects, essays, etc.

Recovery: Any student wishing to resubmit a summative assessment will be given an opportunity to do so, providing the student completes a recovery plan that is approved by the teacher. A recovery plan may include revisiting formative assessments, meeting with the teacher for extra help, redoing missed assignments, or completing additional assignments to improve understanding.

Earning Credit

Course Credit Flow Chart



Course Retake: If a student does not earn a C- or higher in at least 50% of the course competencies, the student would need to retake the course to receive credit.

Post-Course Recovery:

Occurs when a student has scored a minimum of a C- in 50% or more of the identified course competencies, but not all. A student has no more than 5 weeks to re-demonstrate their level of understanding and the highest score the student can receive on the recovered competencies is a C-. Not all courses will have the Post-Course Recovery options, therefore students should focus on meeting all competencies at the end of the course and utilize the In-Course Recovery options detailed in their teacher’s course expectation sheet.

Student Progress and Recognition

Student/Parent Portal:

A student's progress can be viewed at any time by logging on to the student/parent Portal in Aspen. Grades for individual assignments should be updated on a biweekly basis. Any questions regarding a student's grade, or grading practices within a class, should be addressed to the individual teacher.

Progress Reports:

Progress reports will be issued at the half-way point of each quarter. Progress reports will communicate student performance on each course competency and their overall grade at this point.

Report Cards:

Report cards will show the overall level of proficiency for each competency in addition to the overall letter grade. A final grade will be issued solely at the end of each course. The final letter grade is based on the average of the individual competency scores for a course. This letter grade will be used to generate GPA and class rank.

Academic Awards:

Nashua does not use class rank rather academic success is measured based on a Cum Laude system.

- Summa Cum Laude: 30 Credits with a 3.75 – 4.00 GPA
- Magna Cum Laude: 30 Credits with a 3.50 – 3.74 GPA
- Cum Laude: 30 Credits with 3.25 – 3.49 GPA

Grade Point Average:

For the Class of 2026

Student grade point averages (GPA) are calculated using a weighted method. The weighted GPA is based on all courses that carry a weight of Foundation, Extension, Honors, or AP that are taken at Nashua High School North /or South. Students earn quality points based on the grade and level of the class.

Letter Grade	Foundation, Extension, Unleveled	Honors & AP
A+	4.00	5.00
A	3.75	4.67
A-	3.50	4.33
B+	3.25	4.00
B	3.00	3.67
B-	2.75	3.33
C+	2.50	3.00
C	2.25	2.67
C-	2.00	2.33
D	1.00	1.33
F	0.00	0.00

Academic Awards for the classes of 2024, 2025, 2026

Nashua does not use class rank rather academic success is measured based on a Cum Laude system.

- Summa Cum Laude: 30 credits with a 3.75 – 5.00
- Magna Cum Laude: 30 credits with a 3.5 – 3.74
- Cum Laude: 30 credits with a 3.25 – 3.49

For the class of 2027 and beyond

The student grade point average (GPA) will be calculated using an unweighted method. The unweighted GPA is based on all courses a student has taken at Nashua High School North/or South. Students earn quality points based on final grades.

Letter Grade	Quality Point Value
A+	4.00
A	3.75
A-	3.50
B+	3.25
B	3.00
B-	2.75
C+	2.50
C	2.25
C-	2.00
D	1.00
F	0.00

E-Block

The primary goal of E-Block is to engage students in their high school experience, including academic, co-curricular, and extra-curricular activities. E-Block provides time during the school day for students to seek support and/or enrichment. The 35-minute E-Block during the middle of the day is designed to provide personalized and individualized opportunities for students and teachers to address minor concerns before they become major concerns; to help students who are a bit behind catch up before they feel buried; to help students recover grades and credit; and to enable students who are ready to challenge themselves the opportunity to do so. Additionally, outreach by the school counseling department helps freshmen transition into high school and informs returning students about what they need to do to be successful as they enter a new year of high school and encounter new expectations and deadlines. Furthermore, several academic centers (Writing Center, Math Center, and Computer Center) have opened which enable students to receive extra help or participate in cooperative group work.

Benefits of E-Block:

- Subject specific extra help – teachers provide extra support to students by re-explaining concepts, clarifying course expectations & competencies, providing time to make up work, quizzes or tests.
- Academic resource centers – subject-specific areas will be available for student access.
- Enhanced library access – the library will be available for students to complete research and other library services.
- Reading Specialists – time for targeted groups of students to be engaged in learning individually designed to strengthen their skills.
- Enrichment – a variety of offerings for the purpose of supplementing or enhancing student performance in an academic subject.
- Workshops – a variety of special offerings by teachers, students, and community members designed to engage students beyond the typical course content, such as career seminars, guest speakers, book groups, college application process sessions, college essay writing sessions, SAT prep sessions.
- Academic based clubs – math team, FIRST robotics, DI teams, and the school newspaper.
- All students have an adult mentor for all four years of high school.
- Students can access their classmates during the school day to work on cooperative learning assignments.
- Activities such as assemblies, class meetings, and drills can be scheduled during E-Block to lessen interruptions of academic classes.
- School Counseling Seminars are held during E Block. This is a time for counselors to meet with their students in small groups. Topics such as Freshmen Transition, Bullying & Suicide Awareness, 4-year Plan, College Application, College & Career Planning, Naviance, Course Selection and other topics are discussed.



2025-2026

SECTION 2

Career Pathways

The Nashua School District offers 16 career pathways. Career Pathways are small groups of occupations within a career cluster. Occupations within a pathway share common skills, knowledge, and interests.

These career pathways can be used to model how decisions that are made in middle and high school may engage a student's interests and further a student's educational and career options beyond high school. The pathways may assist students in identifying a real pathway to follow to reach their more distant and abstract career goal. Reviewing career pathways may help students find the route to follow a passion to a career or trade.

Below you will find links to the pathways that are offered by the Nashua School District. Our high school students will complete both their required coursework for our high school diploma as well as the courses recommended by their chosen optional pathway. Students who select and follow a pathway, build a foundation for life after high school, whether they chose college, business or trade school, the military services or the workforce.

The Career Pathways assist in:

- Helping the student to gain an understanding of the skills required for a specific career
- Helping students to be more aware of how school subjects relate to the world of work
- Connecting the student to classes that may be of interest to them and may help them toward their goals
- Helping students figure out what they're good at
- Opening student minds to all kinds of careers opportunities (a diverse range of career opportunities)
- Student preparation for education and skill acquisition needed to gain employment
- Ultimately, making education meaningful for each student

Students are strongly encouraged to discuss their career pathway related questions and choices with their school counselor.

Career Pathway Summaries

Agriculture, Food, and Natural Resources

The production, procession, marketing, distribution, financing, and development of agricultural commodities, and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Architecture and Construction

Careers in designing, planning, managing, building and maintaining the built environment.

Arts, A/V Technology, and Communications

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Business, Management, and Administration

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

Education and Training

Planning, managing and providing education and training services, and related learning support services.

Finance

Planning, services for financial and investment planning, banking, insurance, and business financial management.

Government and Public Administration

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Health Science

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Hospitality and Tourism

Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.

Human Services

Preparing individuals for employment in career pathways that relate to families and human needs.

Information Technology

Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.

Law, Public Safety, Corrections, & Security

Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

Manufacturing

Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Marketing, Sales, and Service

Planning, managing, and performing marketing activities to reach organizational objectives.

Science, Technology, Engineering, and Mathematics (STEM)

Planning, managing, and providing scientific research and professional and technical services (i.e., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Transportation, Distribution, and Logistics

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



2025-2026

SECTION 3

Departments and Course
Sequencing

Air Force JROTC

The Air Force Junior Reserve Officer Training Corps (AFJROTC) program provides citizenship, aerospace science, leadership education, and wellness/fitness training to students in grades 9-12. There is absolutely no obligation to join or serve in any of the military services. Elective credit toward graduation is earned just like any other course offered in the Nashua School District. Students completing an AFJROTC course with a grade of B or higher are eligible to earn two elective college credits per course from the University of Colorado at Colorado Springs (UCCS). These credits may be transferred to a college or university that the student attends after graduation from NHSS/NHSN. Students completing 3 semesters of JROTC will receive a certificate of completion. If they then decide to enlist in any branch of the military, they are eligible to go in at one grade/rank higher than others entering without this certificate. Additionally, a completion certificate is equal to one year of participation in a college ROTC program.

Students signing up for this course do so with the understanding they are participating in an Air Force JROTC program and must adhere to the program standards without exception. This includes, but is not limited to, wearing a uniform one day per week and maintaining all grooming standards for men and women (i.e., haircuts, no face piercings, no earrings for men, etc.) and adhering to behavior standards. Uniform wear is optional for first-year cadets. Failure to maintain standards will result in removal from the course/program and/or prevent students from taking future JROTC courses. There will be a number of optional community service projects that students can participate in throughout the year.

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite
0601	AFJROTC1A: Aviation History	1	Non-leveled	S	None
0691	AFJROTC1B: Aviation History	1	Non- leveled	S	None
0651	AFJROTC2A: Science of Flight	1	Non-leveled	S	None
0591	AFJROTC2B: Science of Flight	1	Non-leveled	S	None
0611	AFJROTC3A: Cultural Studies	1	Non-leveled	S	None
0621	AFJROTC3B: Global Awareness	1	Non-leveled	S	None
0631	AFJROTC4A: Exploring Space	1	Non-leveled	S	None
0641	AFJROTC5: Management of the Cadet Corps	1	Non-leveled	S	None
0671	AFJROTC4B: Exploring Space	1	Non-leveled	S	None
0681	AFJROTC6: Survival	1	Non- leveled	S	None
0700	AFJROTC 7: Leadership Education 100 Traditions, Wellness, & Foundation of Citizenship	1	Non- leveled	S	None
0701	AFJROTC 7A: Leadership Education 200 Communication, Leadership, & Awareness	1	Non- leveled	S	None
0702	AFJROTC 7B: Leadership Education 300 Life Skills and Careers	1	Non- leveled	S	None

Computer Science

Ed 306-42C requires high school students to complete .5 credit of Information and Communication Technology (ICT) by completing an advanced computer course or demonstrating proficiency through a high school portfolio.

Computer science is the study of what computers *can* do, and programming is *how* we make computers do things. It plays a central role in our technologically driven culture. Many believe developing logical reasoning skills (essential in every computer science class) before college is a key to success. The classes offered here range from beginner coding to more advanced structures through AP Computer Science. You'll be introduced to computer programming and gain a broad understanding of solving problems using the computational practices of analysis, design, implementation, and testing.

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
3045	Advanced Computer Science Topics (E)	1	Extensions	S	Discovering Computer Science or Video Game Programming	Meets ICT requirement and Math Experience requirement
3047	Advanced Computer Science Topics (H)		Honors	S	Discovering Computer Science or Video Game Programming	Meets ICT requirement and Math Experience requirement
3361	Discovering Computer Science	1	Non-leveled	S	Algebra 1, Part 2 or concurrently taking Algebra 1, Part 2	Meets ICT requirement and Math Experience requirement
3401	Video Game Programming	1	Non-leveled	S	Geometry	Meets ICT requirement and Math Experience requirement
3509	AP Computer Science A	2	AP	Y	Pre-Calculus or currently taking Pre-Calculus	Meets ICT requirement and Math Experience requirement

English-Language Arts

Graduation Requirements & Sequence of English Courses

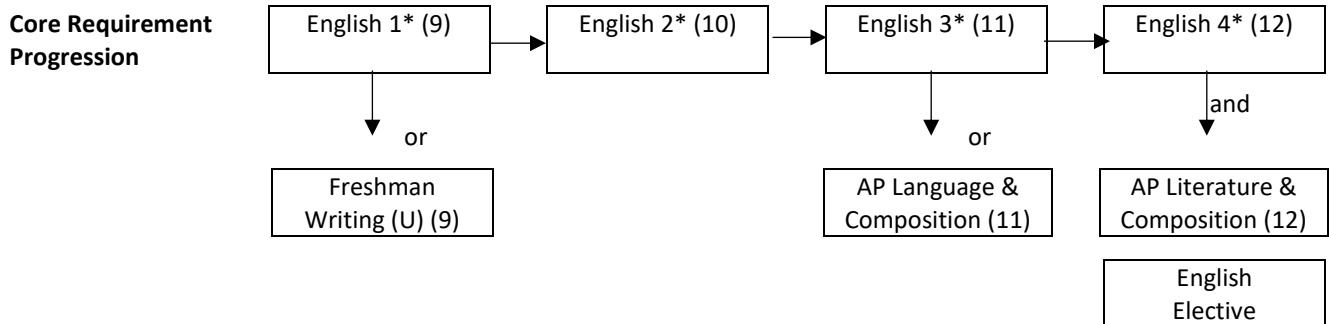
The minimum graduation requirement in English is 4 credits. It is required that all students take at least one credit of English each year. Students may take English electives in addition to the required sequence of classes.

Grade 9-English 1 and Freshmen Writing	Grade 10-English 2	Grade 11-English 3 or AP Language & Composition	Grade 12-English 4 or AP Lit. & Composition or Electives
--	--------------------	---	--

Guidelines for Choosing Your Level in English

- Foundation:** Foundation students should expect reading assignments of up to 20 pages a night.
- Extension:** Extension students will be expected to read up to 30 pages a night and should be able to research and write most assignments independently.
- Honors:** Honors students should be capable and willing to read up to 40 pages a night and should be able to complete independent research and writing assignments.

High School English Course Sequence



Electives

Electives Grades 11 & 12

- Challenges Facing Today's Teens (E)
- Fantasy & Science Fiction (F, H)
- Lyrics as Literature (E, H)
- Horror & Literature of the Unknown (F, E, H)
- Sports Literature(E)
- Woman as a Hero (E, H)
- Mythology (E, H)
- Journalism (E, H)

Electives for Grades 10 – 12

- Public Speaking (E, H)
- Creative Writing (F, H)
- Global Literature (F, E, H)

Electives for Grades 9-12 (Pre-requisite is English)

- Drama (E, H)
(May Satisfy Fine Art Requirement)
- Film Studies (E, H)

Legend	F: Foundation level	E=Extension level	U=Non-levelled	*=offered at F, E, H levels	(#)=year taken
--------	---------------------	-------------------	----------------	-----------------------------	----------------

English Language Arts

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
1011	Freshman Writing	1	Unleveled	S		Required Grade 9 Course
1013	English 1	1	Foundation	S		Required Grade 9 Course
1015	English 1 (E)	1	Extension	S		
1017	English 1 (H)	1	Honors	S		
1023	English 2	1	Foundation	S	English 1	Required Grade 10 Course.
1025	English 2 (E)	1	Extension	S	English 1	
1027	English 2 (H)	1	Honors	S	English 1	
1033	English 3	1	Foundation	S	English 2	Required Grade 11 course or AP English Lang. & Comp.
1035	English 3 (E)	1	Extension	S	English 2	
1037	English 3 (H)	1	Honors	S	English 2	
1039	AP English Language & Composition	2	AP	Y	English 2	
1043	English 4	1	Foundation	S	English 3	
1045	English 4 (E)	1	Extension	S	English 3	
1047	English 4 (H)	1	Honors	S	English 3	
1049	AP English Literature & Composition	2	AP	Y	English 3 or AP English Language	
1055	Challenges Facing Today's Teens (E)	1	Extension	S	English 2	
1065	Language Skills 1 (E)	1	Extension	S		
1075	Language Skills 2 (E)	1	Extension	S		
1215	Lyrics as Literature 1 (E)	1	Extension	S	English 2	
1257	Lyrics as Literature 1 (H)	1	Honors	S	English 2	
1103	Fantasy & Science Fiction	1	Foundation	S	English 3	
1107	Fantasy & Science Fiction (H)	1	Honors	S	English 3	
1203	Horror and Literature of the Unknown (F)	1	Foundation	S	English 2	
1205	Horror and Literature of the Unknown (E)	1	Extension	S	English 2	
1207	Horror and Literature of the Unknown (H)	1	Honors	S	English 2	
1155	Mythology (E)	1	Extension	S	English 2	
1157	Mythology (H)	1	Honors	S	English 2	
1355	Journalism (E)	1	Extension	S	English 2	
1357	Journalism (H)	1	Honors	S	English 2	
1455	Public Speaking (E)	1	Extension	S	English 2	
1457	Public Speaking (H)	1	Honors	S	English 2	
1463	Creative Writing	1	Foundation	S	English 1	
1467	Creative Writing (H)	1	Honors	S	English 1	
1515	Drama (E)	1	Extension	S	English 1	May fulfill an English or Art requirement but NOT both.

1517	Drama (H)	1	Honors	S	English 1	May fulfill an English or Art requirement but NOT both
1555	Sports Literature (E)	1	Extension	S	English 3	Does not meet the NCAA requirements.
1545	Woman as a Hero (E)	1	Extension	S	English 2	
1557	Woman as a Hero (H)	1	Honors	S	English 2	
1615	Film Studies (E)	1	Extension	S	English 1	
1617	Film Studies (H)	1	Honors	S	English 1	
1623	Global Literature (F)	1	Foundation	S	English 2	
1625	Global Literature (E)	1	Extension	S	English 2	
1627	Global Literature (H)	1	Honors	S	English 2	
9061	Reading for Success	1	Unleveled	S		Instructor Approval Required.

ELL – English Language Learners

The English Language Learners (ELL) Program is an instructional program for students who are speakers of other languages. Eligibility in the program is based upon a home language survey and a qualifying score on the state-approved English Language Proficiency (ELP) screener. The initial ELP screener results are used to determine the student's English language proficiency and appropriate course assignment. The ELL program uses evidence-based practices for language development that engages students in relevant contexts as they develop academic vocabulary and language in the areas of listening, reading, speaking, and writing skills. This comprehensive approach ensures that students develop essential language skills, while simultaneously engaging with academic content.

El programa de ELL (Inglés como Segundo Idioma) es un programa de instrucción para estudiantes que hablan otro idioma. La elegibilidad en el programa se basa en una encuesta sobre el idioma materno y una puntuación de calificación en el examen de dominio del idioma inglés (ELP) aprobado por el estado. Los resultados iniciales de la evaluación ELP se utilizan para determinar el dominio del idioma inglés del estudiante y la asignación del curso apropiado. El programa ELL utiliza prácticas basadas en evidencia para el desarrollo del lenguaje que involucran a los estudiantes en contextos relevantes a medida que desarrollan vocabulario académico y lenguaje en las áreas de habilidades de comprensión auditiva, lectura, expresión oral y escritura. Este enfoque integral garantiza que los estudiantes desarrollen habilidades lingüísticas esenciales y al mismo tiempo, interactúen con el contenido académico.

O Programa de Inglês Como Segunda Linguagem (ELL) é um programa de instrução para estudantes falantes de outros idiomas. A elegibilidade no programa é baseada em uma pesquisa no idioma local e em uma pontuação de qualificação no rastreador de proficiência em língua inglesa (ELP) aprovado pelo estado. Os resultados iniciais do ELP são usados para determinar a proficiência em língua inglesa do aluno e a atribuição apropriada do curso. O programa ELL usa práticas baseadas em evidências para o desenvolvimento da linguagem que envolve os alunos em contextos relevantes à medida que eles desenvolvem vocabulário acadêmico e linguagem nas áreas de habilidades de audição, leitura, fala e escrita. Essa abordagem garante que os alunos desenvolvam habilidades lingüísticas essenciais, ao mesmo tempo em que se envolvem com o conteúdo acadêmico.

Course #	Description	Credit	Level	Term Q-S-Y
9005 9505	EEA: Essential English A	1	9-12	S
9015 9215	EEB: Essential English B	1	9-12	S
9025 9325	EEC: Essential English C	1	9-12	S
9035 9335	EED: Essential English D	1	9-12	S
9125	ELDA: ELD Part A	2	9-12	Y
9135	ELDB: ELD Part B	2	9-12	Y
9145	ELDC: ELD Part C	2	9-12	Y
9155	ELDD: ELD Part D	2	9-12	Y
9045	ELL Literacy Lab	1	9-12	S

Each winter, ACCESS for ELLs, a summative English Language Proficiency (ELP) assessment is administered to active ELL students. In compliance with State exit criteria, a student reaches proficiency when they achieve a composite score of 4.5 or higher. Students who reach proficiency will be exited from direct ELL instruction and will be monitored for four years to ensure academic success.

**It is recommended that all English Language learners who achieve a composite score of 3.0 or higher ELL levels 4, 5 or 6 take a mainstream English course in addition to their ELL course. Freshman who achieve a composite score of 3.0 or higher or have 3+ years in the Nashua School District will be placed into Freshman Writing and English 1. ELL students should only be placed into English 4 after consultation with their ELL case manager. Students who have been in an ELL program for 4 years or more should be enrolled in an English course. ELL Case Managers have the discretion to make recommendations for course placement.

Fine and Performing Arts

Students must take a .5 credit of Fine and Performing Arts to graduate. The following additional courses meet the requirement:

- Drama (This course may fulfill an Art or English graduation requirement but not both.)
- Graphic Design 1 or Visual and Design Communication 1 (Each course may fulfill an Art or Computer requirement but not both.)

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
6011	Drawing	0.5	Non-leveled	Q		
6021	Advanced Drawing	1	Non-leveled	S	Intro to High School Art or Art Experience or Drawing	
6047	Studio Art (H)	1	Honors	S	Advanced Drawing	course can be repeated for credit.
6071	Crafts	1	Non-leveled	S		
6501 6501(N)	Jewelry & Small Metal Design	1.0	Non-leveled	S		
6091	Art Experience	0.5	Non-leveled	Q		
6107	Art History (H)	1	Honors	S		
6109	AP Art History	2	AP	Y		
6111	Piano	1	Non-leveled	S		course can be repeated for credit.
6121	Piano (Q)	0.5	Non-leveled	Q		course can be repeated for credit.
6131	Guitar Class (Q)	0.5	Non-leveled	Q		course can be repeated for credit.
6147	Music Theory (H)	1	Honors	S		This course may fulfill a music credit or an ICT requirement but not both.
6151	Guitar Class	1	Non-leveled	S		course can be repeated for credit.
6161	The Roots of Rock and Roll	1	Non-leveled	S		
6171	Band	1	Non-leveled	*		
6181	Chorale	1	Non-leveled	*		
6197	Concert Choir (H)	1	Honors	*		Audition required.
6201	Ceramics	1	Non-leveled	S		Meets the Math Experience requirement.
6217	Select Band (H0)	1	Honors	*		Audition required.

Fine and Performing Arts - Continued

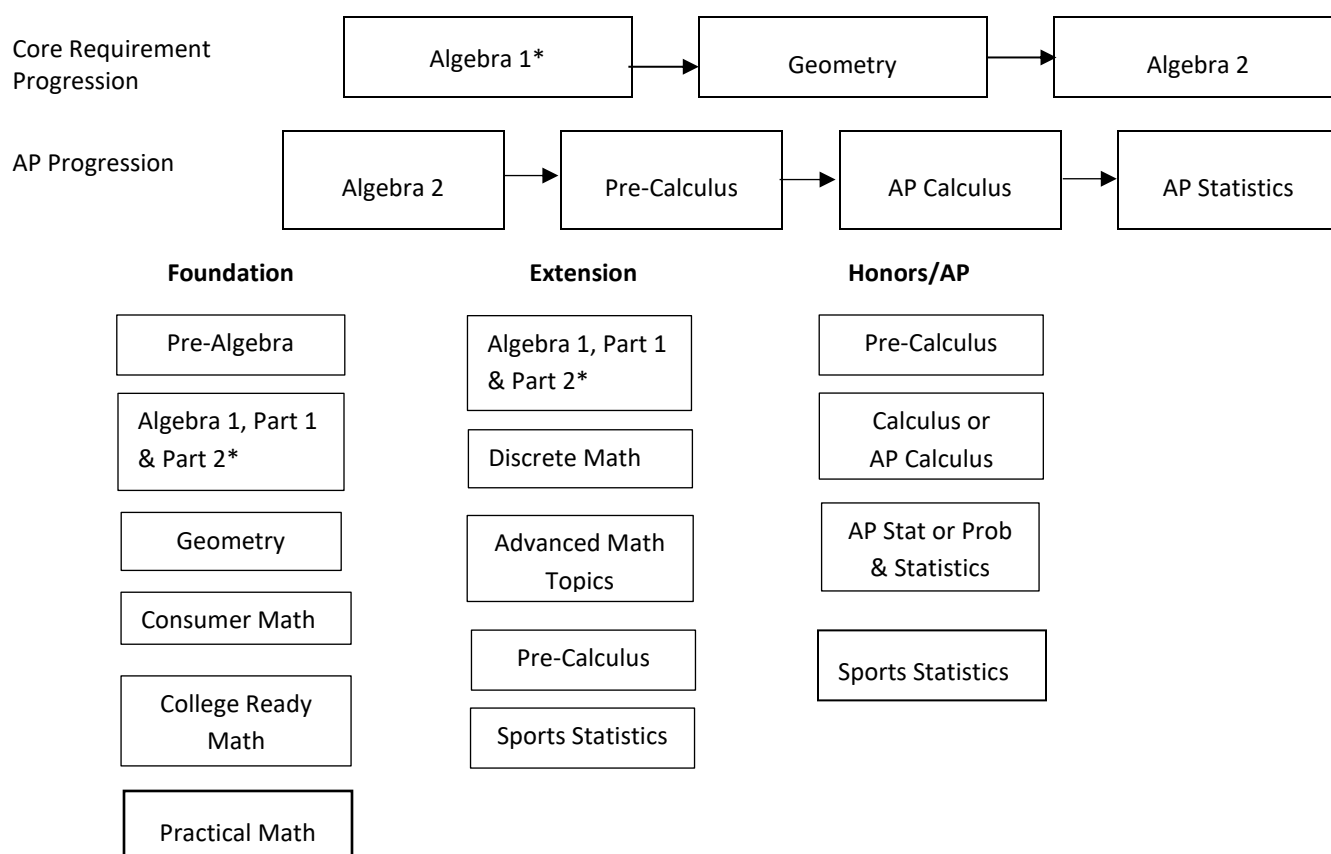
Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
6239	AP Music Theory	1	AP	S		Students are expected to take the AP exam in May. This course may fulfill a music credit or an ICT requirement but not both.
6241	Jazz Improv. & Literature	1	Non-leveled	S	1 year playing experience	Band Director recommendation.
6259	AP Studio Art - FY	2	AP	Y	Advanced Drawing	Adv. Drawing and Art History strongly recommended. Meets ICT requirement. Students are expected to take the AP exam in May.
6301	Photography	1	Non-leveled	S		Meets ICT and Math Experience requirement. Students must provide their own 35mm SLR camera with manual shutter speeds and aperture capabilities and a digital camera with point and shoot options to change modes and also required is a flash drive with 4GB capacity. It is recommended that students provide their own equipment. The high schools will provide assistance on a case-by-case basis for students without the required personal equipment. College credit may be available.
6311	Advanced Photography	1	Non-leveled	S	Photography or Teacher rec.	Meets ICT and Math Experience requirement. Students must provide their own 35mm SLR camera with manual shutter speeds and aperture capabilities and a digital camera with point and shoot options to change modes and also required is a flash drive with 4GB capacity. It is recommended that students provide their own equipment. The high schools will provide assistance on a case-by-case basis for students without the required personal equipment. College credit may be available.
6401	Adaptive Arts	1	Non-leveled	S		

Mathematics

The Mathematics Program offers a substantive sequence of courses to prepare students for college or career in the 21st Century. Three credits in Mathematics are required for graduation; one MUST be Algebra 1 Part 2 or Algebra 1 (H). Students must have a math experience every year of high school. We strongly encourage enrollment in a Mathematics course in each of a student's four years in high school. Four or more credits are generally required for college acceptance at selective schools. The goal of the Math Department is to develop in students the value and enjoyment of Mathematics. Students must be able to reason and communicate mathematically, have confidence in their mathematical skills, use Math to make informed decisions in their daily life and see themselves as mathematical problem solvers. In solving problems, students must be able to question the reasonableness of a solution, be flexible, persevere and take risks.

As a general guideline, students who are proficient (B or better) in their present course and have their teacher's recommendation will be prepared for the next course at that level. The standard college preparatory mathematics program consists of four courses: Algebra 1, Geometry, Algebra 2 and any combination of the Pre-Calculus, Discrete Math and Probability and Statistics semester courses. Students will thoroughly study a core of skills unique to each course and will also discover the connections between and among the courses.

High School Math Course Sequence



Prerequisites:

Algebra 1, Part 2/Algebra 1 (H) → Algebra 2 Algebra 1, Part 2/Algebra 1 (H) → Geometry
 Geometry (E) → Sports Statistics (E)
 Algebra 2 and Geometry → Advanced Math Topics Algebra 2 → Discrete Math
 Advanced Math Topics (E) → Pre-Calculus (E)
 Algebra 2 (H) & Geometry (H) → Probability & Statistics (H)
 Algebra 2 (H) & Geometry (H) → Pre-Calculus (H) → Calculus (H) or AP Calculus
 Pre-Calculus → AP Statistics

*Students will need 3 Math credits (including Algebra 1) to graduate. For the purpose of this graph, Algebra 1 represents Algebra 1, Part 1 and Algebra 1, Part 2 or Algebra 1 (H)

Note: Students need to have a math experience every year of high school. These courses may include any of the courses above, or, any of those listed on the "Math Experience List".

Mathematics

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
3003	Math Skills Review	0.5	Foundation	Q		
3013	Pre-Algebra	1	Foundation	S		
3083	Algebra 1 Part 1	1	Foundation	S		Students who completed Algebra I in 8 th grade with B or better may not take this course. Upon successful completion of Algebra 1 Part 1 and Part 2, 1 credit will be awarded as elective credit for Part 1, and Part 2 meets the Algebra requirement.
3093	Algebra 1 Part 2	1	Foundation	S		
3085	Algebra 1 Part 1 (E)	1	Extension	S		Students who completed Algebra 1 in 8 th grade with B or better may not take this course. Upon successful completion of Algebra 1 Part 1 and Part 2, 1 credit will be awarded as elective credit for Part 1, and Part 2 meets the Algebra requirement.
3095	Algebra 1 Part 2 (E)	1	Extension	S		
3027	Algebra 1 (H)	1	Honors	S		Students who completed Algebra 1 in 8 th grade with B or better may not take this course.
3033	Geometry	1	Foundation	S	Algebra 1 or Algebra 1 Part 2	
3035	Geometry (E)	1	Extension	S	Algebra 1 or Algebra 1 Part 2	
3037	Geometry (H)	1	Honors	S	Algebra 1 or Algebra 1 Part 2	
3043	Consumer Math	1	Foundation	S	Algebra 1 or Algebra 1 Part 2	
3055	Algebra 2 (E)	1	Extension	S	Algebra 1 or Algebra 1 Part 2	Use of graphing calculator required. Geometry recommended.
3057	Algebra 2 (H)	1	Honors	S	Algebra 1 or Algebra 1 Part 2	Use of graphing calculator required. Geometry recommended.
3063	College Ready Math	1	Foundation	S	Senior standing, Algebra 1, or Algebra 1 Part 2, Geometry and/or permission of Math Dept.	

Mathematics - Continued

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
3023	Practical Math	1	Foundations	S	Algebra 1, Part 2 or Geometry	
3105	Pre-Calculus (E)	1	Extension	S	Algebra 2 (H) or Advanced Math Topics and Geometry (H/E)	
3107	Pre-Calculus (H)	1	Honors	S	Geometry (H/E) & Algebra 2 (H)	
3123	Algebra 1 (Continued)	1	Foundation	S	Algebra 1 or Algebra 1 Part 2	Teacher recommendation
3127	Calculus (H)	1	Honors	S	Pre-Calculus (H)	
3129	AP Calculus AB	2	AP	Y	Pre-Calculus (H)	
3139	AP Calculus BC	1	AP	S	AP Calculus AB	Semester course only
3159	AP Calculus BC (FY)	2	AP	Y	Pre-Calculus (H) and Teacher Recommendation	
3153	Algebra 2 (Continued)	1	Foundation	S	Algebra 2	
3155	Advanced Math Topics (E)	1	Extension	S	Algebra 2 & Geometry	
3205	Discrete Math (E)	1	Extension	S	Algebra 2	
3255	Sports Statistics (E)	1	Extension	S	Algebra 2	
3527	Sports Statistics (H)	1	Honors	S	Algebra 2	
3257	Probability & Statistics (H)	1	Honors	S	Geometry (H) & Algebra 2 (H)	Students may take this course OR AP Statistics but NOT both
3259	AP Statistics	2	AP	Y	Pre-Calculus (H)	Can be concurrent with Pre-Calculus in the Fall semester. This course cannot be taken if you completed the Probability & Statistics course

Physical Education and Health

Through Physical Education classes, students will demonstrate fundamental movement skills in a variety of contexts; understand the lifelong benefits of a health enhancing fitness program; participate in self-selected physical activity; cooperate and encourage peers; accept individual differences and demonstrate inclusive behaviors; and engage in physical activity for enjoyment and self-expression. During Health classes students will demonstrate their understanding of making healthy decisions in all aspects of their lives. Topics discussed will be healthy relationships, healthy eating, human sexuality, substance use and abuse, and mental health.

Students will meet the Physical Education and Health graduation requirements by taking Sport Education as a freshman and Health 1 and Fit for Life as a sophomore.

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
7011	Sport Education	0.5	Non-leveled	Q		Required course for graduation.
7021	Fit for Life	0.5	Non-leveled	Q	Sport Education	Fit for Life or Personal Fitness is required for graduation.
7031	Health 1	0.5	Non-leveled	Q		Required course for graduation.
7041	Personal Fitness	0.5	Non-leveled	Q	Sport Education	Fit for Life or Personal Fitness is required for graduation.
7051	Lifetime Activities 1	0.5	Non-leveled	Q	Sport Education & Fit for Life	
7061	Lifetime Activities 2	0.5	Non-leveled	Q	Sport Education, Fit for Life, & Lifetime Activities 1	
7081	Health 2	0.5	Non-leveled	Q	Health 1	

Science

High School Science Course Sequence

Biology (9)	Physical Science Course (9-11)	Science Experience(s) (10-12)
-------------	--------------------------------	-------------------------------

Physical Science Courses				
ELL Physical Science (9-12)	Conceptual Physics and Chemistry (10-12)	Chemistry (10-12) (Foundations: Biology and Algebra 1 part 1 Extensions/Honors: Biology & Geometry or Algebra 2 is recommended)	Physics (10-12) (Foundations/Extensions: Biology & Geometry Honors: Biology, Geometry & Algebra 2)	AP Physics 1 (10-12) (Biology, Geometry & Algebra 2) Or AP Physics C: Mechanics (Biology & AP Calculus AB)

After Biology & Any Physical Science Course (10-12)	After Biology and Conceptual Physics & Chemistry, Physical Science or Chemistry (10-12)	After Biology & Chemistry (11-12)	After Biology & AP Physics 1 or AP Physics C (11-12)
Astronomy & Space Science Contemporary Issues in Science Environmental Science Meteorology Zoology AP Environmental Science	Anatomy & Physiology 1 (Anatomy & Physiology 2)	Forensic Science AP Biology AP Chemistry	AP Physics 2

Science Experience Credit Options

Science Department Courses	CTE Courses
Anatomy & Physiology 1 & 2 Astronomy & Space Science Chemistry Conceptual Physics and Chemistry ELL Physical Science Contemporary Issues in Science Environmental Science Forensic Science Meteorology Physics Zoology AP Biology AP Chemistry AP Environmental Science AP Physics 1 & 2 AP Physics C: Mechanics	Advanced Manufacturing Biotechnology & Biomedical Sciences Computer Aided Drafting & Design Health Sciences Intro to Engineering Design Marine Robotics Principles of Engineering Robotics Using VEX

Science

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
4003	ELL Physical Science	1	Foundation	S		Requires ELL instructor approval
4005	ELL Physical Science (E)	1	Extension	S		ELL instructor approval
4123	Conceptual Physics and Chemistry	1	Foundation	S		
4125	Conceptual Physics and Chemistry (E)	1	Extension	S		
4127	Conceptual Physics and Chemistry (H)	1	Honors	S		
4023	Biology	1	Foundation	S		
4025	Biology (E)	1	Extension	S		
4027	Biology (H)	1	Honors	S		
4029	AP Biology	2	AP	Y	Biology, Chemistry, Anatomy and Physiology and Zoology are recommended	Students are expected to take the AP exam in May. Chemistry may be taken concurrently first semester.
4053	Physics	1	Foundation	S	Biology and Geometry	Or concurrent with Geometry or Algebra 2. Meets Math Experience requirement.
4055	Physics (E)	1	Extension	S	Biology and Geometry	Meets Math Experience requirement.
4057	Physics (H)	1	Honors	S	Biology, Geometry and Algebra 2	Meets Math Experience requirement.
4059	AP Physics I	2	AP	Y	Biology, Geometry and Algebra 2	Students are expected to take the AP exam in May. Meets Math Experience requirement.
4109	AP Physics 2	1	AP	S	Advance Placement Physics I	Students are expected to take the AP exam in May. Meets Math Experience requirement.
4153	Chemistry	1	Foundation	S	Biology and Algebra 1, Part 2	Meets Math Experience requirement.
4155	Chemistry (E)	1	Extension	S	Biology and Geometry or Algebra 2	Algebra 2 suggested. Meets Math Experience requirement.
4157	Chemistry (H)	1	Honors	S	Biology and Geometry or Algebra 2	Algebra 2 suggested. Meets Math Experience requirement.

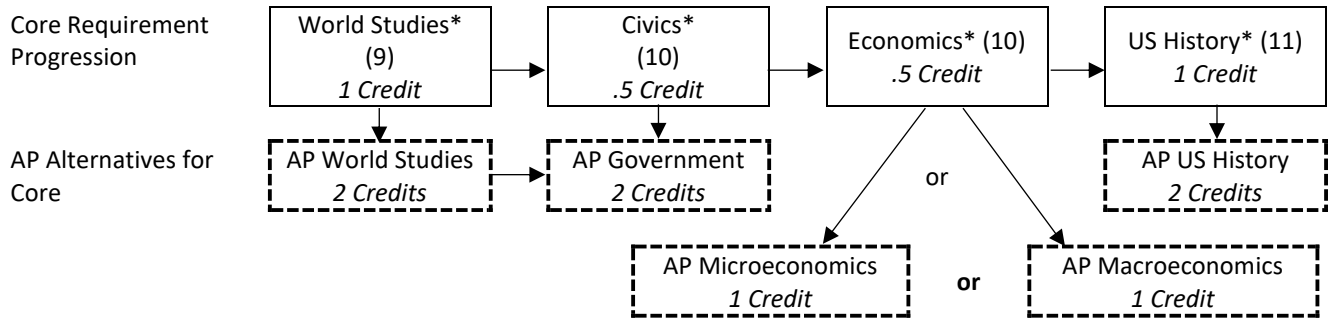
4159	AP Chemistry	2	AP	Y	Chemistry, Geometry and Algebra 2	Meets Math Experience requirement. Students are expected to take the AP exam in May.
4209	AP Physics C: Mechanics	2	AP	Y	Biology and AP Calculus AB	Meets Math Experience requirement.
4253	Astronomy & Space Science	1	Foundation	S	Biology and a Physical Science Course	
4255	Astronomy & Space Science (E)	1	Extension	S	Biology and a Physical Science Course	
4257	Astronomy & Space Science (H)	1	Honors	S	Biology and a Physical Science Course	
4303	Meteorology	1	Foundation	S	Biology and a Physical Science course	Meets Math Experience requirement.
4305	Meteorology	1	Extension	S	Biology and a Physical Science course	Meets Math Experience requirement.
4307	Meteorology	1	Honors	S	Biology and a Physical Science course	Meets Math Experience requirement.
4353	Anatomy & Physiology 1	1	Foundation	S	Biology and Physical Science or Chemistry	
4425	Anatomy & Physiology 1	1	Extension	S	Biology and Physical Science or Chemistry	
4427	Anatomy & Physiology 1 (H)	1	Honors	S	Biology and Physical Science or Chemistry	
4413	Anatomy & Physiology 2	1	Foundation	S	Anatomy & Physiology I	
4415	Anatomy & Physiology 2 (E)	1	Extension	S	Anatomy & Physiology I	
4407	Anatomy & Physiology 2 (H)	1	Honors	S	Anatomy & Physiology I (H)	
4503	Zoology	1	Foundation	S	Biology and a Physical Science Course	
4505	Zoology (E)	1	Extension	S	Biology and a Physical Science Course	
4507	Zoology (H)	1	Honors	S	Biology and a Physical Science Course	

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
4323	Environmental Science	1	Foundation	S	Biology and a Physical Science course.	
4525	Environmental Science	1	Extension	S	Biology and a Physical Science course	
4527	Environmental Science	1	Honors	S	Biology and a Physical Science course	
4529	AP Environmental Science	2	AP	Y	Biology and a Physical Science Course	Chemistry is recommended. Students are expected to take the AP exam in May.
4603	Forensic Science	1	Foundation	S	Chemistry	
4605	Forensic Science (E)	1	Extension	S	Chemistry	
4607	Forensic Science (H)	1	Honors	S	Chemistry	
4703	Contemporary Issues in Science	1	Foundation	S	Biology and a Physical Science Course	
4705	Contemporary Issues in Science (E)	1	Extension	S	Biology and a Physical Science Course	
4707	Contemporary Issues in Science (H)	1	Honors	S	Biology and a Physical Science Course	

Social Studies

Graduation Requirement: the minimum graduation requirement in Social Studies is three credits including one credit in World Studies, .5 credit of Civics, .5 credit of Economics and one credit in US History. **Per NH RSA 189.1, Students are required to take and pass the US Citizenship and Naturalization exam.**

High School Social Studies Course Sequence



Electives (10, 11, 12)

Historical & Global Studies	Behavioral Sciences	Legal Studies
AP European History <i>2 Credit</i>	Introduction to Psychology (E, H) <i>1 Credit</i>	Business Law (E, H) <i>1 Credit</i>
Military History (N) <i>1 Credit</i>	AP Psychology <i>2 Credit</i>	Law & Ethics (E, H) <i>1 Credit</i>
Global Conflicts* (F, E, H) <i>1 Credit</i>	Anthropology (E, H & F) <i>1 Credit</i>	Crime & Justice in America (F) <i>1 Credit</i>
Breaking History: Media Literacy in a Digital Age (F, E, H) <i>1 Credit</i>	Sociology (F, E, H) * <i>1 Credit</i>	
Diversity in America (N)		

Legend: F= Foundation level E=Extension level N=Non-leveled *= offered at all levels (#) = year taken

=Core Requirement
 =AP equivalent to Core Requirement

* Students taking Civics and Economics are not precluded from taking AP Government, AP Microeconomics or AP Macroeconomics (fulfill Economics requirement). AP Government fulfills Civics requirement; AP Macroeconomics fulfills Economics requirement.

Social Studies

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
2013	World Studies	1	Foundation	S		Fulfills World Studies and Geography state requirement.
2015	World Studies (E)	1	Extension	S		Fulfills World Studies and Geography state requirement.
2017	World Studies (H)	1	Honors	S		Fulfills World Studies and Geography state requirement.
2019	AP World History	2	AP	Y		Fulfills World Studies state requirement.
2063	Economics	0.5	Foundation	Q		Students must take this or AP Macro/Microeconomics to fulfill state requirement. Meets Math Experience requirement.
2065	Economics (E)	0.5	Extension	Q		Students must take this or AP Macro/Microeconomics to fulfill state requirement. Meets Math Experience requirement.
2067	Economics (H)	0.5	Honors	Q		Students must take this or AP Macro/Microeconomics to fulfill state requirement. Meets Math Experience requirement.
2073	Civics	0.5	Foundation	Q		Students must take this or AP Government to fulfill state requirement.
2075	Civics (E)	0.5	Extension	Q		Students must take this or AP Government to fulfill state requirement.
2077	Civics (H)	0.5	Honors	Q		Students must take this or AP Government to fulfill state requirement.
2033	US History	1	Foundation	S		Fulfills US and NH History state requirement.
2035	US History (E)	1	Extension	S		Fulfills US and NH state requirement.
2037	US History (H)	1	Honors	S		Fulfills US and NH History state requirement.
2039	AP US History	2	AP	Y		Fulfills US and NH History state requirement.
2053	Anthropology (F)	1	Foundation	S		
2055	Anthropology (E)	1	Extension	S		
2057	Anthropology (H)	1	Honors	S		
2105	Business Law (E)	1	Extension	S		
2107	Business Law (H)	1	Honors	S		
2153	Crime & Justice in America	1	Foundation	S		

Social Studies - Continued

Course #	Description	Credit	Level	Term Q-S-Y	Pre- Requisite	Notes
2205	Law & Ethics (E)	1	Extension	S		20 hours of community service required.
2207	Law & Ethics (H)	1	Honors	S		20 hours of community service required.
2305	Introduction to Psychology (E)	1	Extension	S		
2307	Introduction to Psychology (H)	1	Honors	S		Recommended as a pre-requisite to AP Psychology.
2309	AP Psychology	2	AP	Y		Meets Math Experience requirement. Introduction to Psychology is recommended as a pre-requisite.
2351	Military History	1	Non-leveled	S		
2353	Sociology (F)	1	Foundation	S		
2361	Diversity in America	1	Unleveled	S		
2405	Sociology (E)	1	Extension	S		
2407	Sociology (H)	1	Honors	S		
2513	Global Conflicts (F)	1	Foundation	S		
2515	Global Conflicts (E)	1	Extension	S		
2517	Global Conflicts (H)	1	Honors	S		
2559	AP Microeconomics	1	AP	S		Meets Math Experience requirement.
2569	AP Macroeconomics	1	AP	S		Meets Math Experience requirement.
2609	AP European History	2	AP	Y		
2659	AP US Government & Politics	2	AP	Y		
2703	Breaking History: Media Literacy in the Digital Age	1	Foundation	S		
2705	Breaking History: Media Literacy in the Digital Age	1	Extension	S		
2707	Breaking History: Media Literacy in the Digital Age	1	Honors	S		

Special Education

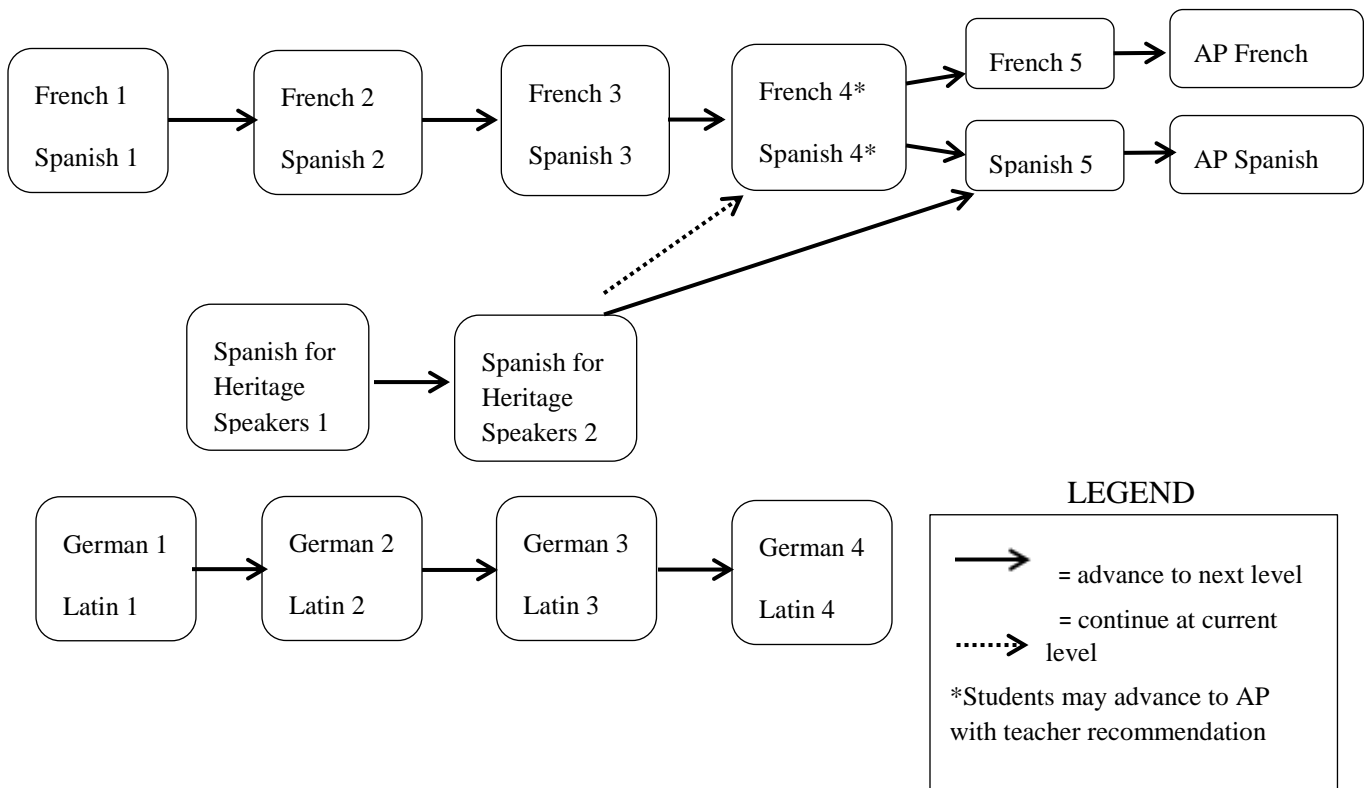
Course #	Description	Credit	Level	Term Q-S-Y	Pre- Requisit e	Notes
9183	General English 1	1	Foundation	S		Teacher recommendation
9213	General English 2	1	Foundation	S		Teacher recommendation
9203	General English 3	1	Foundation	S		Teacher recommendation
9223	General English 4	1	Foundation	S		Teacher recommendation
9211	Metacognitive Skills Development	1	Foundation	S		Teacher recommendation
9051	Reading	2	Foundation	Y		Teacher recommendation
9701	Literacy Center 1	2	Foundation	Y		Teacher recommendation
9751	Literacy Center 2	2	Foundation	Y		Teacher recommendation
9353	General Math	1	Foundation	S		Teacher recommendation
9343	General Pre-Algebra	1	Foundation	S		Teacher recommendation
9373	General Algebra I Part 1	1	Foundation	S		Teacher recommendation
9383	General Algebra I Part 2	1	Foundation	S		Teacher recommendation
9413	General Science-Physical	1	Foundation	S		Teacher recommendation
9423	General Science-Biological	1	Foundation	S		Teacher recommendation
9433	General Geometry	1	Foundation	S		Teacher recommendation
9463	General World Studies	1	Foundation	S		Teacher recommendation
9483	General Civics	0.5	Foundation	Q		Teacher recommendation
9473	General Economics	0.5	Foundation	Q		Teacher recommendation
9453	General US History	1	Foundation	S		Teacher recommendation
9231	Adaptive Music	0.5	Foundation	Q		Teacher recommendation
9241	Adaptive Physical Education	0.5	Foundation	Q		Teacher recommendation
9303	General Health	1	Foundation	S		Teacher recommendation
9501	Habits for Living	1	Foundation	S		Teacher recommendation
9801	Physical Conditioning & Communication Skill	1	Foundation	S		Teacher recommendation
9851	Prep Foods	1	Foundation	S		Teacher recommendation
9901	Work Skills	1	Foundation	S		Teacher recommendation
9711	ND English 1	1	Foundation	S		Teacher recommendation
9721	ND English 2	1	Foundation	S		Teacher recommendation
9731	ND English 3	1	Foundation	S		Teacher recommendation
9741	ND English 4	1	Foundation	S		Teacher recommendation
9811	ND Pre-Algebra	1	Foundation	S		Teacher recommendation
9921	ND Algebra I Part 1	1	Foundation	S		Teacher recommendation
9971	ND Algebra I Part 2	1	Foundation	S		Teacher recommendation
9831	ND Consumer Math	1	Foundation	S		Teacher recommendation
9941	ND Physical Science	1	Foundation	S		Teacher recommendation
9911	ND World Studies	1	Foundation	S		Teacher recommendation
9861	ND Civics	0.5	Foundation	Q		Teacher recommendation
9871	ND Economics	0.5	Foundation	Q		Teacher recommendation
9931	ND US History	1	Foundation	S		Teacher recommendation

World Languages

Studying a world language and its culture is a real asset. Knowing a second language enhances career marketability and often facilitates better understanding and use of English. Students can choose to study French, German, Latin and/or Spanish at the high school level. As students complete the units of study in each of the world language courses, they will demonstrate their level of proficiency via performance assessments to ensure that the desired goals are being met. The performance assessments will indicate the student’s long-term command of listening, speaking, reading and writing skills.

The study of a single language through at least the third year is generally necessary for college/university admissions. We also highly recommend that students who already speak another language challenge themselves by taking courses in a language other than their own. Students who are heritage Spanish speakers or who live in a home where Spanish is the primary language must be tested before being placed in a Spanish class to ensure proper placement. The Spanish classes, particularly Spanish 1 and Spanish 2, are designed for non-heritage speakers and are not appropriate for those who already know Spanish. These students will be placed in Spanish 3, 4, 5 or Heritage Speakers based upon the results of the placement assessment.

World Language Course Sequence



Course #	Course Name	Term	Credit	Level	Pre-requisite	Notes
8117	French 1 (H)	S	1	Honors		
8127	German 1 (H)	S	1	Honors		
8137	Latin 1 (H)	S	1	Honors		
8147	Spanish 1 (H)	S	1	Honors		
8217	French 2 (H)	S	1	Honors	French 1	Teacher recommendation strongly advised.
8227	German 2 (H)	S	1	Honors	German 1	Teacher recommendation strongly advised.
8237	Latin 2 (H)	S	1	Honors	Latin 1	Teacher recommendation strongly advised.
8247	Spanish 2 (H)	S	1	Honors	Spanish 1	Teacher recommendation strongly advised.
8317	French 3 (H)	S	1	Honors	French 2	Teacher recommendation strongly advised.
8327	German 3 (H)	S	1	Honors	German 2	Teacher recommendation strongly advised.
8337	Latin 3 (H)	S	1	Honors	Latin 2	Teacher recommendation strongly advised.
8347	Spanish 3 (H)	S	1	Honors	Spanish 2	Teacher recommendation strongly advised.
8417	French 4 (H)	S	1	Honors	French 3	Teacher recommendation strongly advised.
8427	German 4 (H)	S	1	Honors	German 3	Teacher recommendation strongly advised.
8437	Latin 4 (H)	S	1	Honors	Latin 3	Teacher recommendation strongly advised.
8447	Spanish 4 (H)	S	1	Honors	Spanish 3	Teacher recommendation strongly advised.
8517	French 5 (H)	S	1	Honors	French 4	Teacher recommendation strongly advised.
8547	Spanish 5 (H)	S	1	Honors	Spanish 4	Teacher recommendation strongly advised.
8619	AP French	S	1	AP	French 4 or 5	Teacher recommendation strongly advised.
8649	AP Spanish	S	1	AP	Spanish 4 or 5	Teacher recommendation strongly advised.
8747	Spanish for Heritage Speakers 1 (H)	S	1	Honors		Placement Exam
8847	Spanish for Heritage Speakers 2 (H)	S	1	Honors	Spanish for Heritage Speakers 1	Spanish for Heritage Speakers 1 and Teacher recommendation.

Nashua Technology Center
Career Academy Courses

The Nashua Technology Center offers Career and Technical Education Programs, which are available to students at BOTH Nashua High School North and Nashua High School South. Students may be required to travel to participate in Career and Technical Education programs. These courses are designed to provide students with important and necessary skills for whatever career path they may choose and are designed for students who have a specific interest in pursuing a career in one of the following areas below. A number of these courses, when taken at the honors level, may have college credit available. Please note that some courses in the Nashua Technology Center (NTC) are offered as part of a two-year program to be taken during a student’s junior and senior year, but some programs are available to sophomores as well and are referenced in course descriptions. Students who will be able to complete BOTH years of the program are given preference when enrollments in these courses are determined. Those who meet the requirements for the first year of a program are not guaranteed placement as space is limited due to area agreements with regional sending schools and fixed class sizes. No credit is awarded for withdrawing at midyear.

Programs offered at one high school are available to students from both schools. Shuttle buses run between the two high schools to transport the students.

CTE Programs & NTC Courses at Nashua High North	CTE Programs & NTC Courses at Nashua High South	CTE Programs at North & South
Automotive Technology Biotechnology & Biomedical Sciences Culinary Arts Cosmetology Design & Visual Communication Drone Technology Robotics	Advanced Manufacturing CADD Careers in Education Computer Networking & Cyber Security Construction Technology Electrical Technology Health Sciences HVACR Engineering Pathways Video Production & Broadcasting	College Accounting Business Finance Marketing Cybersecurity 1, 2 & 3

Nashua Technology Center

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5001	Accounting Fundamentals	1	Unleveled	S		Meets ICT and Math Experience requirement.
5027	College Accounting 1 (H)	1	Honors	S		Meets ICT and Math Experience requirement.
5037	College Accounting 2 (H)	1	Honors	S	College Accounting 1	Meets ICT and Math Experience requirements. NTC Director approval.
5051	Introduction to Business	0.5	Unleveled	Q		Meets ICT and Math Experience requirement.
5071	Digital Apps and Communication	1	Unleveled	S		Meets ICT requirement.
5101	Small Business Management	1	Unleveled	S		Meets ICT requirement.
5107	Small Business Management (H)	1	Honors	S		Meets ICT requirement.
5121	Marketing for Sports and Entertainment	1	Unleveled	S		Meets ICT and Math Experience requirement.
5127	Marketing for Sports and Entertainment (H)	1	Honors	S		Meets ICT and Math Experience requirement.
5151	Child Growth & Dev.	1	Unleveled	S		
5161	Exploring Contemporary Cooking	1	Unleveled	S		Meets Math Experience requirement.
5171	Foods Technology	1	Unleveled	S		Meets Math Experience requirement.
5181	Lifespan Nutrition	1	Unleveled	S		
5191	Human Relations	1	Unleveled	S		
5197	Human Relations (H)	1	Honors	S		
5201	On Your Own	0.5	Unleveled	Q		Meets Math Experience requirement.
5211	Interior Design	1	Unleveled	S		Meets ITC requirement.

Nashua Technology Center - Continued

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5221	Automotive Technology 1	2	Unleveled	Y	Algebra 1 or Algebra 1 Part 2 and Physical Science	Student must supply their own instructor-approved safety shoes to be worn in class. Lab coat will be provided for lab work. Meets Math Experience requirement.
5231	Automotive Technology 2	2	Unleveled	Y	Automotive Tech. 1	Student supplied, instructor-approved safety shoes must be worn in class and on the job site. Students must provide their own transportation to work site. Meets Math Experience requirement. NTC Director approval.
5237	Automotive Technology 2 (H)	2	Honors	Y	Automotive Tech. 1	Student supplied, instructor-approved safety shoes must be worn in class and on the job site. Students must provide their own transportation to work site. Meets Math Experience requirement. NTC Director approval.
5241	Drone Technology	1	Unleveled	Q		Meets ICT requirement.
5251	Biotechnology & Biomedical Science 1	2	Unleveled	Y	Algebra 1 or Algebra 1 Part 2, Physical Science or Physics	Meets Science Experience credit or Math Experience Requirement.
5257	Biotechnology & Biomedical Science 1 (H)	2	Honors	Y	Algebra 1 or Algebra 1 Part 2, Physical Science or Physics	Meets Science Experience credit or Math Experience Requirement.
5261	Biotechnology & Biomedical Science 2	2	Unleveled	Y	Biotechnology & Biomedical Science 1	NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.

Nashua Technology Center - Continued

5267	Biotechnology & Biomedical Science 2 (H)	2	Honors	Y	Biotechnology & Biomedical Science 1	NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.
5271	CADD 1	2	Unleveled	Y		NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.
5277	CADD 1 (H)	2	Honors	Y		NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.
5281	CADD 2	2	Unleveled	Y	CADD 1	NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.
5287	CADD 2 (H)	2	Honors	Y	CADD 1	NTC Director approval. Meets ICT or Math Experience or Science Experience requirement.
5291	Construction Technology 1	2	Unleveled	Y		Meets Math Experience requirement.
5301	Construction Technology 2	2	Unleveled	Y	Construction Tech. 1	NTC Director approval. Meets Math Experience requirement.
5307	Construction Technology 2 (H)	2	Honors	Y	Construction Tech.1	NTC Director approval. Meets Math Experience requirement.
5311	Cosmetology 1	2	Unleveled	Y	Algebra 1 or Algebra 1 Part 2 & Physical Science or Biology	Uniform purchase required. Registration with State Board.
5321	Cosmetology 2	2	Unleveled	Y	Cosmetology 1	Uniform required. NTC Director approval.
5331	Culinary Arts 1	2	Unleveled	Y		Purchase of uniform and black safety shoes required. Meets Math Experience requirement.
5337	Culinary Arts 1 (H)	2	Honors	Y		Purchase of uniform and black safety shoes required. Meets Math Experience requirement.
5341	Culinary Arts 2	2	Unleveled	Y	Culinary Arts 1	NTC Director approval. Meets Math Experience requirement.

Nashua Technology Center - Continued

5347	Culinary Arts 2 (H)	2	Honors	Y	Culinary Arts 1	NTC Director approval. Meets Math Experience requirement.
5351	Careers in Education 1	2	Unleveled	Y		
5357	Careers in Education 1 (H)	2	Honors	Y		
5361	Careers in Education 2	2	Unleveled	Y	Careers in Education 1	NTC Director approval.
5367	Careers in Education 2 (H)	2	Honors	Y	Careers in Education 1	NTC Director approval.
5371	Electrical Technology 1	2	Unleveled	Y		Meets Math Experience requirement.
5381	Electrical Technology 2	2	Unleveled	Y	Elec. Tech. 1	NTC Director approval. Meets Math Experience requirement.
5391	Business Finance	1	Unleveled	S		Meets ICT or Math Experience requirement
5397	Business Finance (H)	1	Honors	S		Meets ICT or Math Experience requirement
5401	Financial Services Internship	1	Unleveled	S		Meets ICT or Math Experience requirement
5411	Global Finance	1	Unleveled	S		Meets ICT or Math Experience requirement
5417	Global Finance (H)	1	Honors	S		Meets ICT or Math Experience requirement
5431	Design & Visual Communications 1	2	Unleveled	Y		Meets ICT requirement.
5437	Design & Visual Communications 1 (H)	2	Honors	Y		Meets ICT requirement.
5441	Design & Visual Communications 2	2	Unleveled	Y	Design & Visual Communications 1	
5447	Design & Visual Communications 2 (H)	2	Honors	Y	Design & Visual Communications 1	
5451	Health Sciences 1	2	Unleveled	Y	Biology	Uniform purchase required. Meets Science Experience requirement.
5457	Health Sciences 1 (H)	2	Honors	Y	Biology	Uniform purchase required. Meets Science Experience requirement.
5461	Health Sciences 2	3	Unleveled	Y	Health Sciences 1	1 block one semester, 2 blocks another semester. NTC Director approval. Meets Science Experience requirement.

Nashua Technology Center - Continued

5467	Health Sciences 2 (H)	3	Honors	Y	Health Sciences 1	1 block one semester, 2 blocks another semester. NTC Director approval. Meets Science Experience requirement.
5491	Advanced Manufacturing 1	2	Unleveled	Y		Meets Math Experience or Science Experience requirement.
5501	Advanced Manufacturing 2	2	Unleveled	Y	Advanced Manufacturing	NTC Director approval. Meets Math Experience or Science Experience requirement.
5507	Advanced Manufacturing 2 (H)	2	Honors	Y	Advanced Manufacturing	NTC Director approval. Meets Math Experience or Science Experience Requirement.
5511	HVACR- 1	2	Unleveled	Y		Meets Math Experience requirement.
5521	HVACR- 2	2	Unleveled	Y	HVACR- 1	Meets Math Experience requirement. NTC Director approval.
5521	HVACR- 2 (H)	2	Honors	Y	HVACR- 1	Meets Math Experience requirement. NTC Director approval.
5531	Marketing for Retail and Fashion	1	Unleveled	S		Meets ICT or Math Experience requirement
5537	Marketing for Retail and Fashion (H)	1	Honors	S		Meets ICT or Math Experience requirement
5541	Marketing Management and Social Media	2	Unleveled	Y	Marketing for Retail and Fashion or Marketing for Sports and Entertainment	NTC Director approval. Meets ICT requirement or Math Experience.
5547	Marketing Management and Social Media (H)	2	Honors	Y	Marketing for Retail and Fashion or Marketing for Sports and Entertainment	NTC Director approval. Meets ICT or Math Experience requirement.

Nashua Technology Center - Continued

5551	Introduction to Engineering Design	1	Unleveled	S		Incoming freshmen enrolled in Honors Algebra may elect this course. Meets ICT or Math Experience requirement or Science Experience requirement.
5557	Introduction to Engineering Design (H)	1	Honors	S		Incoming freshmen enrolled in Honors Algebra 1 may elect this course. Meets ICT or Math Experience requirement or Science Experience requirement.
5561	Computer Networking 1	1	Unleveled	Y		Meets ICT requirement
5567	Computer Networking 1 (H)	1	Honors	Y		Meets ICT requirement
5571	Computer Networking 2	2	Unleveled	Y	Computer Networking 1	NTC Director approval.
5577	Computer Networking 2 (H)	2	Honors	Y	Computer Networking 1	NTC Director approval.
5601	Video Production 1	2	Unleveled	Y		Meets ICT or Math Experience requirement.
5607	Video Production 1 (H)	2	Honors	Y		Meets ICT or Math Experience requirement.
5871	Advanced Digital & Media Productions	1	Unleveled	S	Video Production 1	Meets ICT or Math Experience requirement.
5877	Advanced Digital & Media Productions	1	Honors	S	Video Production 1	Meets ICT or Math Experience requirement.
5621	Advanced Cinema Production	1	Unleveled	S	Video Production 1	Meets ICT or Math Experience requirement.
5627	Advanced Cinema Production	1	Honors	S	Video Production 1	Meets ICT or Math Experience requirement.
5741	Power Mechanics 1	0.5	Unleveled	Q		Meets Math Experience requirement.
5751	Electricity/Electronics	0.5	Unleveled	Q		
5761	Graphic Design 1	0.5	Unleveled	Q		Meets Math Experience requirement. Meets ICT or Art requirement.
5771	Woodworking 1	0.5	Unleveled	Q		Meets Math Experience requirement.

Nashua Technology Center - Continued

5781	Woodworking 2	1	Unleveled	S	Woodworking 1	Meets Math Experience requirement.
5821	Marine Robotics	1.0	Unleveled	S	Algebra 1 or Algebra 1 Part 2, NTC Director's approval	Meets Math Experience or Science Experience requirement. South students will need to travel to North.
5841	Power Mechanics 2	0.5	Unleveled	Q	Power Mechanics 1	Meets Math Experience requirement.
5851	Parenting	0.5	Unleveled	Q		
5861	Graphic Design 2	0.5	Unleveled	Q	Graphic Design 1	Meets Math Experience requirement. or ICT requirement or Art requirement.
5901	Personal Finance	0.5	Unleveled	Q		Meets ICT or Math Experience requirement
5911	Cybersecurity 1	1	Unleveled	S		Meets ICT requirement
5917	Cybersecurity 1 (H)	1	Unleveled	S		Meets ICT requirement
5921	Computer Integrated Manufacturing	1	Unleveled	S	Algebra or Algebra 1 Part 2	Meets ICT or Math experience requirement.
5927	Computer Integrated Manufacturing (H)	1	Honors	S	Algebra 1 or Algebra 1 Part 2	Meets ICT or Math experience requirement.
5931	Principles of Engineering Design	1	Unleveled	S	Intro to Engineering Design	Meets ICT or Math Experience or Science Experience requirement
5937	Principles of Engineering Design (H)	1	Honors	S	Intro to Engineering Design	Meets ICT or Math Experience or Science Experience requirement.
5941	Engineering Design & Development	1	Unleveled	S	Intro. to Engineering Design	Meets ICT or Math Experience or Science Experience requirement. NTC Director approval.
5947	Engineering Design & Development (H)	1	Honors	S	Intro. to Engineering Design	Meets ICT or Math Experience or Science Experience requirement. NTC Director approval.

Nashua Technology Center - Continued

5951	Robotics Using VEX	1	Unleveled	S		Meets ICT or Math Experience or Science Experience requirement.
5957	Robotics Using VEX (H)	1	Honors	S		Meets ICT or Math Experience or Science Experience requirement.
5991	Cybersecurity 2	1	Unleveled	S		Meets ICT requirement. NTC Director approval.
5997	Cybersecurity 2 (H)	1	Honors	S		Meets ICT requirement. NTC Director approval.
5981	Cybersecurity 3	1	Unleveled	S		Meets ICT requirement. Cybersecurity 1 & 2. NTC Director Approval.
5987	Cybersecurity 3 (H)	1	Honors	S		Meets ICT requirement. Cybersecurity 1 & 2. NTC Director Approval.

Alvirne High School Courses

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
AL5731	Forest & Wildlife Management 1	2	Unleveled	Y		
AL5831	Forest & Wildlife Management 2	2	Unleveled	Y	Forest & Wildlife Mgmt. 1	
AL5671	Heavy Duty Mechanics Tech. 1	2	Unleveled	Y		
AL5681	Heavy Duty Mechanics Tech. 2	2	Unleveled	Y	Heavy Duty Mechanics 1	
AL5631	Veterinary Science 1	2	Unleveled	Y		
AL5641	Veterinary Science 2	2	Unleveled	Y	Veterinary Science 1	
AL5791	Welding and Fabrication 1	2	Unleveled	Y		
AL5801	Welding and fabrication 2	2	Unleveled	Y	Welding 1	
AL5870	Natural Resources 1	2	Unleveled	Y		
AL5871	Natural Recourses 2	2	Unleveled	Y	Natural Resources 1	



2025-2026

SECTION 4

Course Descriptions

Course Descriptions

Accounting Fundamentals	1 Credit	Gr. 9, 10, 11, 12	Course: 5001
--------------------------------	-----------------	--------------------------	---------------------

Does your future include owning your own business? This course teaches students the process of accurate recordkeeping for the preparation of business financial statements and the determination of the value of a business.

Note: Meets ICT or Math Experience requirement.

Adaptive Arts	2 Credits	Gr. 9, 10, 11,12	Course: 6401
----------------------	------------------	-------------------------	---------------------

This course will give intensive special needs students the opportunity to work with peers while creating art which can be taken home and used for design and function. Most projects made are functional and practical. These explorations may include printmaking, glass painting, recycled sculptures, knitting on a loom, paper mâché and tie-dye. The classroom teacher has the direction to adapt the curriculum based on individual; student needs.

Adaptive Music	0.5 Credit	Gr. 9, 10, 11,12	Course: 9231
-----------------------	-------------------	-------------------------	---------------------

Students will be introduced to different types of music and musical instruments. They will learn to handle various musical instruments and keep time with the music through the use of those instruments as well. General musical terms will also be explored. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individualized student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

Adaptive PE	0.5 Credit	Gr. 9, 10, 11,12	Course: 9241
--------------------	-------------------	-------------------------	---------------------

Students will take part in individual and group activities that will teach students how to be part of a team and practice true sportsmanship. These activities will also help promote personal fitness and lifetime wellness. Some students will also learn tolerance and leadership as well as how to adapt activities to meet the abilities of all students. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individualized student needs.

Prerequisite: Case manager/Special Education teacher recommendation and/or Physical Education teacher recommendation.

Advanced Computer Science Topics	1 Credit	Gr. 10, 11,12	Course: 3045/3047
---	-----------------	----------------------	--------------------------

Students will further explore the modern areas of interest in computer science. Topics may include but are not limited to: app development; microcontrollers and robots; e-textiles; cybersecurity; and artificial intelligence. This course will look at the applications, implications, and science behind the newest innovative developments in the field of computer science.

Advanced Cinema Production	1 Credit	Gr. 11, 12	Course: 5621/5627
-----------------------------------	-----------------	-------------------	--------------------------

Advanced Cinema Production offers students an intensive, project-based, experience to develop their filmmaking skills at a higher level. Students will learn all stages of film production, traditional and emerging forms of documentary and narrative filmmaking, advanced production techniques and strategies, plus project management skills for producing films.

Note: Meets ICT or Math Experience requirement. Course offered at Nashua High School South; North students must travel.

Prerequisite: Video Production & Broadcasting 1

Advanced Digital & Media Productions	1 Credit	Gr. 11, 12	Course: 5871/5877
---	-----------------	-------------------	--------------------------

Advanced Digital & Media Productions will build on students' foundational skills. This course will cover more complex media techniques and projects with focus on editing, multi-camera productions, advanced lighting, motion graphics, and web-based media productions. Students will work on complex, multi-stage projects that mimic real-world workflows.

Note: Meets ICT or Math Experience requirements. Course is offered at Nashua High School South; North students must travel.

Prerequisite: Video Production & Broadcasting 1

Advanced Drawing	1 Credit	Gr. 9, 10, 11, 12	Course: 6021
-------------------------	-----------------	--------------------------	---------------------

This course is intended for students with a strong interest in the visual arts and the desire to improve artistic skills. Experiences will include observational drawing, anatomy, portraiture, linear perspective, color theory, painting, printmaking, and sculptural activities. Sketchbooks will be used for practice and proficiency activities. Expectations include daily homework assignments and independent research designed to enhance self-directed learning.

Prerequisite: Any high school level visual art course including grade 8 “Introduction to High School Art”.

Advanced Math Topics	1 Credit	Gr. 11, 12	Course: 3155
-----------------------------	-----------------	-------------------	---------------------



Students enrolled in algebra at the extension or foundation level MUST take this Advanced Math Topics (AMT) to continue their study of mathematics towards the pre-calculus and calculus courses. Students enrolled in algebra 2 at the honors level who need reinforcement of further algebra topics should take this course. Topics such as triangle trigonometry, statistics, functions, probability, sequence and series, and conic sections are studied. This course emphasizes concept development and applications.

Prerequisite: Geometry and Algebra 2 (C or better suggested).

Advanced Manufacturing 1	2 Credits	Gr. 10, 11	Course: 5491
---------------------------------	------------------	-------------------	---------------------

Students in the manufacturing program learn manufacturing processes and design through a project-based learning experience. Projects may include processes such as CNC milling, waterjet cutting, plasma table, welding, CADD lathe, robotics, dimensional measurements and such. Students can follow a wide variety of paths including, graphic design production, machine tooling and forming, welding and material joining, automation, and project innovation and design.

Note: Meets Math Experience or Science Experience requirement.

Advanced Manufacturing 2	2 Credits	Gr. 11, 12	Course: 5501/5507
---------------------------------	------------------	-------------------	--------------------------

Students in the manufacturing program, year two, will complete a capstone project capitalizing on project management and the processes they are interested in. During this time students will also have a WBL (Work Based Learning) opportunity, where they will work alongside an industry partner in the real world.

Note: Meets Math Experience, Science Experience or ICT requirement.

Prerequisite: Advanced Manufacturing 1

Advanced Photography	1 Credit	Gr. 11, 12	Course: 6311
-----------------------------	-----------------	-------------------	---------------------

Students will study advanced techniques to become more professional, skillful, and creative in their approach to taking and developing images. Students continue to study digital and traditional darkroom photography as well as printing museum quality photographs and crafting a portfolio of images. Students also learn alternative darkroom and lighting techniques which enhance the quality of their emerging portfolio

Note: Meets ICT and Math Experience requirement. Students must provide their own 35mm SLR camera with manual shutter speeds and aperture capabilities and a digital camera with point and shoot options to change modes and also required is a flash drive with 4GB capacity. It is recommended that students provide their own equipment. The high schools will aid on a case-by-case basis for students without the required personal equipment. May be taken to fulfill the computer requirement or Art but not both.

Prerequisite: Photography

Advanced Placement Art History	2 Credits	Gr. 11, 12	Course: 6109
---------------------------------------	------------------	-------------------	---------------------

This advanced placement level art history class follows the same process as the general art history course and chronologically continues through to contemporary art during the spring semester. Students taking this course are strongly urged to take the general art history class prior to taking this AP course, since the goal is to have all students take the AP exam in May.

Note: Students are expected to take the AP exam in May.

Advanced Placement Biology	2 Credits	Gr. 11, 12	Course: 4029
-----------------------------------	------------------	-------------------	---------------------



AP Biology is an introductory college level course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes-energy and communication, genetics, information transfer, ecology and interactions.

Note: Students are expected to take the AP exam in May.

Prerequisite: Biology concurrent first semester in Chemistry. Anatomy and Physiology or Zoology are recommended. Meets Science Experience requirement.

Advanced Placement Calculus AB	2 Credits	Gr. 11, 12	Course: 3129
---------------------------------------	------------------	-------------------	---------------------



This course is the equivalent of a one semester college level course and covers the College Board syllabus needed for the Calculus AB exam. Topics include: functions and limits, the derivative, applications of the derivative, the integral, applications of the integral, transcendental functions and numerical methods as well as slope fields.

Note: Students may not take this course for credit after taking Honors Calculus. Students are expected to take the AP exam in May.

Prerequisite: Honors Pre-Calculus

Advanced Placement Calculus BC	1 Credit	Gr. 11, 12	Course: 3139
---------------------------------------	-----------------	-------------------	---------------------



This course is a continuation of AP Calculus AB. The combined three semesters of these two courses are roughly equivalent to one year of college level Calculus and completes the College Board syllabus needed for the Calculus BC exam. Topics include: The Calculus of Hyperbolic functions, convergence test for series, Taylor and Maclaurin series, parametric, vector, and polar functions. Indefinite integrals and partial fractions are also a part of the course.

Note: Students are expected to take the AP exam in May.

Prerequisite: AP Calculus AB

Advanced Placement Calculus BC (FY)	2 Credits	Gr. 11, 12	Course: 3159
--	------------------	-------------------	---------------------



AP Calculus BC (FY) is available to students who are at an accelerated learning pace. The full-year course is a compressed version of AP Calculus AB and AP Calculus BC.

Note: Students are expected to take the AP exam in May.

Prerequisite: Pre-Calculus (H) and Teacher Recommendation

Advanced Placement Chemistry	2 Credits	Gr. 11, 12	Course: 4159
-------------------------------------	------------------	-------------------	---------------------



The AP Chemistry course provides students with a foundation to support future advanced course work in chemistry. Through inquiry-based learning, students develop critical thinking and reasoning skills. Students cultivate their understanding of chemistry and science practices as they explore topics such as: atomic structure, intermolecular forces and bonding chemical reactions, kinetics, thermodynamics and equilibrium.

Note: Students are expected to take the AP exam in May. Meets Math Experience or Science Experience requirement.

Prerequisite: Chemistry, Geometry and Algebra 2.

Advanced Placement Computer Science A	2 Credits	Gr. 10, 11, 12	Course: 3509
--	------------------	-----------------------	---------------------

This course introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implantation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

Note: Meets ICT or Math Experience requirement. Students are expected to take the AP exam in May.

Prerequisite: Pre-Calculus or currently taking Pre-Calculus

Advanced Placement English Language & Composition	2 Credits	Gr. 11	Course: 1039
--	------------------	---------------	---------------------



This course improves skills in expository writing and critical reading. Includes study of non-fiction prose samples from many academic disciplines and literary periods. These samples are selected as models of effective style. Students will complete a variety of exercises which will require different writing styles. This prepares students for the various kinds of writing assignments encountered in college. Through an organized study of the structure of sentences, paragraphs and larger discursive patterns, students learn the semantic, structural and rhetorical resources of the language.

Note: Students are expected to take the AP exam in May.

Prerequisite: English 1 and 2

Advanced Placement English Literature & Composition	2 Credits	Gr. 12	Course: 1049
--	------------------	---------------	---------------------



This course develops an acute understanding of literature. It increases awareness of written language and of the significance of underlying rhetorical devices and develops a more concise and effective writing style. Students study the novel, survey drama and critically analyze short stories and essays. Students also explore the structure of poetry including the epic poem.

Note: This course is comparable to college-level freshman course in English. Students are expected to take the AP exam in May.

Prerequisite: English 1, 2 and 3 or AP Language and Composition.

Advanced Placement Environmental Science	2 Credits	Gr. 10, 11, 12	Course: 4529
---	------------------	-----------------------	---------------------



The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology environmental studies, environmental science chemistry and geography.

Note: Students are expected to take the AP exam in May.

Prerequisite: Biology and a Physical Science Course. Meets Science Experience requirement.

Advanced Placement European History	2 Credits	Gr. 10, 11, 12	Course: 2609
--	------------------	-----------------------	---------------------

This dynamic full year college level course immerses the student in European History. The focus is on the socioeconomic, cultural, intellectual and political forces that shaped Modern Europe since 1450. Course materials/sources utilize primary documents, art forms, and media as well as traditional text and secondary sources.

Note: Students are expected to take the AP exam in May.

Advanced Placement French	1 Credit	Gr. 9, 10, 11, 12	Course: 8619
----------------------------------	-----------------	--------------------------	---------------------



Expand your proficiency through the exploration of diverse contemporary topics from the French-speaking world. Your understanding of cultural products, practices and perspectives will help you develop skills that can be applied beyond the French course in further French study and everyday life.

Note: Students are expected to take the AP exam in May.

Prerequisite: French 5 or teacher recommendation.

Advanced Placement Macroeconomics	1 Credit	Gr. 10, 11, 12	Course: 2569
--	-----------------	-----------------------	---------------------

According to economist Milton Friedman, "if you put the federal government in charge of the Sahara Desert, in 5 years there would be a shortage of sand." In this course, students investigate the nation's economy and the ability of policy makers to stabilize it. Topics include unemployment, inflation, growth, banking, fiscal and monetary policy and trade. Macroeconomics is useful for those planning to major in business, government, prelaw or statistics.

Note: Students are expected to take the AP exam in May. Meets Math Experience requirement.

Prerequisite: Solid Math background.

Advanced Placement Microeconomics	1 Credit	Gr. 10, 11, 12	Course: 2559
--	-----------------	-----------------------	---------------------

According to the legendary scholar John Maynard Keynes, “Practical men are usually the slaves of some defunct economist. Students in this course learn how prices, wages and production are determined by the invisible hand” that guides resource allocation in the marketplace. Microeconomics is useful for those planning a career in business, accounting, finance or marketing.

Note: Students are expected to take the AP exam in May. Meets Math Experience requirement.

Prerequisite: Solid Math background.

Advanced Placement Music Theory	1 Credit	Gr. 10, 11, 12	Course: 6239
--	-----------------	-----------------------	---------------------

Study secondary dominants, non-harmonic tones and advanced chord progression, learn transpositions of all instruments, and compose works for several different musical ensembles. This course is for serious musicians aiming for composing, arranging or teaching careers.

Note: Students are expected to take the AP exam in May. This course may fulfill a music credit or ICT requirement but not both.

Prerequisite: Teacher recommendation.

Advanced Placement Physics 1	2 Credits	Gr. 11, 12	Course: 4059
-------------------------------------	------------------	-------------------	---------------------



This course is 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 fluids. Students can earn credit for either AP Physics 1 or AP Physics C: Mechanics, but not both.

Note: Students are expected to take the AP exam in May. Meets Math Experience requirement or Science Experience requirement.

Prerequisite: Biology, and a Physical Science Course; Geometry and Algebra 2.

Advanced Placement Physics 2	1 Credit	Gr. 11, 12	Course: 4109
-------------------------------------	-----------------	-------------------	---------------------



This class combines logical, mathematical interpretation of the fundamental laws of physics with practical exercises. Students are taught in a manner similar to most college and university physics classes, with a lecture period followed by problem solving sessions and laboratory activities. Most learning takes place during interaction with the teacher during problem solving sessions.

Note: Students are expected to take the AP exam in May. Meets Math Experience requirement or Science Experience requirement.

Prerequisite: Advanced Placement Physics 1

Advanced Placement Physics C: Mechanics	2 Credits	Gr. 10, 11, 12	Course: 4209
--	------------------	-----------------------	---------------------



This course is equivalent to a first-semester course in Calculus-based Physics, which is typical for Engineering, Computer Science, and Physical Science majors. The course covers Newtonian mechanics (including rotational dynamics and angular momentum), energy and oscillations, with special emphasis on mathematical techniques needed to analyze situations with variable acceleration, force and inertia.

Note: Meets Math Experience requirement & Science Experience.

Prerequisite: Biology, and AP Calculus AB (or concurrent)

Advanced Placement Psychology	2 Credits	Gr. 11, 12	Course: 2309
--------------------------------------	------------------	-------------------	---------------------

Engages students in a systematic study of the behavioral and mental processes of humans and phenomena associated with each of the major subfields within psychology. They also learn about methods psychologists use to explore the process involved in normal and abnormal perceptions, thoughts, feeling and actions.

Note: Students are expected to take the AP exam in May. Meets Math Experience Requirement.

Advanced Placement Spanish	1 Credit	Gr. 9, 10, 11, 12	Course: 8649
-----------------------------------	-----------------	--------------------------	---------------------



Expand your proficiency through the exploration of diverse contemporary topics from the Spanish-speaking world. Your understanding of cultural products, practices and perspectives will help you develop skills that can be applied beyond the Spanish course in further Spanish study and everyday life.

Note: Students are expected to take the AP exam in May.

Prerequisite: Spanish 5, teacher recommendation

Advanced Placement Statistics	2 Credits	Gr. 10, 11, 12	Course: 3259
--------------------------------------	------------------	-----------------------	---------------------



Students learn the major concepts and tools for collecting, analyzing and drawing conclusions from data. They explore several broad conceptual themes of statistics, such as exploring data, planning a study, modeling and anticipating patterns and statistical inference. Students perform their own data analysis and research and are required to communicate their analysis in formal writing. This course follows the AP Statistics curriculum established by the College Board, while also including material that guide students in conducting and communicating their own statistical analysis. Students need to use a TI83 calculator and statistical software packages.

Note: A student may take this course or Probability and Statistics but NOT both. Students are expected to take the AP exam in May.

Prerequisite: Pre-Calculus (H)

Advanced Placement Studio Art	2 Credits	Gr. 11, 12	Course: 6259
--------------------------------------	------------------	-------------------	---------------------

This course prepares students for rigorous study in creating and expressing visual ideas. The course follows the AP curriculum for the Drawing Portfolio requirements, focusing on works that cover the Breadth, Concentration, and Quality sections of the portfolio. AP is designed for students interested in the arts in their post-secondary studies or as a career. The course is taught at the college level, and portfolios submitted to the final exam in May will qualify for college credit if the student earns an adequate score from the College Board review team.

Note: Meets ICT requirement. Students are expected to take the AP exam in May.

Prerequisite: Studio Art and Art History are strongly recommended.

Advanced Placement US Government & Politics	2 Credits	Gr. 10, 11, 12	Course: 2659
--	------------------	-----------------------	---------------------

Students gain a critical perspective on government and politics in the United States. The focus is on the historical and philosophical foundations of constitutional government, the creation of the Constitution, the organization of the American government, civil liberties and the expansion of rights over the last two hundred years. Students also study general concepts used to interpret American politics. Students have the opportunity analyze the various institutions, group beliefs and ideas that constitute political reality in the US today and, at instructor's discretion, may participate in "We the People Program."

Note: A very strong background in US History is recommended. Students are expected to take the AP exam in May.

Advanced Placement US History	2 Credits	Gr. 11	Course: 2039
--------------------------------------	------------------	---------------	---------------------

Students will investigate and analyze the full chronological spectrum of American history. Thematic investigation into such topics and concepts as politics, religion, race, conflict and foreign policy will allow students to draw conclusions about current events. In the process of preparing for the exam, reading and writing skills are emphasized, but students are also evaluated on presentations, projects and research. Large amounts of reading, both textbook and primary source.

Note: Students may take this course or US History but not BOTH. Students are expected to take the AP exam in May.

Advanced Placement World Studies	2 Credits	Gr. 9	Course: 2019
---	------------------	--------------	---------------------

Students will learn about major developments in the history of Asia, Africa, Europe, Oceania, and the Americas from 1200 CE to present. There will be extensive opportunity for students to learn and apply in depth historical thinking skills as they explore our global past. Historical thinking skills provide opportunities for students to learn and to think like historians, most notably to analyze evidence about the past and to create persuasive historical arguments. Five themes, focusing on the environment, cultures, state-building, economic systems, social structures, provide areas of historical inquiry for investigation throughout the course and encourage students to analyze history from multiple perspectives.

Note: students may take this course or World Studies but NOT both. Students are expected to take the AP exam in May.

AFJROTC 1A: Aviation History	1 Credit	Gr. 9, 10, 11, 12	Course: 0601
-------------------------------------	-----------------	--------------------------	---------------------

Forty percent of this course is an aviation history course focusing on the development of human flight from Ancient Times to pre-WW1. Forty percent of the course is a leadership education course focusing on citizenship, character and Air Force tradition. During this part of the course, students will learn about drill and ceremony, self-control, and citizenship. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions about developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 1B: Aviation History	1 Credit	Gr. 9, 10, 11, 12	Course: 0691
-------------------------------------	-----------------	--------------------------	---------------------

Forty percent of this course is an aviation history course focusing on the development of human flight from WW1 to modern times. Forty percent of the course is a leadership education course focusing on citizenship, character and Air Force tradition. During this part of the course, students will learn about drill and ceremony, self-control, and citizenship. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions about developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 2A: The Science of Flight	1 Credit	Gr. 9, 10 11,12	Course: 0651
--	-----------------	------------------------	---------------------

Forty percent of this course is an aviation science course focusing on flight basics, the aerospace environment, and principles of flight. Students will study the atmosphere and gain an understanding of the principles of flight. Forty percent of the course focuses on communication, awareness, and leadership. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 2B: The Science of Flight	1 Credit	Gr. 9, 10, 11, 12	Course: 0591
--	-----------------	--------------------------	---------------------

Forty percent of this course is an aviation science course focusing on flight and human physiology, navigation, and flight instrumentation. Forty percent of the course focuses on communication, awareness, and leadership. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 3A-Cultural Studies	1 Credit	Gr. 11, 12	Course: 0611
------------------------------------	-----------------	-------------------	---------------------

Forty percent of this course introduces students to various regions of the world from a geographic, historical and cultural perspective. The course provides increased international awareness and insight into foreign affairs that permits a more educated understanding of other cultures and enhanced knowledge of American’s interest and role in the world. Geopolitical issues such as terrorism, economics, politics, military issues, religion, environmental concerns, human rights, disease, over population, literacy, the migration of peoples and other cultural issues will be examined. The regional areas included in this course are Europe, the Middle East, South Asia, East Asia, Africa, and Latin America. The lessons include excellent videos to provide a window into life and issues within the regions, followed by a variety of hands on activities created to engage the student. Forty percent of the course is a leadership education course focusing on citizenship, character and Air Force tradition. During this part of the course, students will learn about drill and ceremony, self-control and citizenship. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions on developing a healthy lifestyle.

Note: Students signing up for this course do so with the understanding they are participating in an Air Force Junior ROTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 3B: Global Awareness	1 Credit	Gr. 9, 10, 11,12	Course: 0621
-------------------------------------	-----------------	-------------------------	---------------------

Forty percent of this course introduces students to various regions of the world from a geographic, historical and cultural perspective. The course provides increased international awareness and insight into foreign affairs that permits a more educated understanding of other cultures and enhanced knowledge of American’s interest and role in the world. Geopolitical issues such as terrorism, economics, politics, military issues, religion, environmental concerns, human rights, disease, over population, literacy, the migration of peoples and other cultural issues will be examined. The regional areas included in this course are Europe, the Middle East, South Asia, East Asia, Africa, and Latin America. The lessons include excellent videos to provide a window into life and issues within the regions, followed by a variety of hands-on activities created to engage the student. Forty percent of the course is a leadership education course focusing on citizenship, character and Air Force tradition. During this part of the course, students will learn about drill and ceremony, self-control and citizenship. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 4A: Exploring Space	1 Credit	Gr. 9, 10, 11, 12	Course: 0631
------------------------------------	-----------------	--------------------------	---------------------

Forty percent of the course focuses on the history of space exploration, the earth and moon system, and the solar system. Forty percent of this course is a “hands-on course focusing on teaching the students valuable life skills, such as preparing for college, employment and the basics of financial management. Twenty percent of the course is a wellness program that includes sports, physical training and testing and informational sessions on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

Note: Meets Math Experience requirement.

AFJROTC 4B: Exploring Space	1 Credit	Gr. 9, 10, 11, 12	Course: 0671
------------------------------------	-----------------	--------------------------	---------------------

Forty percent of the course focuses on exploring, living and working in manned/unmanned spaceflight, space technology, and the commercial use of space. Forty percent of this course is a “hands-on” course focusing on teaching the students valuable life skills, such as preparing for college, employment and the basics of financial management. Twenty percent of the course is a wellness program that includes sports, physical training and testing and information sessions on developing a healthy lifestyle. Meets Math Experience requirement.

Note: Meets Math Experience requirement. Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 5: Management of the Cadet Corps	1 Credit	Gr. 9, 10, 11, 12	Course: 0641
---	-----------------	--------------------------	---------------------

Forty percent of this class is a hands-on management course affording the cadets the opportunity to put the theories of previous leadership courses into actual practice. Cadets will plan, organize, coordinate, direct and control the key events and activities of the cadet corps. Forty percent of this class will concentrate on management techniques and theory. Twenty percent of the course is a wellness program that includes sports, physical training and testing and informational session on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 6: Survival	1 Credit	Gr. 9, 10, 11, 12	Course: 0681
----------------------------	-----------------	--------------------------	---------------------

Forty percent of this course is a basic survival instruction course designed to provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. The course also presents “good to know” information that would be useful in any situation, such as someone lost while hunting or the survivors of an aircraft mishap. Forty percent of the course is a leadership education course focusing on citizenship, character and Air Force tradition. During this part of the course, students will learn about drill and ceremony, self-control and citizenship. Twenty percent of the course is a wellness program that includes sports, physical training and testing, and informational sessions on developing a healthy lifestyle.

Note: Students who sign up for this course do so with the understanding that they are participating in an AFJOTC program and must adhere to the program standards without exception. This includes, but is not limited to wearing a uniform and maintaining all grooming and behavior standards. Failure to maintain standards will result in removal from the course/program.

AFJROTC 7: Leadership Education 100/Traditions, Wellness, and Foundations of Citizenship	1 Credit	Gr. 9, 10, 11, 12	Course: 0700
---	-----------------	--------------------------	---------------------

This course provides strategies for effective note-taking and study skills for academic success. Lessons cover how to be emotionally, mentally and physically healthy. Avoiding and preventing violence in today's society will also be covered. Recognizing types of bullying and how to advocate for prevention of this type of behavior. Healthy living, physical fitness, and how to make safe, drug-free, and responsible decisions. This textbook also examines the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including historical understanding of the American flag and other important national symbols. The final chapter covers how the US Constitution protects our rights and freedoms as American citizens.

AFJROTC 7A: Leadership Education 200/Communications. Leadership & Awareness	1 Credit	Gr. 9, 10, 11, 12	Course: 0701
--	-----------------	--------------------------	---------------------

Leadership Education 200 stresses communication skills. Students are provided opportunities on communicating effectively, understanding groups and teams, preparing for leadership positions in life, solving conflict and problems, and personal development. Group activities, discussions, resume writing and speeches compliment the academic materials. Other activities include holding positions of greater responsibility in the planning and execution of projects. Students will also understand how personal actions can have a positive and negative effect on teams. How to problem solve, resolve conflicts and build a cohesive team will be implemented throughout the course.

AFJROTC 7B: Leadership 300/Life Skills & Careers	1 Credit	Gr. 9, 10, 11, 12	Course: 0702
---	-----------------	--------------------------	---------------------

Life skills and Career Development provides an essential component of leadership education for today's high school students. Students will learn how to manage finances and to save, invest, and spend money wisely, as well as how to avoid the credit trap. Students will learn how to select a college that is right for them; how to apply for admissions to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They will learn how to prepare a winning resume, and how to develop effective interviewing skills. Students will become more skilled at using the internet for career research and learn how to network.

Algebra 1 (H)	1 Credit	Gr. 9	Course: 3027
----------------------	-----------------	--------------	---------------------



This semester-long course will build a strong foundation necessary to succeed in future math courses. Concepts and topics are developed around the study of the real number system; understanding slope and its applications to linear systems and inequalities; the representations of functions through tables, graphs, and equations; factoring; and becoming fluent with polynomials and related operations. Students will also explore, graph and manipulate quadratic equations. Learning the fundamentals will be accomplished through application of algebraic techniques to real world scenarios.

Algebra 1 Part 1	1 Credit	Gr. 9, 10, 11, 12	Course: 3083/3085
-------------------------	-----------------	--------------------------	--------------------------



This semester long course will build a strong foundation necessary to succeed in the future math courses. Concepts and topics are developed around study of the real number system; understanding slope and its applications to linear systems and inequalities: the representation of functions through tables, graphs and equations. Learning the fundamentals will be accomplished through application of algebraic techniques to real world scenarios.

Note: Students must successfully complete Algebra 1 Part 1 and Algebra 1 Part 2 to earn credit for the Algebra 1 graduation requirement.

Algebra 1 Part 2	1 Credit	Gr. 9, 10, 11, 12	Course: 3093/3095
-------------------------	-----------------	--------------------------	--------------------------



This semester long course will build a strong foundation necessary to succeed in the future math courses. The course will build on materials covered in Algebra 1 Part 1, expanding from linear concepts to polynomials. Concepts and topics are developed around becoming fluent with polynomials and their relation to operations; factoring: accomplished through application of algebraic techniques to real world scenarios.

Note: Students must successfully complete Algebra 1 Part 1 and Algebra 1 Part 2 to earn credit for the Algebra 1 graduation requirement.

Prerequisite: Algebra 1 Part 1

Algebra 2	1 Credit	Gr. 10, 11, 12	Course: 3055/3057
------------------	-----------------	-----------------------	--------------------------



Students use functions to solve real world problems. They also learn to recognize, write, solve and graph linear, quadratic, radical, polynomial, exponential, logarithmic and inverse functions and use models to predict results. Students explore systems of equations and inequalities, arithmetic and geometric sequences, composition of functions and matrices.

Prerequisite: Algebra 1

Anatomy & Physiology 1	1 Credit	Gr. 10, 11, 12	Course: 4423/4425
-----------------------------------	-----------------	-----------------------	--------------------------



This course covers a general overview of all body systems from the skin to the reproductive system. Labs and dissections will be used to reinforce physiological concepts. The extension level course is challenging, requires good memorizing skills and a commitment to homework.

Note: Meets Science Experience requirement.

Prerequisite: Biology and Physical Science or Chemistry.

Anatomy & Physiology 1 (H)	1 Credit	Gr. 10, 11, 12	Course: 4357
---------------------------------------	-----------------	-----------------------	---------------------



Explores the structure and function of the human body, including biochemistry cell physiology and histology. Through extensive lab exercises, computer simulations and dissections student explore the anatomy and physiology of the skin, skeletal, muscular and nervous systems. This is a challenging course for highly motivated students who have disciplined study skills.

Note: Meets Science Experience requirement.

Prerequisite: Biology (E) or (H) and Physical Science or Chemistry.

Anatomy & Physiology 2	1 Credit	Gr. 10, 11, 12	Course: 4413/4415
-----------------------------------	-----------------	-----------------------	--------------------------



Continues the exploration of anatomy and physiology with the student of the endocrine, circulatory, lymphatic, respiratory, digestive, excretory, and reproductive systems. Students make use of extensive labs, computer simulations and dissections. This course is for highly motivated students who intend to pursue a medical field.

Prerequisite: Completion of Anatomy & Physiology 1

Anatomy & Physiology 2 (H)	1 Credit	Gr. 10, 11, 12	Course: 4407
---------------------------------------	-----------------	-----------------------	---------------------



Continues the exploration of anatomy and physiology with the student of the endocrine, circulatory, lymphatic, respiratory, digestive, excretory, and reproductive systems. Students make use of extensive labs, computer simulations and dissections. This course is for highly motivated students who intend to pursue a medical field.

Prerequisite: Completion of Anatomy & Physiology 1 at the Honors level and earning a grade of C or better. College credit may be available.

Anthropology	1 Credit	Gr. 10, 11, 12	Course: 2053/ 2055/2057
---------------------	-----------------	-----------------------	--------------------------------

Students discover the answers to many questions about our culture and other cultures around the world. They examine marriage practices, courtship customs, dress and body decoration, human inventiveness, verbal and nonverbal communication and family groups. This class is for those interested in human beings, specifically in uncovering their past and applying that information to our modern world. Students learn through activities, discussions, films, independent research and project-based activities.

Art Experience	0.5 Credit	Gr. 9, 10, 11, 12	Course: 6091
-----------------------	-------------------	--------------------------	---------------------

This quarter course gives students the opportunity to explore art making in a variety of ways. Each assignment is hands on, and connects to an art movement from the past. Lessons will provide a historical background that supports the artist or genre being covered. Two- and three-dimensional works will be introduced throughout the term. From Van Gogh to Graffiti Art, the course will take students on a trip through time and will explore traditional and unconventional methods of creating.

Art History	1 Credit	Gr. 9, 10, 11, 12	Course: 6107
--------------------	-----------------	--------------------------	---------------------

This honors level course begins the semester with a quick immersion into modern art, followed by hands-on art projects to trace the development of art chronologically from prehistory to the Renaissance. This approach uses a variety of materials, including texts, PowerPoints, videos and actual art reproductions to support instruction. The evaluation of students relies primarily on summative assessment techniques such as quizzes, tests, projects and written essays. Students develop a greater awareness and appreciation of art and gain an ability to discuss and critically evaluate works of art through numerous oral critiques as well as written communication.

Astronomy & Space Science	1 Credit	Gr. 11, 12	Course: 4253/ 4255/4257
--------------------------------------	-----------------	-------------------	--------------------------------



Students gain a better understanding of the night sky, the universe and our place in it by using the planetarium at Nashua High School South. Students study planets, stars and galaxies, learn how to identify the constellation of the night sky as well as survey current events in astronomy and study the past, present and future of space exploration.

Note: Course is offered at South. North students must travel. Meets Science Experience requirement.

Prerequisite: Biology and a Physical Science course

Automotive Technology 1	2 Credits	Gr. 11	Course: 5221
--------------------------------	------------------	---------------	---------------------

Explores the transportation industry, automotive industry and specific automotive systems. Students learn about the automotive industry, vehicle lubrication, wheels and tires, brake systems, basic automotive electronics and steering and suspension. Instruction time is divided between the classroom and the shop. Students are required to maintain a notebook and participate in repair and maintenance procedures in the automotive lab.

Note: Students must supply their own instructor-approved safety shoes. Lab coats will be provided for lab work. Meets ICT and Math Experience requirement. Course is offered at Nashua High North. South students must travel.

Prerequisite: Algebra and 9th or 10th grade science

Automotive Technology 2	2 Credits	Gr. 12	Course: 5231/5237
--------------------------------	------------------	---------------	--------------------------

Students participate in this work study program consisting of instructional time spent in the classroom, automotive lab and work time in area automotive service centers. Automotive Technology 2 is designed to prepare the student for further studies at the post-secondary technical schools or entry level work.

Note: Students must supply their own instructor-approved safety shoes to be worn to class and on the job site. Meets ICT and Math Experience requirement. Course is offered at Nashua High North. South students must travel.

Prerequisite: Automotive Technology 1 and NTC Director approval.

Band	1 Credit	Gr. 9, 10, 11, 12	Course: 6171
-------------	-----------------	--------------------------	---------------------

Students perform music ranging from the Renaissance to contemporary European, American and world music, learning the historical backgrounds of composers and musical styles. This course sharpens music reading skills, musical elements and proper instrumental techniques. The band performs at school and civic functions, as well as concerts and competitions. Students are required to participate in all activities including weekly after school rehearsals. Students also have the opportunity to audition for Jazz Band and other ensembles to participate in the NH Solo and Ensemble Festival and the New England Band Festival and to audition for the NH Jazz All State and All State Festival Bands or Orchestras. In addition to the above, the band performs at football games, parades and band shows.

Note: Band is a performance-based course and may be repeated for credit. This course is open to students who have experience playing a band instrument.

Note: This is an A/B block class, which means that it will be combined with another class and offered every other day throughout the year and is worth one credit of the credits you need to select for a full schedule.

Biology	1 Credit	Gr. 9, 10, 11, 12	Course: 4023/ 4025/4027
----------------	-----------------	--------------------------	--------------------------------



Biology is an introductory life science course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, DNA, genetics, ecology, energy pathways in plants and animals and interactions between and among organisms.

Note: Requirement for graduation.

Biotechnology & Biomedical Science 1	2 Credits	Gr. 10, 11	Course: 5251/5257
---	------------------	-------------------	--------------------------



Students study biology and explore biotechnology by working in a real-world laboratory environment. Learn basic protocols and advanced techniques for analyzing cell structures, genetic manipulation, medical microbiology, molecular biology, forensic analysis and protein production. In this academic course, students will explore the theories and technologies of the rapidly expanding biotech industry through valuable hands-on activities conducted in a state-of-the-art laboratory. Internships are also available for qualified students. Lab coats are required for this class.

Note: This course satisfies the Life Science/Biology graduation requirement. Meets Math Experience requirement or Science Experience requirement. Course is offered at Nashua High North. South students must travel.

Prerequisite: Algebra and 9th or 10th grade science

Biotechnology & Biomedical Science 2	2 Credits	Gr. 11, 12	Course: 5261/5267
---	------------------	-------------------	--------------------------

Become skilled in laboratory techniques most in demand in today's Biotech industry. Learn more about genetics, cell structure, protein production and purification. Recreate actual industry investigations in a real-world biotechnology laboratory. Write a resume and build a personal portfolio by writing technical labs and protocols. Guest speakers and field trips will supplement your lab and class work. Internships are also available for qualified students.

Note: Meets ICT or Math Experience requirement or Science Experience requirement. College credit may be available. Course offered at Nashua High North. South students must travel.

Prerequisite: Biotechnology & Biomedical Science 1, NTC Director approval

Breaking History: Media Literacy in the Digital Age	1 Credit	Gr. 10, 11, 12	Course: 2703/ 2705/2707
--	-----------------	-----------------------	--------------------------------

Using media coverage of domestic news and popular culture, students will analyze how society creates narratives and understands events as they unfold within the United States. This class will go beyond just identifying so-called "viral" topics, and dig deeper to understand the reasons why certain issues are "trending now". In addition, this course will examine how media's coverage of events can be used to influence public opinion. This class is highly recommended for students who wish to work backward from today to better understand the history behind breaking news. Students taking this course are strongly encouraged to also take Contemporary Global Studies.

Business Finance 1	1 Credit	Gr. 10, 11, 12	Course: 5391/5397
---------------------------	-----------------	-----------------------	--------------------------

Explore the principles and practices for the financial industry of the United States. Develop a strong foundation in banking, credit, investments, and insurance from the perspective of both consumer and industry specialists. Students understand and develop a good personal financial plan. This course, on its own or coupled with Global Finance, strengthens student understanding of domestic financing opportunities.

Note: Meets ITC or Math Experience requirement. College credit may be available.

Business Law	1 Credit	Gr. 11, 12	Course: 2105/2107
---------------------	-----------------	-------------------	--------------------------

This course focuses on key areas of civil law with a special emphasis on areas impacting businesses. Lawsuits, contracts and torts are primary areas of study. Negligence law, product liability and types of business organizations are also addressed. Student activities may include individual research, writing contracts, case analysis, mock trials and guest speakers.

Note: Meets ICT requirement. College credit may be available.

Calculus	1 Credit	Gr. 11, 12	Course 3127
-----------------	-----------------	-------------------	--------------------



Students learn about the derivatives and integrals of polynomial, rational, trigonometric, logarithmic and exponential functions. The class may also study analysis of curves, solution of maximum and minimum problems and special methods of integration.

Prerequisite: Pre-Calculus. Students may take this course or AP Calculus but NOT both.

Careers in Education 1	2 Credits	Gr. 10, 11	Course: 5351/5357
-------------------------------	------------------	-------------------	--------------------------

Are you interested in a career related to Early Childhood Education? Do you enjoy working with children? This course will introduce the basic knowledge needed to pursue a career in education, whether it is an early childhood learning center, an elementary school or other child-oriented institution. Learn how to set up a classroom environment and how to maintain the health, safety and nutrition of the children in your charge. You will explore different philosophies in early childhood education, familiarize yourself with children's literature, learn about behavior management and receive an introduction to curriculum and lesson planning. In addition, you will work in the Purple Panther Preschool and get hands-on experience with pre-school children between the ages of 3 and 4 years old.

Note: College credit may be available. Course is offered at Nashua High South. North students must travel.

Careers in Education 2	2 Credits	Gr. 11, 12	Course 5361/5367
-------------------------------	------------------	-------------------	-------------------------

Learn about the development of the 6-12-year-old in a work study environment. Three days a week you will act as a teacher's aide at local elementary schools during regular class time. In addition to studying philosophies of early childhood education, you will explore numerous job possibilities that you will have in our changing society. This course is recommended for students seeking child related careers and positions as future educators.

Note: Consistent attendance is required for students to successfully complete this program. College credit may be available. Course is offered at Nashua High South. North students must travel.

Prerequisite: Careers in Education 1, NTC Director approval.

Ceramics	1 Credit	Gr. 9, 10, 11, 12	Course: 6201
-----------------	-----------------	--------------------------	---------------------

This class is designed for students who have an interest in working with clay, and gives students experiences in making functional as well as sculptural pieces. Students will explore the many processes of clay, from the simple handmade forms of early cultures to throwing on the potter's wheel and on the extremely varied application of clay in today's modern society. Well thought out forms, designs and functional uses, along with good craftsmanship are emphasized. Students will create many clay pieces, explore a variety of surface decoration techniques, and learn about firing in a kiln.

Note: Meets Math Experience requirement. For grade 9 meets Intro to High School Art.

Challenges Facing Today's Teens	1 Credit	Gr. 11, 12	Course: 1055
--	-----------------	-------------------	---------------------

Being a teenager has never been easy. This theme is often developed in literature. By reading about the experiences of other young people, one can better adjust to pressure of this age. Students read contemporary forms of fiction and analyze themes relevant to today's youth. Through active experiences, students develop literature and reading skills such as analyzing, critiquing and logical thinking. Through these exercises and others, students will enhance their writing and vocabulary skills.

Prerequisite: English 2

Chemistry	1 Credit	Gr. 10, 11, 12	Course: 4153/ 4155/4157
------------------	-----------------	-----------------------	--------------------------------



Students learn modern concepts of chemistry in the lab. They study nomenclature, equation and formula writing, physical and chemical properties, the mole concept, and energy relationships. Students develop lab skills such as mass measurements, analysis of data and samples, synthesis of compounds and model building.

Note: Meets Math Experience requirement or Science Experience requirement.

Prerequisite: Extension & Honors Level: Biology and Geometry, or Algebra 2. Algebra 2 recommended.

Foundation level: Biology and Algebra 1, Part 2.

Child Growth & Development	1 Credit	Gr. 10, 11, 12	Course: 5151
---------------------------------------	-----------------	-----------------------	---------------------

Covers the development of a child during pregnancy and from birth through age 6, including the physical, intellectual, emotional and social development of a child. It's true that "kids don't come with instructions," so students also explore the enormous responsibility of parenting, learning the skills necessary to raise a happy and healthy child. This course includes class discussions, individual and team projects and written assignments. This course will especially benefit those pursuing careers working with children such as Careers in Education and Health Science.

Chorale	1 Credit	Gr. 9, 10, 11, 12	Course: 6181
----------------	-----------------	--------------------------	---------------------

Do you enjoy singing? Join a non-auditioned group that sings many different styles of music. Students will learn proper rehearsal procedures, correct singing techniques, choral blend and balance, music terminology and music reading skills. The chorale performs at least twice a year, and students are expected to participate in all activities and have the opportunity to audition for any NHS extracurricular choir. Students also can participate in the NH Solo & ensemble Festival and audition for All State and Jazz All State Choruses with the choral director's permission.

Note: This is an A/B block class, which means that it will be combined with another class and offered every other day throughout the year and is worth one credit out of the credit's students need to select for a full schedule. There is no audition requirement.

Civics	0.5 Credit	Gr. 10	Course: 2073/ 2075/2077
---------------	-------------------	---------------	--------------------------------

This course gives students a fundamental understanding of how the US government operates. The roles of different branches of government, lawmaking and the principles of government, the formation of governments and the rights and responsibilities of citizens will all be stressed. Contemporary political and governmental issues will also be examined to illustrate the process of government.

Note: Required grade 10 course. Students must take this or AP Government to fulfill the requirement.

College Accounting 1	1 Credit	Gr. 9, 10, 11, 12	Course: 5027
-----------------------------	-----------------	--------------------------	---------------------

Accounting is the language of business. Students utilize spreadsheet software to keep financial records, summarize data, and analyze information to aid management for decision-making. This course is essential for any student considering a major in accounting, management, marketing or finance.

Note: Meets ICT and Math Experience requirement.

College Accounting 2	1 Credit	Gr. 10, 11, 12	Course: 5037
-----------------------------	-----------------	-----------------------	---------------------

This college level course uses computerized accounting systems to expand on the foundations of previous accounting courses with a focus on corporate accounting. This course is highly recommended for students who plan to major in accounting, finance, marketing, or business management.

Note: Meets ICT and Math Experience requirements.

Prerequisite: College Accounting 1 and NTC Director approval.

College Ready Math	1 Credit	Gr. 12	Course: 3063
---------------------------	-----------------	---------------	---------------------

This is a senior math course focusing primarily on the algebra skills needed to enter the work force or community colleges. Students will be actively involved to develop competence in simplifying and evaluating polynomial and rational expressions as well as solving linear equations and inequalities, quadratic equations and systems of linear equations. Emphasis will be placed on critical thinking skills and problem solving along with the use of technology.

Note: Senior standing, Algebra, Geometry and/or permission of the Math Department.

Computer Aided Drafting & Design 1 (CADD1)	2 Credits	Gr. 10, 11	Course: 5271/5277
---	------------------	-------------------	--------------------------

Students design their own building or product using state-of-the-art Autodesk software applications. They learn how to use commands, capabilities and procedures to produce a professional, industry-standard drawing. After a general introduction to computer-aided design and drafting, they choose one of two self-paced tracks, Architectural/Civil drafting or Mechanical/Electrical drafting. In Architectural/Civil Drafting, students create floor plans, elevations and section views from their own designs and learn how to create all the plans required for a building permit. In Mechanical/Electrical Drafting, they create mechanical assembly designs of their own products and learn basic geometric tolerance, fits, manufacturing processes and electrical drafting. They also use computer-controlled machines to make products.

Note: Meets ICT or Math Experience requirement or Science Experience requirement. Course is offered at Nashua High South. North students must travel.

Computer Aided Drafting & Design 2 (CADD2)	2 Credits	Gr. 11, 12	Course: 5281/5287
---	------------------	-------------------	--------------------------

Enhances student understanding of state-of-the-art Autodesk software applications. By continuing self-paced tracks in either Architectural/Civil drafting or Mechanical/Electrical drafting, students sharpen their skills and expand their own knowledge of computer aided drafting and design. In Architectural/Civil Drafting, they explore residential, commercial and civil drafting and work in groups to complete a design requirement and generate professional grade plans. In Mechanical/Electrical Drafting, they design mechanical and electrical systems and work in groups to complete a design requirement and generate professional grade plans.

Note: Meets ICT or Math Experience requirement or Science Experience. Course offered at Nashua High South. North students must travel.

Prerequisite: CADD 1, NTC Director approval.

Computer Integrated Manufacturing	1 Credit	Gr.10, 11, 12	Course: 5921/5927
--	-----------------	----------------------	--------------------------

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing while teaching students about manufacturing processes, product design, robotics and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

Note: Meets ICT and Math Experience requirement. Course offered at Nashua High South. North students must travel.

Prerequisite: Algebra 1 or Algebra 1 Part 2.

Computer Networking 1	1 Credit	Gr. 10, 11	Course: 5561/5567
------------------------------	-----------------	-------------------	--------------------------

This course explores a computer network design by learning about the OSI model and current industry standards. Students study network topologies and IP addressing along with router configurations and required networking components. Program approved as CISCO Academy.

Note: Meets ICT requirement. This course is offered at Nashua High South. North students must travel.

Computer Networking 2	2 Credits	Gr. 11, 12	Course: 5571/5577
------------------------------	------------------	-------------------	--------------------------

This class builds on the knowledge from Computer Networking 1 by studying advanced router configuration, LAN switching theory, VLANs and VLAN Trunking protocol, classless routing such as CIDR and VLSM, WAN theory, design and technology including PPP, DDR, ISDN and Frame Relay. Explores network administration and management, learning optical network fundamentals, understanding the theory and practice of virtual private networks (VPNs) and building strategies for network security, study wireless LANs and investigate alternate operating systems. Program approved as CISCO Academy.

Note: Course offered at Nashua High South. North students must travel.

Prerequisite: Computer Networking & Cyber Security 1, NTC Director approval.

Computer System Design	1 Credit	Gr. 9, 10, 11, 12	Course: 5581/5587
-------------------------------	-----------------	--------------------------	--------------------------

To introduce students to computer technology and how computer systems operate and the theory behind their technology. This course will cover Binary number systems, hexadecimal systems, CompTIA A+ certification material and will introduce networking and internet concepts along with beginning Cyber Security concepts.

Note: Meets ICT requirement.

Conceptual Physics & Chemistry	1 Credit	Gr. 10, 11, 12	Course: 4123/4125/4127
---	-----------------	-----------------------	-------------------------------

This course is designed as an introduction to applied concepts in physics and chemistry. Applied physics offers the subject matter of a traditional physics course with a qualitative approach to problem-solving. Areas of study may include motion, forces, energy, momentum, astronomy, light, sound, electricity, and magnetism. Applied chemistry is designed to introduce students to chemical behavior in everyday life. Students will better understand common substances, their behavior, and how they relate to the environment. Areas of study include measurement, matter and its properties, basic atomic structures, chemical reactions in industry, environment, and everyday processes.

Note: Meets Physical Science Course graduation requirement.

Concert Choir	1 Credit	Gr. 9, 10, 11, 12	Course: 6197
----------------------	-----------------	--------------------------	---------------------

Join a vocally well-balanced chorus and tackle more challenging choral literature. Students will perform music ranging from Renaissance to contemporary European, American and world music, learning the historical backgrounds of composers and musical styles. Explore correct vocal techniques, music reading skills, small ensemble assessments, solo opportunities, choral diction, balance and blend. Concert Choir performs at school and civic functions as well as concerts and competitions. Students are required to participate in all activities and will have the opportunity to audition for any NHS extracurricular choir. Students will also have the opportunity to participate in the NH Solo; Ensemble Festival and to audition for All State Jazz All State Choruses with the choral director's permission.

Note: Concert Choir is a performance-based course and may be repeated for credit. This is an A/B block class, which means that it will be combined with another class and offered every other day throughout the year and is worth one credit of the credits you need to select for a full schedule.

Prerequisite: An individual audition by the choral director is required.

Construction Technology 1	2 Credits	Gr. 11, 12	Course: 5291
----------------------------------	------------------	-------------------	---------------------

The skills and knowledge learned in Construction Technology will help students to develop a basis for a wide range of careers in the building industry, whether they are interested in the trades, construction design and planning or management. Students will learn the safe operation of hand and power tools, as well as how to read blueprints and understand construction with math principles. Their new skills in carpentry, siding and roofing.

Construction Technology 2	2 Credits	Gr. 12	Course: 5301/5307
----------------------------------	------------------	---------------	--------------------------

Students continue to develop their skills and abilities in many areas of construction. In addition to continuing to practice their skills regarding electricity, siding and, roofing, they will learn about and practice all other aspects of new home construction such as site preparation, cabinet installation, insulation, in stallion of windows and doors, etc. Students will continue to have opportunities to network within the building industry, participate in the community to network within the building industry, participate in community construction projects and learn about the many diverse careers/training opportunities available to them after graduation. OSHA IO certification available.

Consumer Math	1 Credit	Gr. 11, 12	Course: 3043
----------------------	-----------------	-------------------	---------------------

Students learn mathematical skills useful all through life; as workers and consumers, maintaining bank accounts, budgets, credit installment buying, taxes, insurance investments and home and automobile finances. A scientific calculator is recommended.

Prerequisite: Algebra 1 or Algebra 1 Part 2

Contemporary Issues in Science	1 Credit	Gr. 11, 12	Course: 4703/ 4705/4707
---------------------------------------	-----------------	-------------------	--------------------------------

Contemporary Issues in Science examines the ways in which science contributes to the study of significant problems in the contemporary world, and can help individuals and society make informed decisions about these issues. This course will look at the history of contemporary scientific issues, and the ways in which these issues have changed over time. In addition, students will examine the consequences of scientific discoveries, or ethical issues arising from their use, and how these issues cross national boundaries and cultural regions. Possible topics could include: energy, climate change, technology, genetics, stem cells, and other current topics in the news.

Prerequisite: Biology and a Physical Science course.

Note: Meets Science Experience requirement.

Cosmetology 1	2 Credits	Gr. 11	Course: 5311
----------------------	------------------	---------------	---------------------

Gain foundation competencies in Cosmetology related to orientation, safety, leadership, personal development, chemistry, properties of the scalp and hair, draping, shampooing, rinsing and conditioning, removing unwanted hair, waving, wet hairstyling, roller sets, manicures and pedicures and thermal hair styling/blow drying. This a hands-on course with practice and review in each area. Students will be tested individually on each subject and be required to pass a practical assessment. Licensing and uniform fees are required.

Note: You can gain hours toward State cosmetology certification if you demonstrate competency in this course. Fees for this course cover a mannequin head, a uniform and application for state apprentice license. The total cost is approximately \$100.00. Students who have a financial hardship should contact their school counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

Prerequisite: Algebra and 9th or 10th grade Science.

Cosmetology 2	2 Credits	Gr. 12	Course: 5321
----------------------	------------------	---------------	---------------------

Learn how to apply makeup, do advance haircutting and do facials. Gain experience and confidence using mannequins and by running the in-school salon. You will be invited to visit supply companies, attend cosmetology symposia and learn from guest speakers working in the industry. In addition, you will investigate postsecondary educational programs that would enhance your career opportunities.

Note: Students must pass a written test on safety practices before you are permitted to use the products and chemicals the coursework requires. Students can gain hours toward State cosmetology certification if competency is demonstrated in this course. Fees for this course cover a mannequin head, a uniform and application for State apprentice license and the cost is approximately \$100.00 Students who have a financial hardship should contact their school counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

Prerequisite: Cosmetology 1, NTC Director approval.

Crafts	1 Credit	Gr. 9, 10, 11, 12	Course: 6071
---------------	-----------------	--------------------------	---------------------

You will learn a variety of handmade crafts in this class. Before you select this course, you must understand that craftwork is a skill as well as a visual language and gain an appreciation that crafts provide a powerful means of self-expression. You will explore a variety of techniques using both natural and synthetic materials. These explorations may include greeting cards, batik, synthetic stained glass, soft sculpture, decorative painting, dream catchers and grapevine wreaths and more.

Creative Writing	1 Credit	Gr. 10, 11, 12	Course: 1463/1467
-------------------------	-----------------	-----------------------	--------------------------



Explore your creativity in poetry and fiction and discover the power of imagination. Evaluate professional models which will serve as springboards for your own writing. Students will keep a journal and a portfolio of their work. Examples from this portfolio will be used for reading, collaborative revision and assessment. This is a workshop process that requires students to practice various writing techniques, work on drafts, share them with others and evaluate critical feedback. This will fine tune the student's creating writing skills in prose and poetry.

Prerequisite: English 1

Crime & Justice in America	1 Credit	Gr. 11, 12	Course 2153
---------------------------------------	-----------------	-------------------	--------------------

Every citizen today needs to be familiar with all aspects of our legal system to protect his or her rights. This course provides a comprehensive introduction to the workings of our legal system. Students learn about criminal law and contemporary legal issues and topics. Learning activities that include role playing, mock trials, debates, guest speakers and field trips familiarize the student with the perspectives of people with different roles in our justice system.

Culinary Arts 1	2 Credits	Gr. 10, 11	Course: 5331/5337
------------------------	------------------	-------------------	--------------------------

Prepares a student for a career in the food service industry. Students train in the basics of planning, purchasing and preparing food in quantity. Students learn cooking techniques and preparation, selection and use of utensils and equipment and safety and sanitation techniques involved in food preparation. The culinary program is certified through the American Culinary Federation. Demonstrating your skill, knowledge and professionalism in the food service industry gives you a competitive edge over other chefs.

Note: Meets Math Experience requirement. Students are required to provide their own uniform and black safety shoes. Fees for this course cover the purchase of chef coats, pants, aprons and a hat and total approximately \$120.00 Non-slip shoes are also required. Students who have a financial hardship should contact their school counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

Culinary Arts 2	2 Credits	Gr. 11, 12	Course: 5341/5347
------------------------	------------------	-------------------	--------------------------

Students study kitchen design and layout, food costs, inventory management and cost controls. They learn how to plan for and serve at banquets. They receive assistance during the year in making postsecondary plans and/or obtaining employment in the food service industry. This assistance will continue after graduation if needed.

Note: Meets Math Experience requirement. Students are also required to pass the Serve Safe exam. Fees for this course cover the purchase of chef coats, pants, aprons and a hat and total approximately \$120.00. Non-slip shoes are also required. Students who have a financial hardship should contact their school counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

Prerequisite: Culinary Arts 1, NTC Director approval.

Cybersecurity 1	1 Credit	Gr. 10, 11, 12	Course: 5911/5917
------------------------	-----------------	-----------------------	--------------------------

Learn about cybersecurity threats, cyber ethics, computing fundamentals, networking, cryptology, Linux, risk identification and system administration. Expect an engaging hands-on learning environment with simulations and authentic cybersecurity applications. Participate in cybersecurity competitions.

Note: Meets ICT requirement.

Cybersecurity 2	1 Credit	Gr. 11, 12	Course: 5991/5997
------------------------	-----------------	-------------------	--------------------------

Students continue their cybersecurity journey by focusing on social engineering, LINUX/Windows system administration, networking basics, SQL databases, malware and computer system vulnerabilities while exploring the cybercrime underworld. Further, students will work more in depth with simulation software along with The National Cyber League where students will compete with other students through the nation in rankings and possible scholarship awards. Students will have the opportunity to complete certificates with IBM Skills Building-Cyber Security Programs, Cyber.org, and Paradigm Systems.

Note: Meets ICT requirement

Prerequisite: Cybersecurity 1, NTC Director approval.

Cybersecurity 3	1 Credit	Gr. 11, 12	Course: 5981/5987
------------------------	-----------------	-------------------	--------------------------

This course is designed as a capstone for the program. Students will focus on a specific area of cybersecurity and determine this area of focus through the coaching of industry mentors and the classroom teacher. These topics include Ethical Hacking, Cyber Forensics, Pen Testing, Cloud Security, and many other options. There is the opportunity for job shadowing, internships, and other outside-of-school industry experiences.

Note: Meets ICT requirement

Prerequisite: Cybersecurity 1 & 2, NTC Director approval.

Design & Visual Communications 1	2 Credits	Gr. 10, 11	Course: 5431/5437
---	------------------	-------------------	--------------------------

This year long course will introduce students to the basic elements of visual communication through lecture, demonstrations and hands-on applications in a state-of-the-art MAC lab. Students will focus on skill levels using Adobe software: Photoshop, Illustrator, and Design and Visual Communications 1 is for students interested in communications, critical thinking, production, problem-solving, and the team approach to a final project. Students should be prepared to work individually and within groups to produce clear and effective communication.

Note: Meets ICT requirement. This course is offered at Nashua High North. South students must travel.

Design & Visual Communications 2	2 Credits	Gr. 11, 12	Course: 5441/5447
---	------------------	-------------------	--------------------------

Students will continue to develop skills that lay the foundation for basic design, color theory and practical lab application. Students will explore, experiment and apply proper application of ideas through the design process in the state-of-the-art MAC lab. Print and project management, collaboration, peer review, design and redesign, research and communications are essential components emphasized during the second year. Students will expand their skills using Adobe Photoshop, Illustrator, and InDesign as well as other web and animation products offered in the Adobe suite of applications. Project activities focus on further developing thinkers that translate concept into digital communication formats,

Note: College credit may be available. Course is offered at Nashua High North. South students must travel. Meets Art requirement.

Prerequisite: Design & Visual Communications 1, NTC Director approval.

Digital Apps & Communications	1 Credit	Gr. 9, 10, 11, 12	Course: 5071
--	-----------------	--------------------------	---------------------

This course will take your online skills to the next level so you can safely participate in the online world while taking advantage of available productivity and communications apps.

Note: Meets ICT requirement.

Discovering Computer Science	1 Credit	Gr. 9, 10, 11, 12	Course: 3361
-------------------------------------	-----------------	--------------------------	---------------------

This course provides a broad introduction to computer science, focusing on the fundamental concepts of computer science, rather than a specific programming language. The goal of this course is to develop the computational thinking skills of problem solving and computing through the exploration and study of a wide range of computer science topics: the history of computer, interface design (human computer interaction), problem solving, algorithmic thinking, social and ethical computing considerations regarding the internet, web design, and programming.

Note: Meets ICT or Math Experience requirement.

Prerequisite: Algebra 1, Part 2 or taking Algebra 1, Part 2 concurrently.

Discrete Math	1 Credit	Gr. 11, 12	Course: 3205
----------------------	-----------------	-------------------	---------------------



This course will answer the never-ending question “when am I ever going to use math?” Students will explore the groundbreaking use of mathematics in the social sciences and the management sciences. The mathematics will shed light on how groups make decisions, how elections are decided, how power can be measured, how conflicts are resolved in a fair way and finally, how data is collected, summarized and interpreted. Students learn how management science uses circuits, trees, directed graphs and critical paths to solve problem involving the organization and management of complex activities. They also delve into population growth and the geometry of natural shapes.

Prerequisite: Algebra 2

Diversity in America	1 Credit	Gr. 10, 11, 12	Course: 2361
-----------------------------	-----------------	-----------------------	---------------------

Diversity in America is focused on introducing students to widely varying perspectives and experiences in life in America, both past and present. Specifically, the course will deal with the American experience through the lens of race, class, gender, and sexual orientation. Finally, the course will seek to explore the extent to which the promise of America has been applied to different demographic groups.

Drama	1 Credit	Gr. 9, 10, 11, 12	Course: 1515/1517
--------------	-----------------	--------------------------	--------------------------

Drama production brings the artistic creation of a playwright to life. Production can open up a fascinating world in which you may find an opportunity to exercise your self-expression and creativity. Production of a play is the major objective for this course. Students will have to assume various responsibilities including performance, set design, lighting, sound and publicity.

Note: This course meets the requirement for both English and Arts Education. Students must declare whether they are taking this course for English credit or Arts Education credit. Drama is a performance-based course and may be repeated for credit. More than one credit will count as an elective course.

Prerequisite: English 1

Drawing	0.5 Credit	Gr. 9, 10, 11, 12	Course: 6011
----------------	-------------------	--------------------------	---------------------

Students in this course will gain the basic skills to create drawings that are both accurate and expressive. Students will gain confidence in their own vision and their ability to draw what they see. They will develop visual competence and expertise of skills in two-dimensional art including contour drawing, perspective, value, and color. Students can take this exploratory quarter course to earn a 1/2 credit requirement in the arts for graduation or to use as a prerequisite for sequential offerings of Advanced Drawing and beyond.

Drone Technology	0.5 Credit	Gr. 10, 11, 12	Course: 5241
-------------------------	-------------------	-----------------------	---------------------

This course will introduce students to the career paths and the multitude of uses for drones. Students will engage in hands-on problem-solving activities with a team approach. They will focus on careers, flight planning missions, coding, and testing drones. Students will gain an understanding of safety, flight rules, flight training, maintenance, and other areas that students will need to know to prepare for the FAA 107 test.

Note: Meets ICT requirement.

Economics	0.5 Credit	Gr. 10	Course: 2063/ 2065/2067
------------------	-------------------	---------------	--------------------------------

This course examines the US free enterprise system and how it answers questions on the production and distribution of goods and services for our society. Basic economic concepts and an introduction to business, investment and personal finance decisions will also be examined. The course also includes a career research component.

Note: Required grade 10 course. Students must take this or AP Macroeconomics/Microeconomics to fulfill the requirement. Meets Math Experience requirement.

ELD A	2 Credits	Gr. 9, 10, 11, 12	Course: 9125
--------------	------------------	--------------------------	---------------------

ELD A extends students' literacy and language skills with an emphasis on increased accuracy and fluency for a variety of academic and everyday purposes. Students apply their academic vocabulary and language, reading, speaking, listening, and writing skills to a wide range of contexts grounded in core content areas or everyday purposes.

ELD B	2 Credits	Gr. 9, 10, 11, 12	Course: 9135
--------------	------------------	--------------------------	---------------------

ELD B expands the critical thinking skills of students while advancing their literacy and language skills by focusing on accuracy and fluency. Students apply their academic vocabulary and language, reading, speaking, listening, and writing skills in core content areas and for everyday purposes.

ELD C	2 Credits	Gr. 9, 10, 11, 12	Course: 9145
--------------	------------------	--------------------------	---------------------

ELD C reinforces and expands upon the academic vocabulary and language, reading, speaking, listening, and writing skills developed in prior courses. Students interact with increasingly more complex texts to continue extending their literacy and language skills while applying their knowledge in core content areas and everyday contexts.

ELD D	2 Credits	Gr. 9, 10, 11, 12	Course: 9155
--------------	------------------	--------------------------	---------------------

ELD D reinforces and expands upon the depth and breadth of academic vocabulary and language, reading, speaking, listening, and writing skills developed in prior courses. Students utilize complex texts and topics to participate in discussions that include individual, group, and whole-class activities to continue the development of critical thinking, literacy, and language skills alongside applying their knowledge in core content areas and everyday contexts.

Electrical Technology 1	2 Credits	Gr. 10, 11	Course: 5371
--------------------------------	------------------	-------------------	---------------------

This course is designed to teach the skills required to become an apprentice electrician. In this program, students learn to install electrical equipment for lighting, heating and power applications in commercial and residential buildings according to the National Electric Code.

Note: Meets Math Experience requirement. Course is offered at Nashua High South. North students must travel.

Electrical Technology 2	2 Credits	Gr. 11, 12	Course: 5381
--------------------------------	------------------	-------------------	---------------------

In this course, students' further study residential wiring and the National Electrical Code. Topics covered include commercial wiring applications such as motor control, conduit bending and fire alarm systems. Students who successfully complete two years of Electrical Technology training receive 144 hours of credit toward an apprentice license.

Note: Meets Math Experience requirement. Course is offered at Nashua High South. North students must travel.

Prerequisite: Electrical Technology 1, NTC Director approval.

Electricity/Electronics	0.5 Credit	Gr. 9, 10, 11	Course: 5751
--------------------------------	-------------------	----------------------	---------------------

Students explore the fields of electrical in-home repair, building construction and maintenance related jobs. Making use of hands-on-projects, students study the laws governing the construction of electrical circuits in residential and mechanical facilities. Students review the basic rules of electricity as they relate to current, voltage and resistance in experimental circuits. Students explore further using semiconductors and solid-state devices and soldering of components onto printed circuit boards.

ELL Literacy Lab	1 Credit	Gr. 9, 10, 11, 12	Course: 9045
-------------------------	-----------------	--------------------------	---------------------

ELL Literacy Lab reinforces basic language skills in the four language domains; (listening, speaking, reading, and writing) that students need to become more proficient and academically successful. Students work on building reading skills rooted in phonemic awareness, phonics, fluency, vocabulary, and comprehension in whole-group, small-group, and individual activities.

ELL Physical Science	1 Credit	Gr. 9, 10, 11, 12	Course: 4003, 4005
-----------------------------	-----------------	--------------------------	---------------------------

This course is designed as an introduction to the major concepts in chemistry and physics. The course includes concepts such as structure of atoms, periodic table principles, motion, forces, conservation of matter and energy, gravity and behavior of waves. These concepts are investigated through the laboratory experiences designed to promote and develop appropriate skills in science inquiry. Course instruction will focus on developing academic English while differentiating to meet the academic and linguistic needs of ELL.

Note: Meets Science Experience requirement.

Engineering Design & Development	1 Credit	Gr. 10, 11, 12	Course: 5941/5947
---	-----------------	-----------------------	--------------------------

The knowledge and skills students acquire through the various engineering and STEM courses come together in this course as they identify an issue and then research, design and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards. Completing EDD prepares students for various post-secondary programs and entry level work.

Note: Meets Math Experience requirement. This course is offered at Nashua High South. North students must travel.

Prerequisite: Introduction to Engineering Design and Principles of Engineering.

English 1	1 Credit	Gr. 9	Course: 1013/ 1015/1017
------------------	-----------------	--------------	--------------------------------



Develop your reading, writing, speaking, listening and research skills as you explore short stories, poetry, drama, non-fiction and novels by classical and modern writers. You will enhance these skills through research assignments and projects. Research skills are an essential component of this course.

Note: Required Grade 9 course.

English 2	1 Credit	Gr. 10	Course: 1023/ 1025/1027
------------------	-----------------	---------------	--------------------------------



Continue to develop your reading, writing, speaking, listening and viewing skills through grammar, vocabulary and writing exercises. Explore the short story, poetry, drama, the essay and the novel. Read anthology-based world literature selections written by classical and modern writers. Students will also critically read classic novels and plays selected from works taught regularly within this course. Students will focus on creating effective communication through oral and written expression. At the honors and extension level, students will write a formal research paper; at the foundation level, students will complete a research report. Students are expected to maintain a writing portfolio that contains various expository and creative pieces as well as the results of career research.

Note: Required grade 10 course.

Prerequisite: English 1

English 3	1 Credit	Gr. 11	Course: 1033/ 1035/1037
------------------	-----------------	---------------	--------------------------------



Students study American literature and the core documents of this nation. They also read one Shakespearean play. Students should be prepared to read additional works outside of school and report on that reading. They should improve grammar, usage, syntax and vocabulary by completing a variety of writing assignments. Speaking, listening and viewing skills will be strengthened through class activities.

Note: Honors and Extension students must write a formal research paper that follows the Modern Language Association Handbook guidelines. Foundation students must complete a research project using MLA citation of sources. Required grade 11 course or AP English Language Composition 1.

Prerequisite: English 2

English 4	1 Credit	Gr. 12	Course: 1043/ 1045/1047
------------------	-----------------	---------------	--------------------------------



Students study challenging literary works drawn mostly from classic and modern British literature. Students read additional works and report on those readings. This rigorous writing curriculum focuses on literary analysis and expository writing. Foundation students read fewer complex works while also improving their grammar, writing, speaking, research, listening and viewing skills

Prerequisite: English

Environmental Science	1 Credit	Gr. 10, 11, 12	Course: 4523/ 4525/4527
------------------------------	-----------------	-----------------------	--------------------------------



Students engage with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world through inquiry-based investigations. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems and examine alternative solutions for resolving or preventing them. Science is interdisciplinary, embracing topics from earth science, biology, chemistry and geography.

Note: Meets Science Experience requirement.

Prerequisite: Biology and a Physical Science Course.

Essential English A	1 Credit	Gr. 9, 10, 11, 12	Course: 9005/9505
----------------------------	-----------------	--------------------------	--------------------------

Essential English A is designed to provide non-native English learners with a comprehensive foundation in the English language through the development of academic vocabulary and language, reading, speaking, listening, and writing skills. Students develop their language proficiency through relevant contexts that involve everyday school activities and interactions.

Essential English B	1 Credit	Gr. 9, 10, 11, 12	Course: 9015/9215
----------------------------	-----------------	--------------------------	--------------------------

Essential English B builds on the foundational language skills with further emphasis on academic vocabulary and language, reading, speaking, listening, and writing skills through contexts that are grounded in core content areas and everyday purposes.

Essential English C	1 Credit	Gr. 9, 10, 11, 12	Course: 9025/9325
----------------------------	-----------------	--------------------------	--------------------------

Essential English C builds on students' growing literacy and language skills through a variety of contextualized, complex texts that are grounded in core content areas and everyday purposes. Students continue to develop and strengthen their academic vocabulary and language, reading, speaking, listening, and writing skills.

Essential English D	1 Credit	Gr. 9, 10, 11, 12	Course: 9035/9335
----------------------------	-----------------	--------------------------	--------------------------

Essential English D enhances the improvement of students' literacy and fluency by targeting students' ability to build on and create content in general and academic areas. Students increase reading comprehension and fluency by reading and discussing complex texts focused on current and content area topics. Students build on their academic vocabulary by using context clues to support natural acquisition.

Exploring Contemporary Cooking	1 Credit	Gr. 10, 11, 12	Course: 5161
---------------------------------------	-----------------	-----------------------	---------------------

Exploring Contemporary Cooking is designed to help students develop their culinary skills while becoming aware of cultural, social and psychological influences in food choices. Students will consider factors that impact the safety of foods and demonstrate their ability to be safe and sanitary with food handling. Students will discuss common foods eaten in the United States that originated in other countries and demonstrate their ability to select, store, prepare and serve a variety of these foods. Previous food handling and preparation is strongly recommended.

Note: Meets Math Experience requirement.

Fantasy & Science Fiction	1 Credit	Gr. 11, 12	Course: 1103/1107
--------------------------------------	-----------------	-------------------	--------------------------

Students study the works of contemporary science fiction writers. They examine themes such as warfare (human combat and biological), utopias and the apocalypse. Students explore these concepts by reading the literature, watching film adaptations and participating in class discussions. Students develop their own points of view through extensive expository and creative writing.

Prerequisite: English 3

Film Studies	1 Credit	Gr. 9, 10, 11, 12	Course: 1615/1617
---------------------	-----------------	--------------------------	--------------------------

Presents a literary look at great American films through the study of hallmark films of the 20th century cinema such as Modern Times, Citizen Kate, Casablanca, Rebel Without a Cause, Dr. Strangelove and Star Wars. Students critically view, discuss and write about these great films.

Prerequisite: English 1

Financial Services Internship	1 Credit	Gr. 11, 12	Course: 5401
--------------------------------------	-----------------	-------------------	---------------------

This course will include the basic principles and practices of credit unions and the financial industry. Students will be exposed to accounting, technology, cash handling, customer service skills, clerical and back office tasks, as they develop confidence under the guidance of a credit union professional. Coursework includes comprehensive financial literacy education on a variety of topics such as debit/credit cards, insurance, taxes, credit, credit reports, budgeting and more. In addition, students will utilize an online simulator designed to help them understand the relationship between decisions about money and quality of life. Upon completion of the course students will have a solid understanding of financial concepts, and will possess employable skills including cash handling, customer service standards, organization and teamwork. This authentic learning permits the student to explore hands-on, real-life situations and problems solving coupled with independent practice.

Note: Meets ICT and Math Experience requirement.

Fit for Life	0.5 Credit	Gr. 10	Course: 7021
---------------------	-------------------	---------------	---------------------

Students in this class assess their fitness level and set personal goals. Students will study and participate in a variety of physical activities that enhance muscular strength and power, cardiovascular and muscular endurance and increase flexibility.

Note: Taken with Health 1

Prerequisite: Sport Education

Foods Technology	1 Credit	Gr. 9, 10, 11	Course: 5171
-------------------------	-----------------	----------------------	---------------------

Learn the basic principles of nutrition, food preparation, meal planning and table service. Use new and different methods of meal planning and preparation, approximately twice a week, lab experiences will give students practice in meal preparation techniques while you eat healthy foods and enhance your cooking skills.

Note: Meets Math Experience requirement.

Forensic Science	1 Credit	Gr. 11, 12	Course: 4603/ 4605/4607
-------------------------	-----------------	-------------------	--------------------------------



The students in this course are taught the fundamentals of a criminal investigation. They learn by doing; they process crime scenes, analyze lab data and conduct scientific investigations, interact with guest speakers, employers, the internet, and become familiar with various texts. Students use technology to participate in activities that closely resemble those used by law enforcement personnel and forensic scientists.

Note: Meets Science Experience requirement.

Prerequisite: Chemistry

French 1	1 Credit	Gr. 9, 10, 11, 12	Course: 8117
-----------------	-----------------	--------------------------	---------------------



Bienvenue! Open the door to new opportunities for travel, work and study. Soon your world will change as you learn a new language and different culture. You will be able to communicate in French with a focus on your daily life at school, home and with friends.

French 2	1 Credit	Gr. 9, 10, 11, 12	Course: 8217
-----------------	-----------------	--------------------------	---------------------



Go beyond the basics in this exciting course that explores housing, the community, health/wellness and tourism in the French-speaking world. Gain confidence through authentic learning tasks and creative situational problem-solving.

Prerequisite: French 1

French 3	1 Credit	Gr. 9, 10, 11, 12	Course: 8317
-----------------	-----------------	--------------------------	---------------------



Where have you been? What did you do? Using target language, explore past excursions and experience virtual travel to “target language” locations. On your way, you will go shopping, check out the latest fashions, go out to eat, and experience local traditions, customs, and celebrations.

Prerequisite: French 2

French 4	1 Credit	Gr. 9, 10, 11, 12	Course: 8417
-----------------	-----------------	--------------------------	---------------------



Immerse yourself in the diverse cultures of the French world through exposure to authentic music, literature, films, art, and more. You’ll learn to communicate effectively in a variety of social settings and situations through dynamic activities.

Prerequisite: French 3

French 5	1 Credit	Gr. 9, 10, 11, 12	Course: 8517
-----------------	-----------------	--------------------------	---------------------



Refine your communication skills in French while exploring historical and contemporary contexts. The use of authentic materials encourages cultural awareness as you deepen your understanding and appreciation of the various aspects of the cultures of the French-speaking world. Enjoy engaging activities such as reading fables, watching films, listening to music, and discussing current events.

Prerequisite: French 4

Freshman Writing	1 Credit	Gr. 9	Course: 1011
-------------------------	-----------------	--------------	---------------------

This semester-long freshman writing course will require students to master the fundamental writing skills necessary for high school success across all content areas. The course features writing in response to informational text, narrative writing, argumentative writing and writing to learn. Students will learn and use the writing process.

Note: This is a required grade 9 course.

General Algebra 1 Part 1	1 Credit	Gr. 9, 10, 11, 12	Course: 9373
---------------------------------	-----------------	--------------------------	---------------------

This semester long course will build a strong foundation necessary to succeed in the future math courses. Concepts and topics are developed around study of the real number system; understanding slope and its applications to linear systems and inequalities; the representation of functions through tables, graphs and equations. Learning the fundamentals will be accomplished through application of algebraic techniques to real world scenarios. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General Algebra 1 Part 2	1 Credit	Gr. 9, 10, 11, 12	Course: 9383
---------------------------------	-----------------	--------------------------	---------------------

This semester long course will build a strong foundation necessary to succeed in the future math courses. The course will build on materials covered in Algebra 1 Part 1, expanding from linear concepts to polynomials. Concepts and topics are developed around becoming fluent with polynomials and their relation to operations; factoring: accomplished through application of algebraic techniques to real world scenarios. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Algebra 1 Part 1 and Case manager/Special Education teacher recommendation.

General Civics	0.5 Credit	Gr. 10, 11, 12	Course: 9483
-----------------------	-------------------	-----------------------	---------------------

This course gives students a fundamental understanding of how the U.S. Government functions. The roles of different branches of government, lawmaking, the principles of government, the formation of governments and the rights and responsibilities of citizens will all be stressed. Contemporary political and governmental issues will also be examined to illustrate the process of government. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General Economics	0.5 Credit	Gr. 10, 11, 12	Course: 9473
--------------------------	-------------------	-----------------------	---------------------

This course examines the US free enterprise system and how it answers questions on the production and distribution of goods and services for our society. Basic economic concepts and an introduction to business, investment and personal finance decisions will also be examined. The course also includes a career research component. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Note: Required grade 10 course. Students must take this or AP Macro/Micro Economics to fulfill the requirement.

General English 1	1 Credit	Gr. 9	Course: 9183
--------------------------	-----------------	--------------	---------------------

The instruction of this course focuses on the acquisition and practice of proper grammar and usage and the mechanics of writing. Students work on a variety of writing projects from formal essays to real world pieces such as resumes, cover letters and job applications. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General English 2	1 Credit	Gr. 10	Course: 9213
--------------------------	-----------------	---------------	---------------------

Continue to develop your reading, writing, speaking, listening and viewing skills through grammar, vocabulary, and writing exercises. Explore the short story, poetry, drama, the essay and the novel. Read anthology-based world literature selections written by classical and modern writers. Students will also critically read classic novels and plays selected from works taught regularly within this course. Students will focus on creating effective communication through oral and written expression. At the honors and extension level, students will complete a research report. Students are expected to maintain a writing portfolio that contains various expository and creative pieces as well as the results of career research. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General English 3	1 Credit	Gr. 11	Course: 9203
--------------------------	-----------------	---------------	---------------------

Students study American literature and the core documents of this nation. They also read one Shakespearean play. Students should be prepared to read additional works outside of school and report on that reading. They should improve grammar, usage, syntax and vocabulary by completing a variety of writing assignments. Through class activities and exercises, speaking, listening and viewing skills will be strengthened.

Note: Honors and Extension students must write a formal research paper that follows the Modern Language Association Handbook guidelines. Foundation students must complete a research project using MLA citation of sources. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General English 4	1 Credit	Gr. 12	Course: 9223
--------------------------	-----------------	---------------	---------------------

Students study challenging literary works drawn mostly from classic and modern British literature. They read additional works and report on those reading. This rigorous writing curriculum focuses on literary analysis and expository writing. Foundation students read fewer complex works while also improving their grammar, writing, speaking, research, listening and viewing skills. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General Geometry	1 Credit	Gr. 9, 10, 11, 12	Course: 9433
-------------------------	-----------------	--------------------------	---------------------

Students discover mathematics as a deductive science by studying plane, solid and transformational geometry. Students learn the relations of equality and inequality, triangle relationships, perpendicular and parallel lines, quadrilaterals, congruency and similarity, constructions with a compass and a straight edge, ration and proportion, areas and volumes, trigonometric ratios, relationships between angles, arcs, and line segments related to circles and spheres and the concept of proof. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individualized student needs.

Note: Fulfills math elective requirement.

Prerequisite: General Algebra 1 (9363) or Algebra 1 Part 2.

General Health	1 Credit	Gr. 10, 11, 12	Course: 9303
-----------------------	-----------------	-----------------------	---------------------

Students are involved in the concept of wellness. Topics covered include: stress management, maintaining mental and emotional health, balanced nutrition and avoidance of drugs, alcohol and tobacco, along with sexuality education. Students examine these topics through readings, discussions, group projects, video presentations and internet research.

Prerequisite: Case manager/Special Education teacher recommendation.

General Math	1 Credit	Gr. 9, 10, 11, 12	Course: 9353
---------------------	-----------------	--------------------------	---------------------

Through real world applications and examples, students develop mathematical skills useful in the workplace. A review of basic mathematic operations is included along with topics such as problem solving, money, money management skills and related real-world mathematical applications. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General Pre-Algebra	1 Credit	Gr. 9, 10, 11, 12	Course: 9343
----------------------------	-----------------	--------------------------	---------------------

This course advances the student from eighth grade mathematics to pre-algebra. After reviewing basic operations, students learn about real numbers and their properties, mathematical modeling that requires equation writing and solving in context, data analysis and statistics and geometry and graphs. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs

Prerequisite: Case manager/Special Education teacher recommendation.

General Science-Biological	1 Credit	Gr. 9, 10, 11, 12	Course: 9423
-----------------------------------	-----------------	--------------------------	---------------------

Biology is an introductory life science course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, DNA, genetics, ecology, energy pathways in plants and animals, and interactions between and among organisms. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General Science-Physical	1 Credit	Gr. 9, 10, 11, 12	Course: 9413
---------------------------------	-----------------	--------------------------	---------------------

This course is designed as an introduction to the major concepts in chemistry and physics. The course includes concepts such as structure of atoms, periodic tables, principles, motion, forces, conservation of matter and energy, gravity and the behavior of waves. These concepts are investigated through laboratory experiences designed to promote and develop appropriate skills in science inquiry. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General US History	1 Credit	Gr. 11, 12	Course: 9453
---------------------------	-----------------	-------------------	---------------------

Investigate the social, political and economic ideas and movements that have shaped modern American society. Emphasis is on the 20th century, including topics such as social change, foreign policy and the development of the American culture and character. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

General World Studies	1 Credit	Gr. 9, 10, 11	Course: 9463
------------------------------	-----------------	----------------------	---------------------

This course builds upon the middle school social studies courses and helps lay a foundation for US History in 11th grade. Beginning with the Enlightenment, World Studies explores the themes of revolution, economic development and world conflict throughout history. Students will use a variety of primary and secondary source materials to critically analyze the social, political, technological and economic developments that have shaped recent history. Per the IEP, the classroom teacher has the discretion to adapt the curriculum based on individual student needs.

Prerequisite: Case manager/Special Education teacher recommendation.

Geometry	1 Credit	Gr. 10, 11, 12	Course: 3033/ 3035/3037
-----------------	-----------------	-----------------------	--------------------------------



Students discover mathematics as a deductive science by studying plane, solid and transformational geometry. They learn the relationships, perpendicular and parallel lines, quadrilaterals, congruency and similarity, construction with a compass and a straight edge, ratio and proportion, areas and volumes, trigonometric ratios, relationships between angles, arcs and line segments related to circles and spheres and the concept of proof.

Prerequisite: Algebra 1 or Algebra 1 Part 2

German 1	1 Credit	Gr. 9, 10, 11,12	Course: 8127
-----------------	-----------------	-------------------------	---------------------



Willkommen! Open the door to new opportunities for travel, work and study. Soon your world will change as you learn a new language and different cultures. You will be able to communicate in German with a focus on your daily life at school, home and with friends.

German 2	1 Credit	Gr. 9, 10, 11, 12	Course: 8227
-----------------	-----------------	--------------------------	---------------------



Go beyond the basics in this exciting course that explores housing, the community, health/wellness, and tourism in the German speaking world.

Prerequisite: German 1

German 3	1 Credit	Gr. 9, 10, 11, 12	Course: 8327
-----------------	-----------------	--------------------------	---------------------



Where have you been? What did you do? Using the target language, explore past excursions and experience virtual travel to “target language” locations. On your way, you will go shopping, check out the latest fashions, go out to eat, and experience local traditions, customs, and celebrations.

Prerequisite: German 2

German 4	1 Credit	Gr. 9, 10, 11, 12	Course: 8427
-----------------	-----------------	--------------------------	---------------------



Immerse yourself in the diverse culture of the world through exposure to authentic music, literature, films, art, and more. You’ll learn to communicate effectively in a variety of social settings and situations through dynamic activities.

Prerequisite: German 3

Global Conflicts	1 Credit	Gr. 10, 11, 12	Course:2513/ 2515/2517
-------------------------	-----------------	-----------------------	-----------------------------------

Our life in the United States is influenced by situations and countries all around the globe. To understand wars, climate change, disease, terrorism, and other problems a person needs to grasp life in many places far from the United States. Global Conflicts is designed to help students gain an understanding of major regions of the world and current international problems. Students may study issues and conflicts in India, China, Latin America, the Middle East, and Eastern Europe. Major geographic concepts, world religions, economic and government systems, map skills and human rights will all be addressed. As part of the course, students may participate in a Model United Nations simulation to understand and work to solve world problems as seen through the perspective of different nation

Global Finance	1 Credit	Gr. 10, 11, 12	Course: 5411/5417
-----------------------	-----------------	-----------------------	--------------------------

To provide a conceptual understanding of global financial strategies, and interest rates differentials: the institutional framework of foreign exchange markets and to enhance the topics of Business Finance to a global platform. This course, on its own or coupled with Business Finance will serve students well – to strengthen their understanding of global financing opportunities.

Note: Meets ICT or Math Experience requirement.

Global Literature	1 Credit	Gr. 10, 11, 12	Course: 1623/ 1625/1627
--------------------------	-----------------	-----------------------	--------------------------------



This course will explore literature dealing with contemporary global issues, such as oppression in third world countries, the rising tide of fanaticism, and human rights. Students will read, analyze, interpret, discuss and synthesize information in a series of essays and projects.

Prerequisite: English 2

Graphic Design 1	0.5 Credit	Gr. 9, 10, 11	Course: 5761
-------------------------	-------------------	----------------------	---------------------

Students gain a working knowledge of graphic design and all related components of the discipline. They learn industry specific computer software (Photoshop and Illustrator), creative thinking, advertising principles, basic drawing techniques, copy writing, market psychology, traditional design and layout, art history and printing. Students gain valuable insight into career options and preparation for higher education.

Note: This course meets the ICT graduation requirement and may be taken to fulfill the computer requirement or Art but NOT both. Meets Math Experience requirement.

Graphic Design 2	0.5 Credit	Gr. 10, 11, 12	Course: 5861
-------------------------	-------------------	-----------------------	---------------------

Students continue to explore their working knowledge of the graphic design field. Students will focus on skill levels using Quark Express, InDesign, Photoshop and Illustrator design software. Graphic Design 2 is for students interested in communications, critical thinking production, problem solving and the team approach to the final product. Students should be prepared to work individually and within groups to produce clear and effective communication. Students will search for career opportunities in the graphics field.

Note: Meets Math Experience requirement.

Prerequisite: Graphic Design 1

Guitar Q/S	0.5/1 Credit	Gr. 9, 10, 11, 12	Course: 6131/6151
-------------------	---------------------	--------------------------	--------------------------

If you are a beginning guitarist or have some basic skills, you can develop your reading and technical skills. You will perform regularly, both for and with the music faculty and the class.

Note: This course may be repeated for credit. A guitar will be provided for use in class.

Habits for Living	2 Credits	Gr. 9, 10, 11, 12	Course: 9501
--------------------------	------------------	--------------------------	---------------------

This full year course is designed for students with intensive social/communicative and self-regulation challenges to develop personal self-care skills. Skills are addressed on an individual basis and utilize intensive visual and communications supports. The use of structured real-life scenarios, field trips and meaningful projects assist the students in generalizing information into the real world. This course also addresses student's self-regulation needs and abilities in preparation for more efficient interaction within the school community and the Greater Nashua Community.

Prerequisite: Case manager/Special Education teacher recommendation.

Health 1	.5 Credit	Gr. 10	Course: 7031
-----------------	------------------	---------------	---------------------

Students will explore effective decision-making strategies that enhance mental, social, emotional, and physical health. Students learn the importance of abstinence as it relates to tobacco, illegal drugs, alcohol and sexual activity. Through class discussions, role playing, guest speaker presentation, and interactive technology, students gain knowledge on these topics and others including proper management of stress and relationships.

Health 2	0.5 Credit	Gr. 11, 12	Course: 7081
-----------------	-------------------	-------------------	---------------------

Students will study first aid and handling emergency situations. Instruction will be authentic and hands-on while students learn how to provide first aid and conduct CPR. Students will learn to respond to common emergencies including choking and treatment for poisonings. Students will have a certification option through required testing at the conclusion of the course. Additional topics will include non-communicable diseases and disabilities, cardiovascular diseases, cancer, asthma, diabetes as well as an overall look at individuals who have physical or mental challenges. Finally, students will learn what it means to be a health literate consumer, by examining choices, choosing community health services and managing consumer related problems such as health fraud and malpractice as they related to products and services.

Prerequisite: Health 1

Health Sciences 1	2 Credits	Gr. 11	Course: 5451/5457
--------------------------	------------------	---------------	--------------------------

Explore health occupations and careers through this overview of Anatomy and Physiology. Included in this class are labs, which solidify the information received in the theory portion of the class. This class also includes the study of medical terminology, career guidance and the opportunity to become CPR/First Aid certified.

Note: College credit may be available. Students will be required to purchase lab coats, a t-shirt, name tag pins, CPR certification cards that cost approximately \$40.00. Students who have a financial hardship should contact their school counselor so that assistance can be provided. Course is offered at Nashua High South. North students must travel. Meets Science Experience requirement.

To continue to Health Sciences 2, students are required to have full vaccinations or tests including but not limited to COVID 19, Flu Shot, TB (lab test two step).

Prerequisite: Biology and a Physical Science course

Health Sciences 2	3 Credits	Gr. 12	Course: 5461/5467
--------------------------	------------------	---------------	--------------------------

Receive on-the-job clinical training that qualifies students to be candidates for the NH Licensed Nursing Assistant Exam (LNA). Students in the program are required to purchase LNA scrubs, name tag pins, a watch with a second hand, pay an LNA test fee, a state licensing fee, a criminal background check and a mandatory drug testing. These essentials cost approximately \$300.00. Students may speak with their teacher or school counselor in order to seek potential financial assistance for the required fees. Clinical rotation in other health care fields may be offered if employer sites are available.

Note. The Health Sciences 2 students work in medical facilities in Nashua that required full vaccinations or tests including, but not limited to COVID 19, Flu Shot, TB (lab test of two step). These requirements must be met in order to participate in the class. Meets Science Experience requirement.

Prerequisite: Health Sciences 1, NTC Director approval and CPR & First Aid Certification.

Heating, Ventilation, Air Conditioning & Refrigeration 1	2 Credits	Gr. 10, 11	Course: 5511
---	------------------	-------------------	---------------------

Students learn refrigeration fundamentals, electricity and controls; installing, operating, servicing and repairing both heating and air conditioning equipment through classroom demonstrations and laboratory experiments. They work on domestic and commercial refrigeration and window and central air conditioning equipment, including heat pumps and oil and gas systems. Students learn on modern equipment, including three phase electrical components. The demand for skilled technicians far exceeds the supply in this field.

Note: Meets Math Experience requirement. Course is offered at Nashua High South. North students must travel.

Heating, Ventilation, Air Conditioning & Refrigeration 2	2 Credits	Gr. 11, 12	Course: 5521/5527
---	------------------	-------------------	--------------------------

Students learn to perform systems tests, troubleshoot and repair heating, air conditioning and refrigeration systems with state-of-the-art industry equipment on a variety of models and makes of both residential and commercial HVACR systems. They learn to use a variety of tools and instruments to perform tests for electrical pressure and burner efficiency. Laboratory activities focus on refrigeration systems (component installation and repair), pipe fitting, ventilation ducting, air conditioning unit service and furnace and burner service. Individual safety codes pertaining to each type of system are addressed and adhered to during lab activities.

Note: Meets Math Experience requirement. Course is offered at Nashua High South. North students must travel.

Prerequisite: HVACR 1 and NTC Director approval.

Horror & Literature of the Unknown	1 Credit	Gr. 11, 12	Course: 1203/ 1205/1207
---	-----------------	-------------------	--------------------------------



From Gothic novels of the 1800's to "campy" horror of the 90's, and Shelley to King, students will be immersed in the world of the Unknown. Using a broad range of Horror/Mystery texts, students will study a variety of genres, including novels, short stories, poetry, and film. This course is not for those afraid of the dark.

Prerequisite: English 2

Human Relations	1 Credit	Gr. 10, 11, 12	Course: 5191/5197
------------------------	-----------------	-----------------------	--------------------------

Learn how to have rewarding and successful relationships in school, at home and at work. This program will inspire students to develop necessary skills in communication, listening, conflict management and mediation. By using interactive learning methods, role playing and participating in challenging activities, the student strengthens and develops their skills, self-esteem and self-concept. This course would benefit students interested in the fields of psychology and sociology.

Interior Design	1 Credit	Gr. 9,10,11, 12	Course: 5211
------------------------	-----------------	------------------------	---------------------

Do you want to make the space you occupy your own? Learn the principles and elements of creating your individual living area, whether it's your dorm, apartment, room or house. Design and construct various decorating projects and a model of your own living space while learning about career opportunities in this field.

Note: Meets ICT requirement.

Introduction to Business	0.5 Credit	Gr. 9, 10	Course: 5051
---------------------------------	-------------------	------------------	---------------------

Be introduced to the world of business. Explore real world day to day operations needs to run a small entrepreneurial business. Use simulation software to learn business startup tasks, pre-launch planning, and, day to day business operations including staffing, purchasing and payments, marketing and business finances.

Note: Meets ICT or Math Experience requirement.

Introduction to Engineering Design	1 Credit	Gr. 9, 10, 11,12	Course: 5551/5557
---	-----------------	-------------------------	--------------------------

Develop three dimensional solid models by working from sketching simple geometric shapes to applying the use of solid modeling software Autodesk Inventor. Students work within a problem-solving design process and learn how it is used in industry to manufacture a product. They use Computer Aided Design System (CAD) to analyze and evaluate the product design. The techniques learned and equipment used is state-of-the-art and are currently in use by engineers throughout the United States.

Note: Meets ICT or Math Experience or Science Experience requirement.

Prerequisite: Algebra 1 Part 2 or Algebra 1 (H)

Introduction to Psychology	1 Credit	Gr. 11, 12	Course: 2305/2307
-----------------------------------	-----------------	-------------------	--------------------------

Students explore individual human behavior. They analyze the nature of intelligence, learning styles, personality theories, psychological testing and stress management. Learning activities include class discussions, films, small group research projects, experiments, readings and lectures. Since many current careers require the knowledge Psychology offers, students have the opportunity to gain valuable information useful in both college and employments. This course is highly recommended for students who are interested in learning about human behavior.

Note: This course is recommended as a **prerequisite** to AP Psychology.

Jazz Improvisation & Literature	1 Credit	Gr. 10, 11, 12	Course: 6241
--	-----------------	-----------------------	---------------------

Study, rehearse and perform the various styles and periods of Jazz, learning their basic elements and structures, as well as learn the theory and skills of improvisation. This course is open to all players of saxophone, trumpet, trombone, rhythm/lead guitar, string bass/bass, piano/keyboard and drums. Auditions may be necessary based on enrollment and instrumentation.

Jewelry & Small Metal Design	.5 Credit (N) 1 Credit (S)	Gr. 10, 11, 12	Course: 6501(N) 6501
---	---------------------------------------	-----------------------	---------------------------------

This hands-on course explores the art and craft of working with small metals, providing students with the essential skills and techniques for creating unique and wearable art. From jewelry design to small-scale metal sculptures, participants will learn the fundamentals of shaping and finishing metal pieces. Through a combination of practical exercises and creative projects, students will gain proficiency in manipulating metals such as silver, copper, and brass. Topics covered may include: Metal cutting and shaping, texturing and surface shaping, design and fabrication, safety and tool proficiency, and project-based learning. *Soldering will be conducted at South with the use of the Machine Shop.*

Journalism	1 Credit	Gr. 11 12	Course: 1355/1357
-------------------	-----------------	------------------	--------------------------



Explores the major areas of mass media: newspapers, magazines and television. This course is intended for students who like to write. The emphasis is on news writing for print and broadcast media. Students study ethics in the media and learn interviewing techniques. Exercises include editorial and feature writing, advertising and sports writing. Students also read, analyze and discuss newspapers and news magazines.

Prerequisite: English 2

Language Skills 1	1 Credit	Gr. 11	Course: 1065
--------------------------	-----------------	---------------	---------------------

The instruction of this course focuses on improvement of grammar, usage, syntax and vocabulary by completing a variety of writing assignments. Speaking and listening skills will be strengthened through class activities and exercises. Students will also explore short stories, poetry, non-fiction and novels by classical and modern writers.

Note: These classes may be taken in place of English 3 (Language Skills 1) and English 4 (Language Skills 2).

Prerequisite: Case manager/Special Education teacher recommendation.

Language Skills 2	1 Credit	Gr. 12	Course: 1075
--------------------------	-----------------	---------------	---------------------

The instruction of this course focuses on the continuation and building of reading, writing, speaking and listening skills through vocabulary, grammar and writing pieces. Students will also explore non-fiction, short stories and poetry by classical and modern writers.

Note: These classes may be taken in place of English 3 (Language Skills 1) and English 4 (Language Skills 2).

Prerequisite: Case manager/Special Education teacher recommendation.

Latin 1	1 Credit	Gr. 9, 10, 11, 12	Course: 8137
----------------	-----------------	--------------------------	---------------------



Learn about the city of Pompeii and follow the Caecilius family in the year before the eruption of Mt. Vesuvius. Discover Latin's connections to the English Language. Understand the history of daily life, Roman theatre, gladiators, and the elections in ancient Pompeii.



Latin 2	1 Credit	Gr. 9, 10, 11, 12	Course: 8237
----------------	-----------------	--------------------------	---------------------

Explore the Roman Empire from the British frontier to Alexandria, Egypt by following the lives of Quintus and Salvius. Learn about the Roman invasions of Britain by Julius Caesar and Claudius. Continue to develop Latin connections to your own language and culture.

Prerequisite: Latin 1



Latin 3	1 Credit	Gr. 9, 10, 11, 12	Course: 8337
----------------	-----------------	--------------------------	---------------------

Continue to explore the influence of the Romans on life in Great Britain, from religious practices to superior organization of Roman army. Learn about Agricola, the most famous Roman governor of Britain. Develop a more sophisticated grasp of Latin grammar. Follow Salvius' evil deeds and the mischief of two Roman soldiers in Britain.

Prerequisite: Latin 2



Latin 4	1 Credit	Gr. 9,10,11,12	Course: 8437
----------------	-----------------	-----------------------	---------------------

Rome! Explore the Eternal City and its lasting monuments. Understand the history behind the story of Masada, philosophy in the ancient world, and Roman architecture. Follow the actions of Salvius in upper class Roman society in Emperor Domitian's court. Advance to reading authentic Latin prose and poetry.

Prerequisite: Latin 3

Law & Ethics	1 Credit	Gr. 11, 12	Course: 2205/2207
-------------------------	-----------------	-------------------	--------------------------

Explores the nature of law and the importance of ethics in our society. The course examines the purpose of law, the functioning of our criminal justice system and the responsibilities and ethical obligations of lawyers and police. Students discuss contemporary legal and ethical issues such as abortion, the death penalty, censorship and genetic engineering. Students also analyze important Supreme Court cases and personal ethical decision-making. This course is ideal for those with a genuine interest in law.

Note: Community service required.

Lifespan Nutrition	1 Credit	Gr. 11, 12	Course: 5181
---------------------------	-----------------	-------------------	---------------------

Learn the basics of various nutrients and their functions in the body. Promote good health and well-being. Students will gain practical experience in planning nutritious meals to satisfy their own eating habits and will make use of some lab experience. This course would benefit students in the Life Sciences, Health Sciences, Careers in Education and Culinary Arts.

Lifetime Activities 1	0.5 Credit	Gr. 11, 12	Course: 7051
------------------------------	-------------------	-------------------	---------------------

Students learn about and participate in physical activities for lifelong enjoyment and wellness at any age. Activities will vary throughout the year depending on facilities and weather but may include archery, skating, weight training, team and individual sports. One offsite field trip will be included in this course.

Prerequisite: Sports Education AND Fit for Life.

Lifetime Activities 2	0.5 Credit	Gr. 11, 12	Course: 7061
------------------------------	-------------------	-------------------	---------------------

This course is designed for students who enjoy a variety of physical activities and wish to advance their fitness training. Students will study and participate in physical activities that promote a healthful lifestyle. Activities will vary throughout the year depending on facilities and weather, but will include strength, endurance, flexibility, and cardio training. One offsite field trip may be included in this course.

Prerequisite: Sports Education, Fit for Life, and Lifetime Activities 1.

Literacy Center 1	2 Credits	Gr. 9, 10, 11, 12	Course: 9701
--------------------------	------------------	--------------------------	---------------------

This class is designed to meet the needs of students who would benefit from a multisensory approach to the enhancement of phonemic awareness and basic phonics for decoding and encoding.

Literacy Center 2	2 Credits	Gr. 9, 10, 11, 12	Course: 9751
--------------------------	------------------	--------------------------	---------------------

This class benefits students who need reading strategies for imagining what they are reading, reading textbooks, reading literature and the application of higher order thinking skills to reading material.

Prerequisite: Teacher recommendation.1

Lyrics as Literature	2 Credits	Gr. 11, 12	Course: 1213/ 1215/1217
-----------------------------	------------------	-------------------	--------------------------------



This course will be the study of song lyrics (from multiple genres) as literature. We will read, listen to, consider, analyze, discuss/debate, and write about the various songs we study. This analysis will include literary devices, criticism, and appreciation. Ultimately, using critical reading/thinking/writing skills, students will write about and discuss the cultural and historical impact of music in our society.

Prerequisite: English 2

Marine Robotics	1 Credit	Gr. 9 10, 11, 12	Course: 5821
------------------------	-----------------	-------------------------	---------------------

This course will introduce students to the world of robotics. Students will engage in hands-on, problem-solving activities with a team approach to develop a working underwater robot. The objective of this course is to introduce the basic concepts in robotics, focusing on design, building and testing of mobile robots applying current state-of-the-art research and application. Students will gain an introductory understanding in Programming and Microprocessor technology. Course information will be tied to lab experiments as students work in teams to build and test underwater robots, culminating in an end-of-course robot contest.

Note: Meets Math Experience requirement or Science Experience requirement. This course is offered at Nashua High North. South students must travel.

Prerequisite: Algebra 1 or Algebra 1 Part 2.

Marketing for Retail & Fashion	1 Credit	Gr. 10, 11, 12	Course: 5531/5537
---	-----------------	-----------------------	--------------------------

This introductory course helps students develop an extensive understanding of marketing concepts and theories that apply to retail and fashion business. Areas covered in this course include: the basics of marketing, target marketing and segmentation, retailing, merchandising, and related industries, promotion and marketing plans.

Note: Meets ICT or Math experience requirement.

Marketing for Sports & Entertainment	1 Credit	Gr. 10, 11, 12	Course: 5121/5127
---	-----------------	-----------------------	--------------------------

This introductory course helps students develop an extensive understanding of marketing concepts and theories that apply to sports, entertainment, and business. Areas covered in this course include: the basics of marketing, target marketing and segmentation, public image, the entertainment industry, entertainment marketing, and legal issues for sports and entertainment.

Note: Meets ICT or Math Experience requirement. College credit may be available.

Marketing for Social Media	2 Credits	Gr. 11, 12	Course: 5541/5547
-----------------------------------	------------------	-------------------	--------------------------

This course provides the foundation of social media and digital marketing. Students will learn what social media marketing entails, including the history and the different social media channels that exist. You'll learn how to select social media or digital channel that fits your needs, set goals and success metrics, and determine who your target audience is. In addition, this course will familiarize students with the principals of sales and marketing in a business to consumer space through operation of the school-based enterprise. This course will provide an understanding of sales function in retail environment, with topics including sales training, consumer service, merchandising, and the effective use of CRMs. The course will also provide students with an overview of managing retail businesses, with a focus on Product/Service Management, Distribution, Pricing and Selling.

Note: Meets ICT or Math Experience requirement.

Prerequisite: Marketing for Retail and Fashion or Marketing for Sports and Entertainment, NTC Director Approval.

Metacognitive Skills Development	1 Credit	Gr. 9, 10, 11, 12	Course: 9211
---	-----------------	--------------------------	---------------------

The course will focus on developing metacognitive skills in students of average intelligence who are going into the work force or who are college bounds. Metacognitive skills benefit students who need executive functioning strategies for planning, organizing, managing materials, time and space, initiation and self-monitoring. Students in the Metacognitive class review special education services primarily due to executive function deficits. Students will be taught to understand their personal learning style, to capitalize on their strengths, to develop effective study and organizational skills and to advocate appropriately for themselves. The focus is on fostering independence with students being part of the planning process and fading support as skills develop.

Note: this course is restricted and enrollment is open for students who are recommended and meet specific criteria by the case manager and Special Education teacher.

Meteorology	1 Credit	Gr. 10, 11, 12	Course: 4303/ 4305/4307
--------------------	-----------------	-----------------------	--------------------------------



This course provides students with the opportunity to learn meteorological concepts in a visual, practical, and scientific manner. The intent is to stimulate curiosity about weather and climate that has impacted our planet historically and currently in our daily lives. This course emphasizes the understanding and application of meteorological principles such as the nature of the atmosphere, circulation processes, and weather patterns including severe storms.

Note: Meets Math or Science Experience Requirement.

Prerequisite: Biology and a Physical Science course.

Military History	1 Credit	Gr. 10, 11, 12	Course: 2351
-------------------------	-----------------	-----------------------	---------------------

“Force is the ultimate argument and once it has been invoked, the only effective response is superior force.” It can be argued that military conflict has been the most influential force in the development of society and the world, it has touched every aspect of life. Students learn how military conflict has developed and change throughout human history, as well as how it has affected our world today. Topics include the following: the origins of conflict, battle tactics and strategies, the development of weapons and technology, significant historical battles, in-depth analysis of various wars and a focus on modern-day military force.

Note: Does not count in weighted GPA.

Music Theory (H)	1 Credit	Gr. 10, 11, 12	Course: 6147
-------------------------	-----------------	-----------------------	---------------------

Improve your music reading skills, develop aural skills and study proper notation, music analysis and transpositions. Learn how to take rhythmic and melodic dictation, write scales and use key signatures and different meters. Acquire sight singing and basic piano keyboard skills. Students will be assessed on notation skills, aural skills and basic keyboard proficiency. This course should be of special interest if a student is considering a career in music.

Note: This course may fulfill a music credit or an ICT requirement but not both.

Prerequisite: Teacher recommendation.

Musical Ensembles	1 Credit	Gr. 10, 11, 12	Course: 6351
--------------------------	-----------------	-----------------------	---------------------

Students who are enrolled in Band, Jazz Improvisation & Literature, Concert Choir and Chorale should sign up to join this performance-based class and improve their techniques, music reading, ensemble skills and overall musicianship with individual and full ensemble rehearsal time. Students will perform at least twice annually and be assessed through performance in class at least bi-weekly. Students will be expected to participate in all activities.

Prerequisite: Teacher recommendation.

Mythology	1 Credit	Gr. 11, 12	Course: 1155/1157
------------------	-----------------	-------------------	--------------------------



Students read and examine the stories of Greek, Roman, Norse, Native American and other mythologies to discover their origins, patterns and similarities. Students read Edith Hamilton’s Mythology as well as other resources in this field. Students analyze ancient myths through discussion and writing and examine references to them found in art, literature, film and contemporary culture.

Prerequisite: English 2

On Your Own	0.5 Credit	Gr. 11, 12	Course: 5201
--------------------	-------------------	-------------------	---------------------

Learn how to be more independent, whether you are pursuing your education, looking for job opportunities or just living on your own. As the cornerstone of their independence, students will learn personal finance, including banking, establishing and keeping good credit, budgeting and managing finances. Students will acquire skills and knowledge in the area of transportation, housing, furnishings, insurance, wardrobe and food and nutrition. Students will also learn more about good study habits, time management, goal setting and making good decisions in order to make better educational and career choices.

Note: Meets Math Experience requirement.

Parenting	0.5 Credit	Gr. 10, 11, 12	Course: 5851
------------------	-------------------	-----------------------	---------------------

Kids don't come with instructions! This course will emphasize the enormous responsibility of parenting. The students will learn the various skills necessary in order to raise a happy and healthy child. Exploration of these issues will be accomplished through class discussion, various individual and team projects and written assignments. This course will especially benefit those pursuing careers in Careers in Education and Health Science.

Personal Finance	0.5 Credit	Gr. 9, 10, 11, 12	Course: 5901
-------------------------	-------------------	--------------------------	---------------------

Students learn the practical side of money management to prepare them to make sound financial decisions from their first job through retirement. This course informs students how choices directly impact future financial circumstances.

Note: Meets ICT or Math Experience requirement.

Personal Fitness	0.5 Credit	Gr. 9, 10, 11, 12	Course: 7041
-------------------------	-------------------	--------------------------	---------------------

This course provides students with the opportunity to improve their aerobic fitness through a variety of individual activities. Students will learn fitness concepts, the basics of healthy nutrition, the benefits of physical activity, and the consequences of a sedentary lifestyle. Students will strive to improve their fitness through lifelong activities such as but not limited to walking, weight training, stretching to develop flexibility, interval, and circuit training.

Prerequisite: Sports Education

Photography	1 Credit	Gr. 10, 11, 12	Course: 6301
--------------------	-----------------	-----------------------	---------------------

This course teaches the basic functions of a 35mm SLR (Single Lens Reflex) camera. Students take black and white photographs and use a darkroom to develop negatives and photographs. Students are also introduced to Adobe Photoshop and digital photography techniques and technologies, including scanning images and working with color formats. Instruction is balanced between classroom lecture with research, darkroom and digital application.

Note: Meets ICT and Math Experience requirement. Students must provide their own 35mm SLR camera with manual shutter speeds and aperture capabilities and a digital camera with point and shoot options to change modes and also required is a flash drive with 4GB capacity. It is recommended that students provide their own equipment. The high schools will provide assistance on a case-by-case basis for students without the required personal equipment. May be taken to fulfill the computer requirement or Art but not both.

Physical Condition & Communication Skills	1 Credit	Gr. 9, 10, 11, 12	Course: 9801
--	-----------------	--------------------------	---------------------

This course provides students with severe communication issues an opportunity to use and improve augmentative communication strategies. It also gives students overall muscle conditioning to improve and maintain functional skills for daily living. The overall purpose of this class is to become more functional in other aspect of their day by providing intensive physical and communication support.

Prerequisite: Teacher recommendation.

Physics	1 Credit	Gr. 11, 12	Course: 4053/ 4055/4057
----------------	-----------------	-------------------	--------------------------------



Physics involves the identification and application of natural laws used to describe and explain the physical world around us. Through inquiry-based investigations, students will explore topics in Kinematics, (Motion) and Forces, Momentum and Energy, and Waves, (sound and light)> Students will conduct laboratory experiments, analyze data to draw conclusions, investigate and apply mathematical relationships between variables construct solutions to complex design problems and communicate technical information. Major concepts such as Newton’s Laws and the Laws of Conservation of Energy and Momentum are applied throughout the course to everyday situations.

Note: Meets Math Experience requirement. Meets Physical Science course graduation requirement or Science Experience requirement.

Prerequisite: (F &E) Biology and Geometry; (H) Biology, Geometry and Algebra 2

Piano	0.5/1 Credit	Gr. 9, 10, 11, 12	Course: 6121/6111
--------------	---------------------	--------------------------	--------------------------

Students will survey a variety of skills and techniques applicable to piano keyboarding. These will include hand positions, common patterns, chords, folk tunes and necessary skills for beginning keyboardists. Students will practice further comprehension of properly and effectively using equipment through physical technique, literacy and practice. They will demonstrate how the elements of music are used to achieve unity and variety, tension and release and balance. Students are forming a collection of tools needed for proficiency.

Power Mechanics 1	0.5 Credit	Gr. 9, 10, 11	Course: 5741
--------------------------	-------------------	----------------------	---------------------

Students learn the principles and methods of engine disassembly, inspection and diagnosing causes of breakdown and failure of engine parts. Students specialize in the repair of 2 and 4 cycle engines while learning proper procedure, correct use of tools, safety and test equipment. Power Mechanics is an entry level course preparing the student for a possible career as a mechanic, parts person, salesperson, power equipment technician, designer and automotive service technician.

Note: Meets Math Experience requirement.

Power Mechanics 2	0.5 Credit	Gr. 10, 11, 12	Course: 5841
--------------------------	-------------------	-----------------------	---------------------

Emphasis in this course will be hands-on repair and diagnostic techniques covering the evolutionary development and scientific principles of small engine operation. Engine systems and troubleshooting methods including failure analysis techniques will be presented as well as power transmission and drive trains.

Note: Meets Math Experience requirement.

Prerequisite: Power Mechanics 1.

Practical Mathematics	1 Credit	Gr. 11,12	Course: 3023
------------------------------	-----------------	------------------	---------------------

In this course students will explore mathematical reasoning, applications, and skills used in everyday life. Topics of study include; pattern recognition, data science, functions, problem-solving, graphs, algebra, and geometry.

Prerequisite: Algebra 1, Part 2 or Geometry

Pre-Algebra	1 Credit	Gr. 9	Course: 3013
--------------------	-----------------	--------------	---------------------

This course advances the student from eighth grade mathematics to pre-algebra. After reviewing basic operations, students learn about real numbers and their properties, mathematical modeling that requires equation writing and solving in context, data analysis and statistics and geometry and graphs.

Pre-Calculus	1 Credit	Gr. 10, 11, 12	Course: 3105/3107
---------------------	-----------------	-----------------------	--------------------------



Students study polynomial, rational, trigonometric, circular, logarithmic and exponential functions. Applying, analyzing and modeling data is an integral part of the study of each function.

Prerequisite: Advanced Math Topics or Algebra 2 (H) and Geometry (H/E) for Extension level. Algebra 2 (H) and Geometry (H) for Honors level.

Preparatory Foods	2 Credits	Gr. 9, 10, 11, 12	Course: 9851
--------------------------	------------------	--------------------------	---------------------

This course focuses on the basic skills necessary to effectively participate in kitchen activities. Activities include kitchen and food safety, measuring, shopping, budgeting, coupon use, simple meal preparation, personal hygiene, reading, writing and social skills.

Prerequisite: Case manager/Special Education teacher recommendation.

Principles of Engineering	1 Credit	Gr. 10, 11, 12	Course: 5931/5937
----------------------------------	-----------------	-----------------------	--------------------------

Through problems that engage and challenge, students explore a broad range of engineering topics including mechanisms, the strength of structures and materials and automation. Students develop skills in problem solving, research and design while learning strategies for design process documentation, collaboration and presentation.

Note: Meets ICT or Math Experience or Science Experience requirement.

Prerequisite: Introduction to Engineering Design

Probability & Statistics	1 Credit	Gr. 11, 12	Course: 3257
-------------------------------------	-----------------	-------------------	---------------------



Students will explore probability and simulation and conditional probability. They will learn the major concepts and tools for collecting, analyzing and drawing conclusions from data. How measures of central tendency, dispersion and graphing techniques help us to observe patterns and departures from patterns. Students enrolled in an honors level will learn and perform higher levels of inference including formal tests of significance.

Note: Students may take this course or AP Statistics but NOT both.

Prerequisite: Algebra 2 (E) or (H) for Extension level or Algebra 2 (H) for Honors level.

Public Speaking	1 Credit	Gr. 10, 11, 12	Course: 1455/1457
------------------------	-----------------	-----------------------	--------------------------



Students will overcome stage fright and develop confidence in public communication skills. They study the fundamentals of outlining and researching for a speech and then give speeches of persuasion, demonstration, information and entertainment to classmates. Students put language into action by learning this useful skill.

Prerequisite: English 2

Reading	2 Credits	Gr. 9, 10, 11, 12	Course: 9051
----------------	------------------	--------------------------	---------------------

This class is for nonreaders or students reading below a second-grade level. Course content focuses on sight words and survival vocabulary utilizing basic sound/symbol relationships. It also teaches decoding skills.

Prerequisite: Case manager/Special Education teacher recommendation.

Reading for Success	1 Credit	Gr. 9, 10	Course: 9061
----------------------------	-----------------	------------------	---------------------

This course is for students who are looking for strategies to help comprehend fiction, interpret informational text and analyze a variety of reading content. This course is taken in addition to a regular English course and will not count as one of four required English credits.

Note: Instructor Approval Required.

Robotics Using VEX	1 Credit	Gr. 9, 10, 11, 12	Course: 5951/5957
---------------------------	-----------------	--------------------------	--------------------------

Students will master the fundamentals of science, technology, engineering and math (STEM) by designing robots using VEX EDR and Autodesk, Inventor, Frame Design, electronics, mechanics and integrating systems. Students will utilize mechatronics principles and will allow students to compete in head-to-head competition with their robots. This course is a bridge from middle school robotics into the Engineering Pathway.

Note: Meets ICT or Math Experience or Science Experience requirement.

Select Band	1 Credit	Gr. 10, 11, 12	Course: 6217
--------------------	-----------------	-----------------------	---------------------

Join an instrumentally balanced band and tackle more challenging instrumental music. Students will perform music of varying styles, as well as learning the historical background of the composers. Explore correct instrumental techniques, small ensemble assessments and solo opportunities. Select Band performs with the Band as a combined ensemble for football games, parades and shows. Select Band performs at school and civic functions as well as concerts and competitions. Students are required to participate in all activities and will be encouraged to audition for the NH All-State Festival Ensembles and NH Jazz All-State Bands with the Band Director's permission.

Note: One year of high school level Band and an audition with the Band Director required. Select Band is a performance-based course and may be repeated for credit. This is an A/B block class which means that it will be combined with another class and offered every other day throughout the year.

Small Business Management	1 Credit	Gr. 10, 11,12	Course: 5101/5107
----------------------------------	-----------------	----------------------	--------------------------

Learn what it takes to run a small business! Students develop skills and knowhow needed to successfully operate and manage a small business. This course builds skills and knowledge of business ownership, legal issues, market analysis, business finance/start-up costs, business trends, marketing, and pricing strategies through the development of a business plan on the student's business of choice.

Note: Meets ICT requirement.

Sociology	1 Credit	Gr. 11,12	Course:2353/ 2405/2407
------------------	-----------------	------------------	-------------------------------



Sociology is the study of human group behavior. This course covers topics such as racial, gender and ethnic relations as well as cultural diversity, criminal behavior and marriage and divorce. Learning activities include class discussions, films, experiments, readings and lectures. In addition, students participate in several small group projects involving numerous contemporary social and psychological issues. Since many current careers require working in small groups, students have the opportunity to gain information valuable for both college and employment. This course is highly recommended for those interested in learning how human groups work within our society.

Spanish 1	1 Credit	Gr. 9, 10, 11, 12	Course: 8147
------------------	-----------------	--------------------------	---------------------



Bienvenido! Open the door to new opportunities for travel, work and study. Soon your world will change as you learn a new language and different cultures. You will be able to communicate in Spanish with a focus on your daily life at school, home and with friends.

Spanish 2	1 Credit	Gr. 9, 10, 11, 12	Course: 8247
------------------	-----------------	--------------------------	---------------------



Go beyond the basics in this exciting course that explores housing, the community, health/wellness, and tourism in the Spanish-speaking world. Gain confidence through authentic learning tasks and creative situational problem-solving.

Prerequisite: Spanish 1

Spanish 3	1 Credit	Gr. 9, 10, 11, 12	Course: 8347
------------------	-----------------	--------------------------	---------------------



Where have you been? What did you do? Using the target language, explore past excursions and experience virtual travel to "target language" locations. On your way, you will go shopping, check out the latest fashions, go out to eat, and experience local traditions, customs, and celebrations.

Prerequisite: Spanish 2

Spanish 4	1 Credit	Gr. 9, 10, 11,12	Course: 8447
------------------	-----------------	-------------------------	---------------------



Immerse yourself in the diverse culture of the Hispanic world through exposure to authentic music, literature, films, art, and more. You'll learn to communicate effectively in a variety of social settings and situations through dynamic activities.

Prerequisite: Spanish 3

Spanish 5	1 Credit	Gr. 9, 10, 11, 12	Course: 8547
------------------	-----------------	--------------------------	---------------------



Refine your communication skills in Spanish while exploring historical and contemporary contexts. The use of authentic materials encourages cultural awareness as you deepen your understanding and appreciation of the various aspects of the cultures of the Spanish-speaking world. Enjoy engaging activities such as reading fables, watching films, listening to music, and discussing current events.

Prerequisite: Spanish 4 or Spanish for Heritage Speakers

Spanish for Heritage Speakers 1	1 Credit	Gr. 9, 10, 11, 12	Course: 8747
--	-----------------	--------------------------	---------------------



If you are able to speak and understand Spanish, or you were born in a Spanish speaking country, but then moved to the USA, if you would really like to learn to read and write as well as you speak and understand the Spanish language, this is the course for you! Imagine taking a class in Spanish where you will learn about your language and cultural heritage, meet students with similar interests and experiences, and gain awareness of how Hispanic culture and identity are a thriving, living presence throughout the U.S. Successful completion of this course will help prepare you for Spanish for Heritage Speakers 2, Spanish 5 or AP Spanish.

Prerequisite: Diagnostic placement exam given by the World Languages department

Spanish for Heritage Speakers 2	1 Credit	Gr. 10, 11, 12	Course: 8847
--	-----------------	-----------------------	---------------------



Have you successfully earned credit for Spanish for Heritage Speakers 1? Do you love to read and want to know more about the literature and history of the Spanish language? In this course, you will explore the diversity of the Spanish language, culture and history throughout the Americas and Europe, discover how ancient cultures have shaped our present-day communities and how generations of Hispanic immigrants have enriched the culture, language and history of the United States. Successful completion of this course will help prepare you for Spanish 5 or AP Spanish.

Prerequisite: Spanish for Heritage Speakers 1.

Sports Education	0.5 Credit	Gr. 9	Course: 7011
-------------------------	-------------------	--------------	---------------------

Students will learn personal and social responsibility through participation in a variety of physical activities by emphasizing fair play, teamwork and compassion for teammates. Students will learn to recognize the qualities of positive sport experiences.

Note: Requirement for graduation.

Sports Literature	1 Credit	Gr. 11, 12	Course: 1555
--------------------------	-----------------	-------------------	---------------------

This literature course examines themes in American and international cultures that are prevalent in the world of sports. It also examines the effects sports have on the economic, political and moral fiber of society and how individuals or teams have managed the challenges of competing at high school, college and professional levels. Additionally, the course contains a writing component which requires students to analyze critical themes such as motivation, self-preservation, peer pressure, teamwork, and values. Students should be prepared to complete daily reading assignments and participate in lively and open discussions.

Prerequisite: English 3

Sports Statistics	1 Credit	Gr. 10, 11, 12	Course: 3255/3257
--------------------------	-----------------	-----------------------	--------------------------



In this course, students will learn to use some mathematical tools that can help predict and analyze sporting performances and outcomes. By exploring and evaluating sports data, students will draw conclusions through mathematical analysis and understand how math plays an integral role in the sports we enjoy.

Prerequisite: Geometry

Studio Art	1 Credit	Gr. 10, 11, 12	Course: 6047
-------------------	-----------------	-----------------------	---------------------

This honors level advanced art course is designed for students who are personally motivated and want to challenge themselves within the realm of the visual arts. The course includes both guided instruction and independent learning that covers the areas of drawing, painting, printmaking, and sculpture. Students will create a body of work that may be included in a portfolio for college admission either as an art major or as a supplementary portfolio for other disciplines of study.

Note: Course may be repeated for credit.

Prerequisite: Advanced Drawing

The Roots of Rock & Roll	1 Credit	Gr. 9, 10, 11, 12	Course: 6161
-------------------------------------	-----------------	--------------------------	---------------------

Want to learn about Rock 'n' Roll? How about hip-hop or rap? The popular music cultures? Then this is the course for you! You will listen to music from the 1960's through to the music of today and learn about the culture surrounding these styles of music!

US History	1 Credit	Gr. 11	Course: 2033/ 2035/2037
-------------------	-----------------	---------------	--------------------------------



Investigate the social, political and economic ideas and movements that have shaped modern American society. Emphasis is on the 20th century including topics such as social change, foreign policy and the development of the American culture and character.

Note: This is a required course that fulfills the State requirement for US and NH History. Students cannot take both this and AP US History.

Video Game Programming	1 Credit	Gr. 9, 10, 11, 12	Course: 3401
-------------------------------	-----------------	--------------------------	---------------------

Students will learn the concepts of computer programming including memory management, decision making, looping, objects and lists. We will be using different environments including but not limited to Scratch and Greenfoot. Students will focus on all phases of the game development process including problem solving, analysis, criteria definition, constraints, goals, design, coding, testing and de-bugging. Coding and programming will be done in Java.

Note: Meets ICT or Math Experience requirement.

Prerequisite: Geometry

Video Production & Broadcasting 1	2 Credits	Gr. 11	Course: 5601/5607
--	------------------	---------------	--------------------------

Video production and broadcasting introduce students to all aspects of the media industry. Students learn through hands-on projects how to use our state-of-the-art high definition broadcast facility and Mac computer lab, and learn on industry-standard equipment. Students learn about the art and technology of modern communication while producing award winning projects for the class, the school district and the community. They increase their self-confidence and organizational abilities by learning how to plan and execute projects on their own and in groups. Video production and broadcasting lays a foundation of skills, both technical and career readiness that properly prepares students for the next step of their career in the media industry.

Note: Meets ICT or Math Experience requirement. Course is offered at Nashua High South. North students must travel.

Woman as Hero	1 Credit	Gr. 11, 12	Course: 1545/1557
----------------------	-----------------	-------------------	--------------------------



Students study fiction, poetry, drama, non-fiction and film by women authors of diverse cultural backgrounds and analyze the role of woman as hero. These readings will be grouped according to life stages ranging from childhood to old age. The changing role of women in society is examined through advertising, language, film noir and women's companion films. This honors level course is designed for male and female students.

Prerequisite: English 2

Woodworking 1	0.5 Credit	Gr. 9, 10, 11	Course: 5771
----------------------	-------------------	----------------------	---------------------

Develops basic woodworking skills by completing required projects from drawings. Students perform quality workmanship with both hand and machine tools, following safe practices with all equipment. Students interested in woodworking learn that the following careers are open to them: carpenter, designer, architect, draftsman, cabinetmaker and building material salesperson.

Note: Meets Math Experience requirement.

Woodworking 2	1 Credit	Gr. 11, 12	Course: 5781
----------------------	-----------------	-------------------	---------------------

Delves into an in-depth study of the properties of wood and its use as a building material. The study includes manmade wood products such as plywood, and wafer board, and plastics such as polyethylene, polypropylene, ABS and PVC. Students learn the principles of mass production including research and product development, interchangeable parts and, the use of jigs and fixtures and make use of both wood and plastic in a problem-solving approach to manufacturing products.

Note: Meets Math Experience requirement.

Prerequisite: Woodworking 1.

Work Skills	0.5 Credit	Gr. 9, 10, 11, 12	Course: 9891
--------------------	-------------------	--------------------------	---------------------

Students will gain knowledge and tools to successfully complete work experiences within the school and community. Topics include: goal setting, team building and problem solving. Students participate in performance-based assessments while working throughout the school community. Work jobs may include: laundry, mail and newspaper delivery, washing dishes, recycling and learning the life/job skills necessary to operate a student-run business.

Prerequisite: Case manager/Special Education teacher recommendation.

Work Skills-Semester	1 Credit	Gr. 9, 10, 11, 12	Course: 9901
-----------------------------	-----------------	--------------------------	---------------------

This course teaches students the behaviors/skills associated with life beyond the high school. Topics include: goal setting, problem solving techniques, relationships and team building.

Note: This is not a job placement course.

Prerequisite: Teacher recommendation.

World Studies	1 Credit	Gr. 9	Course: 2013/ 2015/2017
----------------------	-----------------	--------------	--------------------------------



This course builds upon the middle school social studies courses and helps lay a foundation for US History in 11th grade. Beginning with the Enlightenment, World Studies explores the themes of revolution, economic develop and world conflict throughout history. Students will use a variety of primary and secondary source materials to critically analyze the social, political, technological and economic developments that have shaped recent history.

Note: This is a required course that fulfills the State requirement for World History, AP World History also fulfills the State requirement.

Zoology	1 Credit	Gr. 10, 11, 12	Course: 4503/ 4505/4507
----------------	-----------------	-----------------------	------------------------------------

This course explores animal evolution, animal classification, adaptation and various aspects of animal physiology and comparative anatomy. Students investigate living and preserved animals and carry out laboratory activities which may include insect collection, animal project, microscope labs and selected dissections.

Note: Meets Science Experience requirement.

Prerequisite: Biology and a Physical Science course.

Courses Available at Alvirne High School

The following courses are available to students at both Nashua High School North and South. Students must fill out an application for the first year of the program and be able to complete the two-year program. The application must be turned into the NTC Director's office in the Career Center. Students taking classes at Alvirne are required to take the bus provided for the trip to and from Alvirne.

Application is required. No students will be allowed to use private automobiles for transportation. Students will miss a significant amount of Nashua class time due to travel. Please see your school counselor for more information. Students MUST successfully complete all year one competencies to advance to year two.

Forest and Wildlife Management 1	Full Year Course	2 Credits	Gr. 10,11	AL5731
---	-------------------------	------------------	------------------	---------------

This course is designed for students with an interest in a career in the outdoors. Through real-world hands-on projects, students will actively manage Alvirne's 126-acre registered NH Tree Farm. Course activities will immerse students in forest ecosystem science and management activities including; tree and shrub identification, forest health issues, wildlife studies, natural resource inventories, recreation and habitat improvements, and the harvesting and production of forest products including maple syrup production, lumber, and cordwood. Operation and maintenance of machinery is a significant component of this course and includes; chainsaws, tractors, portable sawmill, grapple loader, wood splitter, and wood chipper. Other topics cover history of conservation, environmental laws, and career readiness activities through involvement in the FFA. Considerable amount of time will be spent outdoors in this course in all weather conditions and steel toed boots are required. This course prepares students for entry level work or further education in a variety of outdoor occupations in the broad field of environmental conservation science and management, and the tree care industry.

Note: Steel-toed boots are required.

Forest and Wildlife Management 2	Full Year Course	2 Credits	Gr. 11,12	AL5831
---	-------------------------	------------------	------------------	---------------

This course is a continuation of Forest & Wildlife Management I. In year two, second year students will be required to demonstrate foundational skills and knowledge, and build upon them through completion of more independent learning projects. Year two students will be involved in the development and implementation of the Tree Farms Forest Management Plan and community wide conservation projects, including conducting natural resource inventories, remote sensing and satellite image interpretation, resource mapping with drones, Geographic Information Systems (GIS), global positioning systems (GPS), and other cutting-edge technologies used in the field of forest and wildlife management.

Note: Steel-toed boots are required.

Prerequisite: Successful completion of Forest and Wildlife Management 1.

Heavy Duty Mechanics Tech 1	Full Year Course	2 Credits	Gr. 11	AL5671
------------------------------------	-------------------------	------------------	---------------	---------------

This course is designed to give students an understanding of large diesel and gasoline engines as related to construction and agricultural equipment. Subject areas include: equipment operation and maintenance, theory of engine operation, engine overhaul, hydraulics, power train, operation, welding, diagnostics and troubleshooting. Safety will be stressed in all aspects of the course. Students will apply what they learn by gaining practical experience in the heavy equipment shop. Students can apply what they learn to help them with careers in mechanics, agriculture, construction or trucking.

Note: Students MUST successfully complete all year one competencies to advance to year two.

Heavy Duty Mechanics Tech 2	Full Year Course	2 Credits	Gr. 12	AL5681
------------------------------------	-------------------------	------------------	---------------	---------------

This course allows students to apply and expand upon skills and knowledge gained in the first year of the program. Students will work on construction and agricultural equipment performing repairs, overhaul, diagnostics, and troubleshooting. Students will become independent through projects requiring record keeping, disassembly, analysis, replacement of parts, and final reassembly to a working condition. Students will troubleshoot basic diesel engine malfunctions using the latest computer technology. This course will help prepare students for an entry level job in heavy equipment maintenance or a technical school program in mechanics.

Prerequisite: Successful completion of Heavy-Duty Mechanics 1.

Natural Resources 1	Full Year Course	2 Credits	Gr. 10 -12	AL5870
----------------------------	-------------------------	------------------	-------------------	---------------

To conserve, manage and protect the biodiversity of our planet is critical for human survival. The management of Earth's natural resources is essential to keeping our communities safe from need in the 21st century, ensuring we have water to drink, food to eat, air to breathe, and materials for shelter. Activities covered in this course include identification and classification of plants and animals, forest & wildlife ecology & management, invasive species, biodiversity & habitat loss, climate change, and alternative energies. Considerable class time will take place outdoors where students will be involved in hands-on learning in Alvirne's 126-acre registered NH Tree Farm. Students will be introduced to a verity of tools and technologies used in natural resource management and conservation, including remote sensing with satellites and drones, computer-based mapping with Geographic Information Systems (GIS), and handheld Global Positioning Systems (GPS).

Natural Resources 2	Full Year Course	2 Credits	Gr. 11 -12	AL5871
----------------------------	-------------------------	------------------	-------------------	---------------

This course is a continuation of Natural Resources 1 with a strong focus on sustainability. In year two, students will have the opportunity to pursue interests in Fish & Game, aquaponics, greenhouse management and alternative energy. The Alvirne Tree Farm and greenhouse will continue to serve as the main laboratory spaces for the class, however student projects could take them to locations across the region. The course will continue to use a variety of tools and technologies used in natural resource management and conservation, including remote sensing with satellites and drones, computer-based mapping with Geographic Information Systems (GIS), and handheld Global Positioning Systems (GPS). Students will be encouraged to pursue industry recognized credentials such as OSHA 10 and Wilderness First Aid.

Prerequisite: Successful completion of Natural Resources 2.

Veterinary Science 1	Full Year Course	2 Credits	Gr.10- 11	AL5631
-----------------------------	-------------------------	------------------	------------------	---------------

The first year of this two-year program introduces students to the applied principles and practices used in small and large animal related business with special emphasis on veterinary medicine. Students will explore concepts through hands-on experiences working with Alvirne's kennel animals such as chinchillas, rabbits, guinea pigs, ferrets, rodents, and birds along with our large animal species including donkeys, dairy cattle, and horses. Topics will also include safety, animal behavior, breed and species identification, animal health, welfare and client relations. Through continuous exposure to animals on the school farm and small animal facility, students will develop hands-on skills in handling, restraint, grooming, feeding, cleaning/disinfection, training and record keeping. Students will develop skills in professional telephone etiquette and customer service. Students will also be required to complete 12 hours of community service in an animal related service project. Students enrolled in Alvirne's Veterinary Science Program will have the opportunity to earn both high school credits and college credits simultaneously with a partnership with Great Bay Community College and SUNY at Cobleskill. The Veterinary Science curriculum will also enable students to develop their leadership skills and veterinary skills and opportunities through their involvement in the State and National Youth FFA organization including participation in the Veterinary Science Career Development Event (Competition). This course will provide students with entry level skills and knowledge for employment as veterinary assistants, pet shop workers, humane society assistance or assistant groomers.

Prerequisite: Successful completion of Biology or teacher approval required. Sophomores considering taking Vet Science must have teacher approval; prior to enrolling. Algebra 1 skills will be required in this program. Students **MUST** successfully complete all first-year competencies to advance to the second year of this program.

Veterinary Science 2	Full Year Course	2 Credits	Gr. 12	AL5641
-----------------------------	-------------------------	------------------	---------------	---------------

In the second year of the Veterinary Science program students will continue to build on their knowledge and skills gained in the first year. Using the kennel's small and large animal species, advanced topics in veterinary science 2 will include nutrition and anatomy, health and diseases, veterinary medical terminology, and entrepreneurship. Hands-on skills will be developed in feed selection, laboratory procedures (I.e. fecal analysis, blood, and urine analysis), animal health and disease protection, such as vaccinations, deworming, grooming, physical exams, office skills, equipment identification, and business management. Students will also be required to complete 12 hours of community service in an animal related service project. Students enrolled in Alvirne's Veterinary Science Program will have the opportunity to earn both high school credits and college credits simultaneously with a partnership with Great Bay Community College and SUNY at Cobleskill. The Veterinary Science curriculum will also enable students to develop their leadership skills and veterinary skills and opportunities through their involvement in the State and National Youth FFA organization including participation in the Veterinary Science Career Development Event (Competition). With the completion of this program, a student's potential for success in a post-secondary education or in an entry level job in an animal science field is greatly enhanced. Students successfully completing Veterinary Science I and 2 with a C+ or better can earn 2 college credits at Great Bay Community College through Running Start or may earn articulation credits toward SUNY at Cobleskill.

Note: A chemistry course taken previously or concurrently is strongly recommended for Veterinary Science 2. Students who complete both years of the Veterinary Science program with a 1 and 2 may earn 3 college credits at Great Bay Community College.

Prerequisite: Successful completion of Veterinary Science I.

Welding and Fabrication 1	Full Year Course	2 Credits	Gr. 10, 11, 12	AL5791
----------------------------------	-------------------------	------------------	-----------------------	---------------

Students will learn to arc weld in the flat position, utilize an oxy-acetylene torch for cutting metal and learn basic MIG skills. Through various exercises students will select the proper welding materials and demonstrate appropriate techniques. This course is useful for any student planning a career in the fields of mechanics, engineering, agriculture, construction, machine trades, or civil technology. Students MUST successfully complete all competencies to advance to Welding II. Grade 10 & 11 students will be given priority when scheduling.

Welding and Fabrication 2	Full Year Course	2 Credits	Gr. 11, 12	AL5801
----------------------------------	-------------------------	------------------	-------------------	---------------

In year two of the welding program students will delve into advanced MIG, TIG, and stick welding skills. Using torch and plasma cutters students will develop their own self-directed projects to encourage growth of welding skills and to connect program contents to real life applications. Students will use oxy-fuel, shielded metal arc, metal inert gas, gas tungsten arc, gas metal arc, and plasma metal arc equipment to develop real-world skills in a controlled environment. Students will build partnerships with business and community members to help master skills.

Prerequisite: Successful completion of Welding and Fabrication 1.



2025-2026

SECTION 5

Programs and Services

Programs and Services

Nashua High School South and Nashua High School North offer a variety of programs and services that complement our program of study. These programs and services enable the administration and staff to provide additional opportunities to meet the individual and special needs of our student body. The integration of these programs and services will improve the overall performance of the students in their schoolwork.

English Language Learners (ELL)

The Nashua School District's policy for instruction of students for whom English is a second language is one of immersion in the school program. This immersion is supplemented by instruction in the ELL program until the student attains a demonstrated status of functional English proficiency. At this time, the student is transitioned from the ELL program and is provided with support while eventually achieving an instructional level appropriate for the student's grade placement. Communication will occur between the home and the school to promote understanding of the ELL program and to assist students in adjusting to the school environment. Whenever possible, this communication will be in the language spoken at home.

Ingles Como Segundo Idioma

Este curso ofrece inmersión en el inglés para los estudiantes cuyo primer idioma no es inglés. Esta inmersión se ofrece junto con clases especializadas en el lenguaje inglés hasta que el estudiante logra demostrar dominio del idioma. Cuando el estudiante logra dominio del idioma inglés pasa a tomar clases regulares con ayuda adicional para que el estudiante pueda seguir teniendo éxito en sus cursos regulares y al nivel del grado en que está. Hay coordinación de servicios entre las escuelas y el hogar para asegurar buena comunicación y éxito académico. Cuando es posible esta comunicación se lleva a cabo en el idioma que se habla en el hogar.

Library Media Services

The mission of the school Library Media Center is to ensure that students are effective users of ideas and information. Through collaborative efforts between the teachers and the library media specialists, learning activities are integrated into the curriculum to help students achieve information literacy. Information skills include the selection, use, evaluation and presentation of information. The Library Media Center collection consists of a wide variety of materials selected to support the curriculum. These include books, periodicals, databases and audio-visual materials. Most items may be borrowed through the use of the student's identification card. Our various online databases, which can be accessed from both school and home, provide full-text articles from magazines, newspapers, academic journals and reference books. Students have access to the district's computer network and the internet through individual accounts. All students must sign and abide by the Nashua School District's Responsible Use Guidelines.

Special Education

Special Education services are tailored to the educational needs of students according to their individual education plans (IEP). If an educational disability is suspected of interfering with academic success, students should be referred to their school counselor or administrator for further review.

Student Extracurricular Activity Eligibility – Academic Expectations

To be eligible for extracurricular activities, a high school student athlete and/or student participating in an extracurricular activity must have, for the prior grading period, an overall "C-" average and have no more than one non-passing grade in subjects during that prior grading period. It is quarter grades, not semester or final grades that determine academic eligibility.

Advanced Placement Program

Advanced Placement courses are designed to challenge highly motivated students who have demonstrated exceptional academic ability and who wish to study at the college level while still in high school.

The College Board provides tests for all Advanced Placement courses. These tests are administered during the month of May. Students must register to take the AP exam in advance and pay the required fee. Information is available in the Guidance Department. If this fee will cause financial hardship, students should contact their school counselor for information about financial assistance. In order to be considered for college credit or college standing, students must satisfactorily complete these tests. Students enrolled in AP courses should check with the college of their choice to receive information concerning the college's policy regarding Advanced Placement credit or/or standing.

Please note that only courses which have adequate enrollment will run. Students are encouraged to discuss taking AP courses with their parents, school counselors and teachers. All students who participate in Advanced Placement courses are expected to take the Advanced Placement exam which is administered in May.

Extended Learning Opportunities

The Nashua Board of education allows high school students to pursue extended learning opportunities (ELO) as a means of acquiring knowledge and skills through instruction or study that is outside the traditional classroom methodology.

Extended learning opportunities may include, but are not limited to,

- College/University classes
- independent study (to learn more about a topic that excites them which they want to explore deeply),
- internships (to gain practical experience in a potential career or academic field of study),
- Community service (to volunteer to serve our community in a meaningful way),
- Apprenticeships (to learn a craft from a skilled worker), or
- Other opportunities approved by the Superintendent or his/her designee, in conjunction with Board policies.

The purpose of extended learning opportunities is to provide educational experiences that are meaningful and relevant, and that provide students with opportunities to explore and achieve at high levels. In order to maximize student achievement and meet diverse pathways for learning, this policy permits students to employ extended learning opportunities that are stimulating and intellectually challenging, and that enable students to fulfill or exceed the expectations set forth by state minimum standards and applicable Board policies.

<http://www.nashua.edu/Nashua/Media/PDF-files/Policies/IHBH-EXTENDED-LEARNING-OPPORTUNITIES.pdf>

Extended learning opportunities may be taken for credits or may be taken to supplement regular academic courses.

Extended learning opportunities may also be used to fulfill prerequisite requirements for advanced classes. If the extended learning opportunity is taken for credit, the provisions of Policy IMBC, alternative Credit Options, will apply (<http://www.nashua.edu/Nashua/Media?PDF-files/Policies/IMBC-Alternative-Credit-Options.pdf> and <http://www.nashua.edu/Nashua/media/PDF-files/Policies/Nashua-Board-of-Education-Policy-ILBA.pdf>) and ILBAA, High School competency Assessments (<http://www.nashua.edu/Nashua/Media/PDF-files/Policies/ILBAA-High-School-Competency-Assessments-revised-02-19-2009.pdf>).

Courses approved by the NCAA will have this symbol next to them:



For more information, see your School Counselor.

Online Education

The Board encourages students to take full advantage of on-line education opportunities as a means of enhancing and supporting their education. Online education means internet/online/virtual or other similar media that provides educational courses as a means to fulfill curriculum requirements. Such opportunities, including responsibilities for associated costs, will be implemented under the provisions set forth in Policy IMBC, alternative credit options, will apply.

Students must have their application for online education courses pre-approved by the Director of School Counseling in order to receive credit. Once written approval has been given, the course will become part of the student's transcript and upon conclusion of the course the grade earned will also become part of the student's transcript but will not be factored into the calculation of the student's GPA. Credit for the course is not recognized until an official record of the final grade has been submitted to the principal or designee. Approved online courses may be taken whether they align with the district calendar or not.

A full description of the policies and procedures linked to online education can be found at <http://www.nashua.edu/Nahsua/Media/PDF-files/Policy/IMBA-On-Line-Education.pdf>

Dual Enrollment and Project Running Start Credit

Nashua High School North and South provide opportunities for students to earn college credit through either Dual Enrollment or Project Running Start.

The Dual Enrollment Program:

- Students will receive both high school and college credit for a course.
- Dual Enrollment credits may be transferred to other colleges and universities throughout the country.
- All participating students are recognized as a Nashua Community College, NHTI-Concord's Community College, Great Bay Community College, or Manchester Community College student and will have access to many college resources such as their library.

Project Running Start:

- College credit awarded in high school
- Reduced tuition costs.
- Minimal, if any, costs for textbooks and course materials

Please note that course sections of the course taught by a College Approved Instructor will qualify for college credit. Placement with a Running Start teacher is not guaranteed.

For more information on Dual Enrollment or Running Start, please contact the Career Center Coordinator

The awarding of credit and who is eligible to earn the credit is determined by the college.

