

# FOOTSTEPS TO THE FUTURE

Nashua High School North

Nashua High School South

Home of the  
Nashua Technology Center

**2021-2022**



PROGRAM OF STUDIES

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If you need assistance reading this document in either Spanish or Portuguese, please contact the Office of Student Services and ELL at 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.*

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# Program of Studies

This Program of Studies contains very specific information about courses, programs, and services offered at Nashua High School North and South. Concise course descriptions are presented alphabetically in Section 3.

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 is divided into four sections which 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, por favor llame Claudia 966-1214 NHS South or 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
Course Enrollments and Cancelled Courses Policy and Procedures .....	13
How to Select Your Courses and Develop the 4-Year Plan .....	14
Course Levels .....	14
NH Scholars.....	15
Competency-Based Learning .....	16
Student Progress.....	20
E-Block .....	22
SECTION 2 .....	23
Career Pathways .....	23
SECTION 3 .....	27
Departments and Course Sequencing .....	27
Air Force JROTC.....	29
Computer Science .....	30
English-Language Arts.....	31
ELL – English Language Learners.....	33

Fine and Performing Arts .....	34
Mathematics .....	36
Physical Education and Health.....	40
Science .....	41
Social Studies .....	45
Special Education .....	48
World Languages .....	49
Nashua Technology Center .....	51
Alvirne High School Courses .....	62
SECTION 4 .....	64
Course Descriptions .....	64
SECTION 5 .....	121
Programs and Services .....	121
Programs and Services.....	123
English Language Learners (ELL) .....	123
Library Media Services.....	123
Driver Education .....	123
Special Education .....	124
Student Extracurricular Activity Eligibility – Academic Expectations.....	124
Attention Athletes -NCAA Approved Courses .....	124
Advanced Placement Program.....	124
Personalized Learning .....	125
Nashua Center for Lifelong Learning .....	125
Extended Learning Opportunities .....	125
College Courses/Dual Enrollment .....	127
Online Education.....	128
Dual Enrollment and Project Running Start Credit .....	128
SECTION 6 .....	129
School Counseling Department .....	129



2021-2022

# SECTION 1

Introduction and Course  
Selection



Nashua's High School  
**Contact Information**

**District Website:** [www.nashua.edu](http://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?** Email addresses are normally the last name, first initial @nashua.edu . For example, John Smith would be [smithj@nashua.edu](mailto:smithj@nashua.edu)

	<b>Nashua High School North</b>	<b>Nashua High School South</b>
<b>General Information</b>	<a href="http://www.nashua.edu/north">www.nashua.edu/north</a> <a href="tel:603-966-2500">603-966-2500</a>	<a href="http://www.nashua.edu/south">www.nashua.edu/south</a> <a href="tel:603-966-1100">603-966-1100</a>
<b>Principal</b>	Nathan Burns <i>Assistants: Jean Inzerillo/ 966-2502 Denise Petz/966-2450</i>	Keith Richard <i>Assistants: Moriah Hallam/966-1102 Isa Ross/966-1104</i>
<b>Assistant Principals</b>	Jason Lonergan/966-2523 Peter Schmidt/966-2573 Heidi Paris/966-2923 Michael Whitehead/966-2873	Nicholas Audley/966-1213 Phil Derosa/966-1153 Lesa McQuesten/966-1403 Dennis Hamilton/966-1343
<b>Directors</b>	Jackie Hackett/966-2506 School Counseling Lisa Gingras/966-1491 Athletics/HE/PE Dorothy O'Gara/966-2633 Nashua Tech Ctr Laurie Rothhaus/966-1154 Adult Ed	Lori Coutu/966-1106 School Counseling Lisa Gingras/966-1491 Athletics/HE/PE Dorothy O'Gara/966-1113 Nashua Tech Ctr Laurie Rothhaus/966-1154 Adult Ed
<b>School Counselors</b>	Karyn Wojtas/966-2478 Tina Hamilton/966-2545 Zach Harris/966-2544 Renee Crowell/966-2898 Denise Oujaimi/966-2872 Rob Moreau/966-2897 Sandra Bent/966-2477	Nancy Duffy/966-1215 Jessica Brox/966-1217 Lindsey Albert/966-1155 Joe, Miller/966-1157 Linda Sellner/966-1345 Scott Jaquith/966-1347 Alyssa Medico/966-1404
<b>Department Heads</b>		
Nashua Technology Center	Christopher Knoetig/966-2629	Kathryn Tremblay/966-1327
English Language Learners	Robert Cioppa/966-1010	Robert Cioppa/966-1010
English	Samantha McElroy/966-2512	Susan Rourke/966-1246
Health/PE	Jason Robie/966-2961	Jason Robie/966-2961
Mathematics	James Graham/966-2863	Kellie Gabriel/966-1185
Media Center	Heidi Grant/966-2602	Sharon Flesher-Duffy/966-1298
Science	Cheryl Meesig/966-2670	Naomi Hall/966-1369
Social Studies	Ami Rich/966-2919	Alice Regneri/966-1435
Special Education	Susan Chmura/966-2800	Ann Wagner/966-1124
World Language	Leslie Anton/966-2864	Jayne Wing/966-1434
Art	Angela Walsh/966-1131	Angela Walsh/966-1131
Music	Thomas Souza/966-3990	Thomas Souza/966-3990

## Graduation Requirements

The Nashua School District offers a three-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 Diploma with Distinction requires 32 credits, Proficient with Distinction on State Assessment, 92% attendance and a 3.0 GPA. Please see policy IKF.

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 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>	All Math courses count with the exception of Computer Science courses. <i>3 math credits and one math experience are required for graduation.</i> Students must have a math experience every year of high school.
Physical Science	1	Physical Science is a prerequisite for all science courses and is taken freshman year. <i>Students may submit a Physical Science Portfolio for approval to determine advanced standing and course credit in lieu of taking Physical Science.</i>
Biological Science	1	Biology is required for graduation.
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.
Physical Education	1	Sports Education is required. Fit for Life or Personal Fitness are also required.
Health	0.5	Health 1
Electives	12.5 or 5.5	12.5: Standard Diploma      5.5: 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.

<b>Course #</b>	<b>Course</b>	<b>Credit</b>
5001	Accounting Fundamentals	1
5041	Advanced Accounting Topics	1
5047	Advanced Accounting Topics (H)	1
6311	Advanced Photography	1
3509	AP Computer Science A	1
6239	AP Music Theory	1
5221	Automotive Technology 1	2
5231	Automotive Technology 2	2
5237	Automotive Technology 2 (H)	2
5261	Biotechnology & Biomedical Science 2	2
5267	Biotechnology & Biomedical Science 2 (H)	2
5391	Business Finance 1	1
5397	Business Finance 1 (H)	1
5411	Business Finance 2	1
5417	Business Finance 2 (H)	1
5271	CADD 1	2
5277	CADD 1 (H)	2
5027	College Accounting 1 (H)	1
5037	College Accounting 2 (H)	1
5921	Computer Integrated Manufacturing	1
5927	Computer Integrated Manufacturing (H)	1
5561	Computer Networking & Cyber Security 1	2
5567	Computer Networking & Cyber Security 1 (H)	2
5431	Design and Visual Communications 1	2
5437	Design and Visual Communications 1 (H)	2
5061	Desktop Publishing	1
5067	Desktop Publishing (H)	1
5501	Digital Life	0.5

<b>Course #</b>	<b>Course</b>	<b>Credit</b>
3361	Discovering Computer Science	1
5241	Drone Technology	1
5401	Financial Services Internship	1
5761	Graphic Design 1	0.5
5051	Introduction to Business	0.5
5551	Intro to Engineering Design	1
5537	Intro to Engineering Design (H)	1
3307	Java Programming (H)	1
5501	Manufacturing and Machine Technology 2	2
5507	Manufacturing and Machine Technology 2 (H)	2
5541	Marketing 2	2
5547	Marketing 2 (H)	2
6147	Music Theory (H)	1
6301	Photography	1
5901	Personal Finance	0.5
5931	Principles of Engineering	1
5937	Principles of Engineering (H)	1
5951	Robotics Using Vex	1
5957	Robotics Using Vex (H)	1
5101	Small Business Management	1
5107	Small Business Management (H)	1
5071	Software Application	1
3401	Video Game Programming	1
5601	Video Production	2
5607	Video Production (H)	2
3355	Web Page Design (E)	1
3357	Web Page Design (H)	1

### 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. In addition to mathematics classes the following courses will satisfy this requirement:

Course Number	Course Name
5001	Accounting Fundamentals
5041/ 5047	Advanced Accounting Topics
0631/0671	AFJROTC Exploring Space 4A or 4B
4159	AP Chemistry
3509	AP Computer Science
2569	AP Macroeconomics
2559	AP Microeconomics
4059/4109	AP Physics 1 or 2
2309	AP Psychology
5221/5231/5237	Automotive Technology 1 or 2
5251/5257/5261/5267	Biotechnology & Biomedical Science 1 or 2
5391/5397/5411/5417	Business Finance 1 or 2
6201	Ceramics
4153/4155/4157	Chemistry
5027/5037	College Accounting 1 (H) & 2 (H)
5271/5277/5281/5287	Computer Aided Drafting Design (CADD 1 or 2)
5921/5927	Computer Integrated Manufacturing
5291/5301/5307	Construction Technology 1 or 2
5332/5337/5341/5347	Culinary Arts 1 or 2
3361	Discovering Computer Science
2063/2065/2067	Economics
5371/5381	Electrical Technology 1 or 2
5841/5947	Engineering Design and Development
5161	Exploring Contemporary Cooking
5401	Financial Services Internship
5171	Food Technology
5761/5861	Graphic Design 1 or 2
5511/5521	Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR 1 or 2)
5051	Introduction to Business
5551/5557	Introduction to Engineering Design

**Math Experience - Continued**

<b>Course Number</b>	<b>Course Name</b>
3307	Java Programming
5491/5501/5507	Manufacturing and Machine Technology 1 & 2
5821	Marine Robotics
5541/5547	Marketing 2
5201	On Your Own
5901	Personal Finance
6301/6311	Photography or Advanced Photography
4053/4055/4057	Physics
5741/5841	Power Mechanics 1 or 2
5931/5947	Principles of Engineering
5951/5957	Robotics Using Vex
3401	Video Game Programming
5601/5607/5611/5617	Video Production and Broadcasting 1 or 2
3357	Web Page Design
5771	Woodworking 1
5781	Woodworking 2

## Course Enrollments and Cancelled Courses Policy and Procedures

The Board of Education's policy guidelines for course enrollments state that a minimum enrollment of 20 students will be required in order to offer a course that is non-sequential. A minimum enrollment of 14 students is required for sequential and advanced placement single section courses. Lab courses with a maximum class size of 24 will not be scheduled unless there are at least 17 students requesting them.

Courses are subject to cancellation due to insufficient enrollment and/or funding.

### Steps to Course Selection

1. Review the graduation requirements.
2. Decide on the courses that you want to take next school year. There are several ways you can get information on courses.
  - a) Course tables by departments
  - b) Course descriptions in alphabetical order
  - c) Advanced Placement Course table
  - d) Running Start Dual Enrollment and Articulation courses (high school classes that offer college credit)
3. Note the length of the course (quarter, semester or full year). Quarter courses need to be paired with another quarter class.
4. Note the level of difficulty of the course:  
*Advanced Placement (AP); Honors (H); Extension (E); Foundation (F)*
5. Note the course Pre-requisites or sequences.
6. Go to on-line registration at: [x2.nashua.edu](http://x2.nashua.edu)
7. If you need further assistance, please contact a counselor.

LENGTH OF COURSE	CREDIT VALUE
Quarter Course * (Q)	.50
Semester Course (S)	1
Full Year Course (Y)	2

\*Note: A quarter class always needs to be scheduled with another quarter class.

## 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 first five days of the semester 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 keep 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 weighted GPA: English, Mathematics, Science, Social Studies (except Military History), World Languages, and Computer Science (except for the state-mandated computer course). Additionally, CTE and Music classes at the Honors level count toward weighted 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.

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: Project Lead the Way 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 Contemporary Global Studies Any AP Social Studies course NTC Courses: Marketing Computer Networking Careers in Education Business Finance
World Language	2 Years of the same language	French Spanish German Latin Spanish for Heritage Speakers
<i>Note: Non-native English speakers are waived from the World Language requirement.</i>		

## 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 a 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		
<b>A+</b>	✓	✓	✓	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.
<b>A</b>					
<b>A-</b>					
<b>B+</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</b>					
<b>B-</b>					
<b>C+</b>	✓	✓	✓	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.
<b>C</b>					
<b>C-</b>					
<b>IP</b>	✓	✓	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.
<b>NE</b>	✓	✓	X	No Evidence	The student has not submitted evidence to demonstrate an acceptable level of competencies.
<b>NYA</b>		✓		Not Yet Assessed	This competency will be assessed at a later date.
<b>D</b>	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.
<b>NC</b>	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.
<b>F</b>	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 “21<sup>st</sup> 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.

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

### 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.

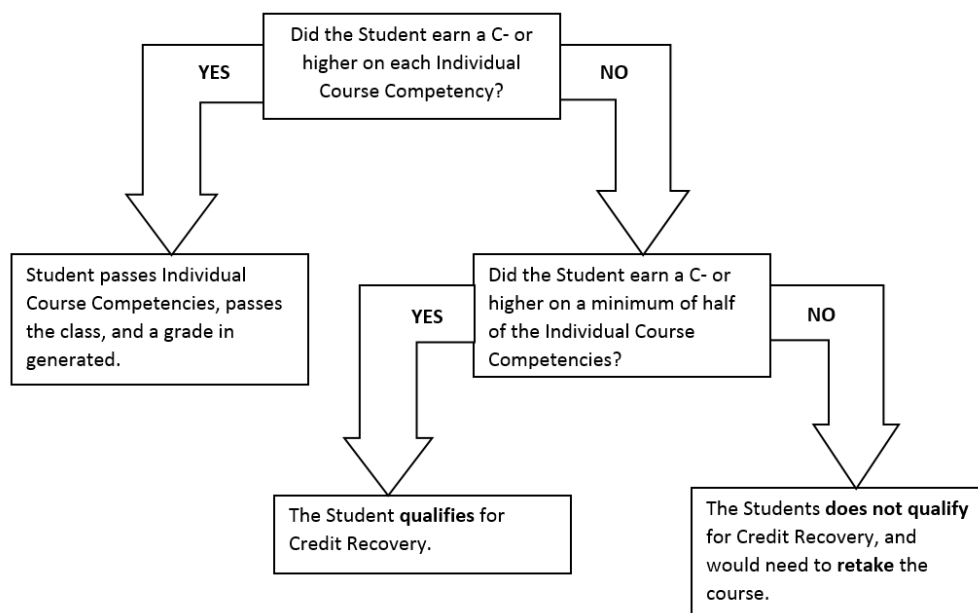
**Formative Assessments:** A formative assessment is used to gauge a student's level of understanding, as well as guiding the teacher's instruction. These are assessments that could be formal or informal, and are given during the learning process as practice. Examples include: practice problems, reading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

### **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 with 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.

### Grade Point Average:

Student grade point averages (GPA) are calculated using a WEIGHTED and UN-WEIGHTED method.

The UN-WEIGHTED GPA is based on all courses taken at Nashua High School North and/or South using a 4.20 scale (see "Foundation" column).

The WEIGHTED GPA is based on all courses that carry a weight of Foundation, Extension, or Honors that are taken at Nashua High School North and/or South. Students earn quality points based on the grade and level of the class. For example. For a grade of B in an extensions class a student would earn 3.8 quality points.

OVERALL GPA is calculated using the following formula:

*Total number of quality points earned divided by total credit attempted*

Course Grade Weights				
Letter Grade	Foundation	Extension	Honors	Advanced Placement
A+	4.20	4.60	5.00	5.40
A	4.00	4.40	4.80	5.20
A-	3.80	4.20	4.60	5.00
B+	3.60	4.00	4.40	4.80
B	3.40	3.80	4.20	4.60
B-	3.20	3.60	4.00	4.40
C+	3.00	3.40	3.80	4.20
C	2.80	3.20	3.60	4.00
C-	2.60	3.00	3.40	3.80
D+	2.40	2.80	3.20	3.60
D	2.20	2.60	3.00	3.40
D-	2.00	2.40	2.80	3.20
F	0.00	0.00	0.00	0.00

### Class Rank

To receive class rank a student must have attended Nashua High School North and/or South for at least 4 consecutive semesters on a full time basis. Grade point averages are calculated along with class rank beginning in junior year and are recalculated annually. Students receive a weighted as well as an un-weighted class rank and may report either when applying to college

### Grade Promotion, Retention, and Acceleration

At the high school, grade level is determined by the number of credits (see Policy IKF for high school graduation requirements) earned by the individual student prior to the start of the next school year. The following represents credit acquisition for the majority of students through the standard, academic diploma.

- For the sophomore class, a student must have a minimum of 6 credits;
- For the junior class, a student must have a minimum of 13 credits;
- For the senior class, a student must have a minimum of 19 credits;

## **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 – library will be available for students to complete research and other library services.
- Peer tutoring and mentoring
- 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 Planning, Resume Writing, Career Planning, Naviance, Course Selection and other topics are discussed.



2021-2022

# SECTION 2

## Career Pathways



Nashua High School





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**

#### **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



2021-2022

# 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. 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.

<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>
AFJROTC1A: Aviation History	1	Non-leveled	S	None
AFJROTC1B: Aviation History	1	Non- leveled	S	None
AFJROTC2A: Science of Flight	1	Non-leveled	S	None
AFJROTC2B: Science of Flight	1	Non-leveled	S	None
AFJROTC3A: Cultural Studies	1	Non-leveled	S	None
AFJROTC3B: Global Awareness	1	Non-leveled	S	None
AFJROTC4A: Exploring Space	1	Non-leveled	S	None
AFJROTC4B: Exploring Space	1	Non-leveled	S	None
AFJROTC5: Management of the Cadet Corps	1	Non-leveled	S	SASI recommendation only
AFJROTC6: Survival	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 to 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
3307	Java Programming (H)	1	Honors	S	Geometry E/H	Meets ICT requirement and Math Experience requirement
3355	Web Page Design (E)	1	Extension	S	Geometry E/H	May take concurrently with Geometry E/H; Meets ICT requirement and Math Experience requirement
3357	Web Page Design (H)	1	Honors	S	Geometry E/H	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	1	AP	S	Successful completion of JAVA and Pre-Calculus or currently taking Pre-Calculus	Meets ICT requirement and Math Experience requirement

## English-Language Arts

### Graduation Requirements & Sequence of English Courses

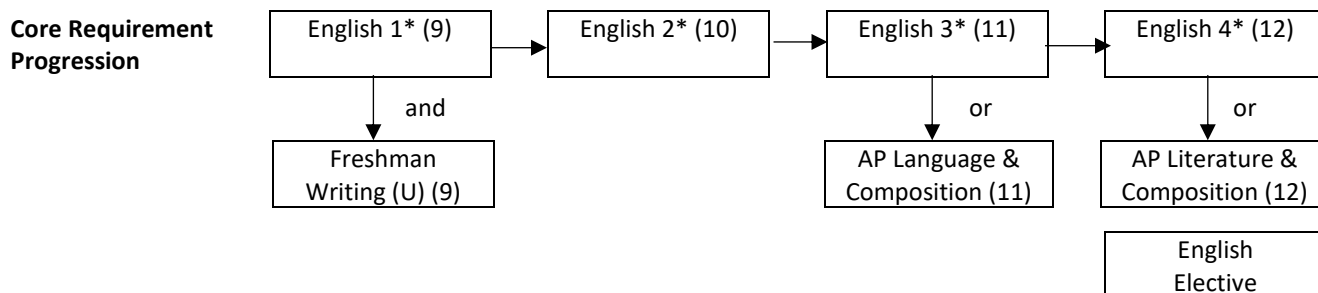
The minimum graduation requirement in English is 4 credits. It is required that all students take at least one credit of English each year. Students may take English electives in addition to the required sequence of classes.

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
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### 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 for Grades 11 & 12

Challenges Facing Today's Teens (E)

Fantasy & Science Fiction (F, 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)

Contemporary 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-leveled	*=offered at F, E, H levels	(#)=year taken
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### 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		
1103	Fantasy & Science Fiction	1	Foundation	S	English 3	
1107	Fantasy & Science Fiction (H)	1	Honors	S	English 3	
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 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	Contemporary Global Lit	1	Foundation	S	English 2	
1625	Contemporary Global Lit (E)	1	Extension	S	English 2	
1627	Contemporary Global Lit (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 another language. Participation in the program is determined by the ELL staff, based on the student's English language proficiency. The goal of the program is to develop English communication and cognitive academic language skills so that the students can achieve success and assimilate into the school community.

*El programa de ELL (Ingles como Segundo idioma) es un programa de instruccion para estudiantes que hablan otro idioma. Los maestros determinan si un estudiante califica para estar en el programa. El objetivo del programa es el desarrollo de la comunicacion y las destrezas academicas y cognitivas del lenguaje para que los estudiantes puedan lograr exito e integracion en la comunidad escolar.*

*O programa de ingles como Segunda lingua (ELL) e um programa de instrucao para alunos que falam outra lingua. A participacao no programa e determinada pelo pessoal do ELL que e baseado no conhecimento e desenvoltura da lingua inglesa do aluno. A meta do programa e desenvolver a comunicacao e habilidade does alunos com a lingua inglesa de modo que eles pos – sam alcançar exito dentro da comunidade escolar.*

Course #	Description	Credit	Level	Term Q-S-Y	Pre- Requisite	Notes
9011, 9021 9031, 9041	ELL Level 1 (Includes parts A,B, C, and D)	4	Foundation	S		This class schedules for two blocks each semester
9101, 9121	ELL Level 2 (Includes parts A & B)	2	Foundation	S		This class schedules for one block each semester.
9131, 9141	ELL Level 3 (Includes parts A & B)	2	Foundation	S		This class schedules for one block each semester.
9151, 9161	ELL Level 4 (Includes parts A & B)	2	Foundation	S		This class schedules for one block each semester. **See note below
9171, 9181	ELL Level 5 (Includes parts A & B)	2	Foundation	S		This class schedules for one block each semester. **See note below
9191, 9201	ELL Level 6 (Includes parts A & B)	2	Foundation	S		This class schedules for one block each semester. **See note below
9003	ELL Literacy	2	Foundation	Y		

\*\*It is recommended that all English Language learners in levels 4, 5 or 6 take a mainstream English course in addition to their ELL classes. Freshman in ELL levels 4, 5 or 6 will be placed into Freshman Writing and English 1. Freshman in ELL level 3 with 5+ years in the Nashua School District should also take Freshman Writing and English 1. ELL students should only be placed into English 4 after consultation with their ELL case manager.

### 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		
6081	Jewelry Making	0.5	Non-leveled	Q		
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 a Math Experience requirement
6217	Select Band (H)	1	Honors	*		Audition required.

**Fine and Performing Arts - Continued**

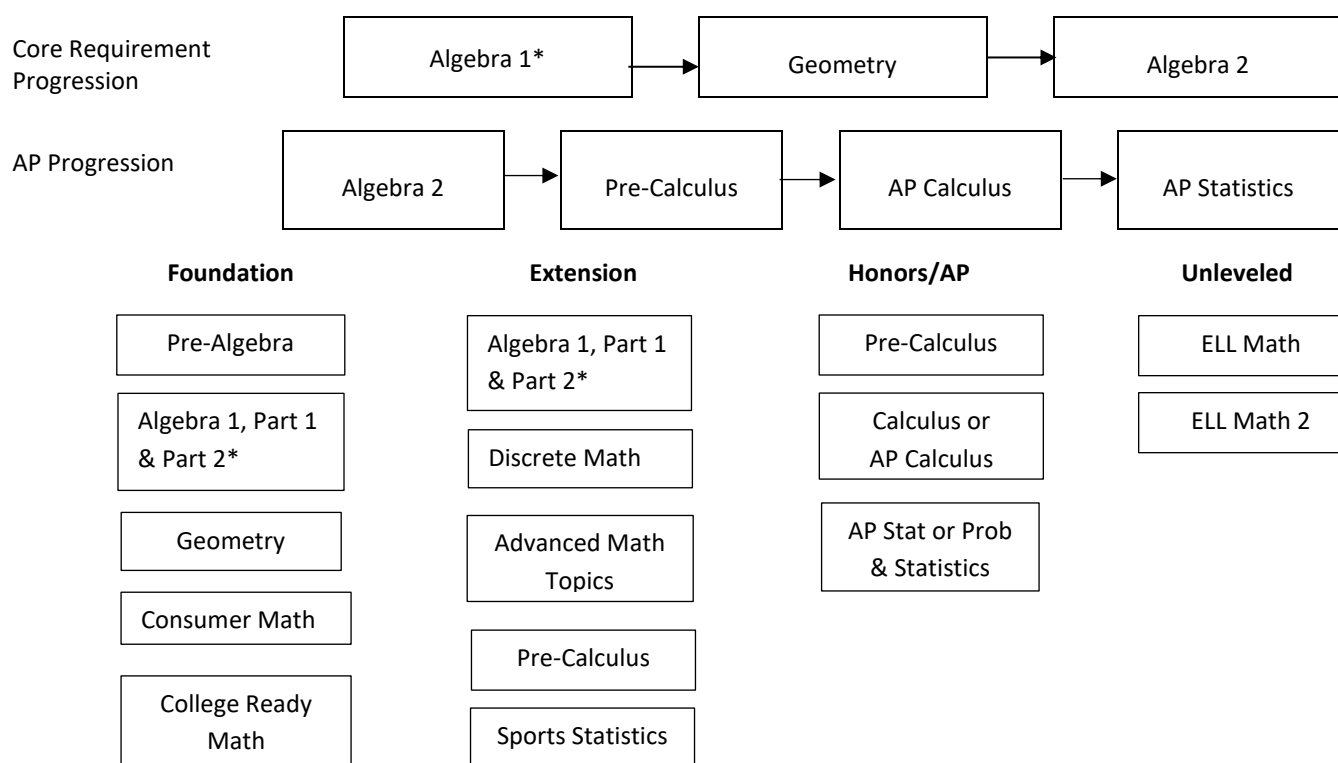
<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre- Requisite</b>	<b>Notes</b>
6239	AP Music Theory	1	AP	S		Students are expected to take the AP exam in May. This course may fulfill a music credit or an ICT requirement but not both.
6241	Jazz Improv. & Literature	1	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.

## **Mathematics**

The Mathematics Program offers a substantive sequence of courses to prepare students for college or career in the 21<sup>st</sup> 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. Student 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  
 Non-leveled ELL Math → Departments (ELL & Math) recommendation

\*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 <sup>th</sup> 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 <sup>th</sup> 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 <sup>th</sup> 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**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
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	
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
3301	ELL Math	1	Non- leveled	S		Open to students in ELL Level 1-2
3302	ELL Math 2	1	Non- leveled	S	ELL Math 1	Open to students in ELL Level 1-2

## Physical Education and Health

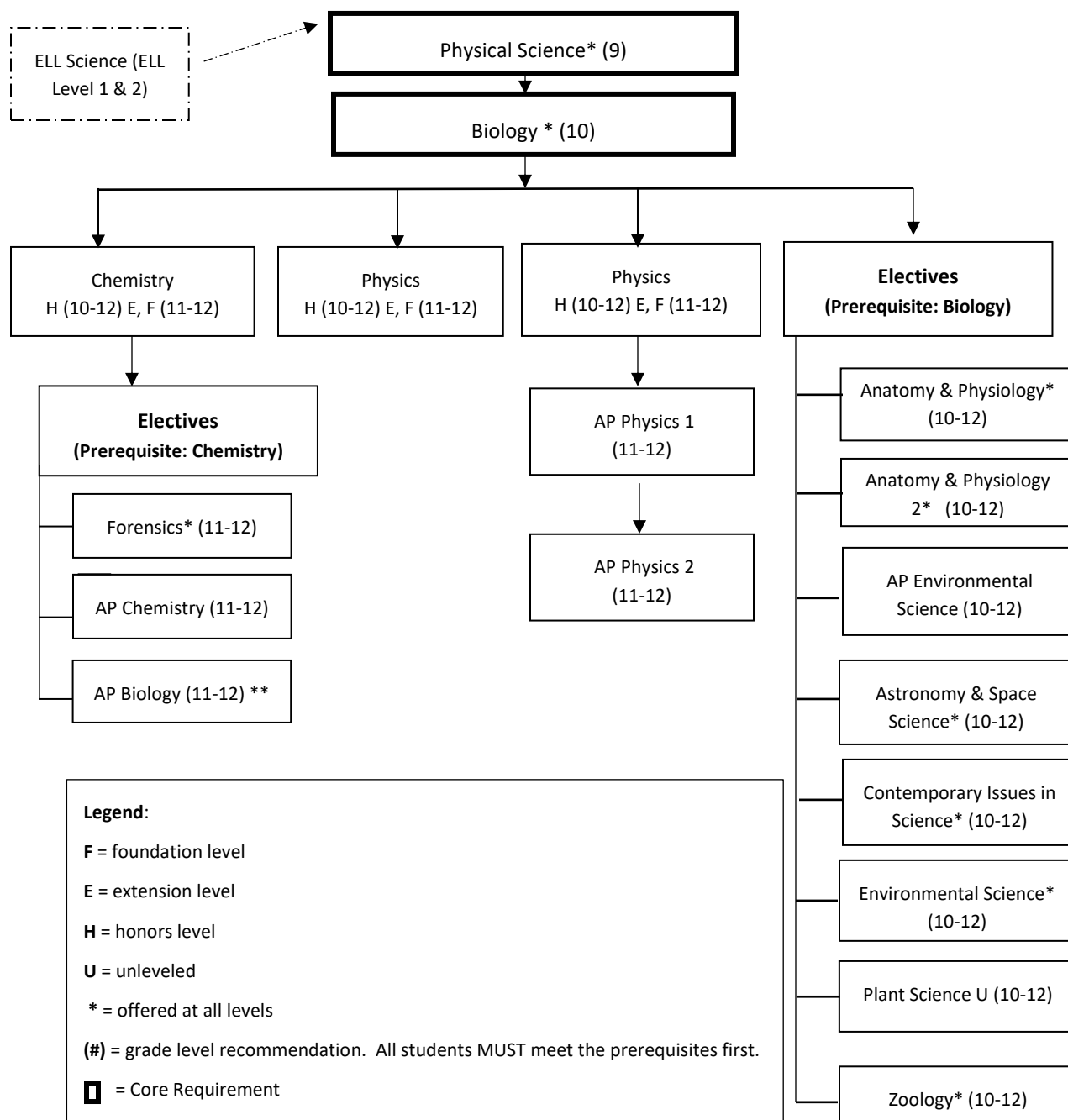
Through Physical Education classes, students will demonstrate fundamental movement skills in a variety of contexts; understand the lifelong benefits of a health enhancing fitness program; participate in self-selected physical activity; cooperate and encourage peers; accept individual differences and demonstrate inclusive behaviors; and engage in physical activity for enjoyment and self-expression. During Health classes students will demonstrate 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.

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
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	1	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



## **Legend:**

**F** = foundation level

**E** = extension level

**H** = honors level

**U** = unleveled

**\*** = offered at all levels

**(#)** = grade level recommendation. All students **MUST** meet the prerequisites first.

**█** = Core Requirement

**\*\*** Can be taken concurrently with chemistry

----- Only offered to beginner ELL students

**NOTE:** AP course are only offered at the advanced placement level

**Physical Science Portfolio:** Students in Grade 9 are required to take Physical Science at the high school; however, a student may opt to take Biology if they pass the Physical Science assessment process prior to enrolling at Nashua High School North or Nashua High School South. To demonstrate proficiency, students will present evidence that exhibits mastery of Physical Science concepts covered in the class curriculum. This portfolio process is designed to be a rigorous and authentic demonstration of understanding, and mimics the learning experience of students currently enrolled in the Physical Science class at North and South. Information about the process can be accessed on the district website or obtained from the North or South head science teacher.

## Science

Students must earn 1 credit in Physical Science and an additional 1 credit in Biological Science.

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
4013	Physical Science	1	Foundation	S		Students who successfully fulfill this requirement by completing the physical science portfolio option will earn 1 credit for this course.
4015	Physical Science (E)	1	Extension	S		Students who successfully fulfill this requirement by completing the physical science portfolio option will earn 1 credit for this course.
4017	Physical Science (H)	1	Honors	S		Students who successfully fulfill this requirement by completing the physical science portfolio option will earn 1 credit for this course.
4003	ELL Physical Science	1	Foundation	S		Requires ELL instructor approval
4005	ELL Physical Science (E)	1	Extension	S		Requires ELL instructor approval
4023	Biology	1	Foundation	S	Physical Science (PS) or PS portfolio credit	Students who successfully fulfill this requirement by completing the biology portfolio option will earn 1 credit for this course
4025	Biology (E)	1	Extension	S	Physical Science (PS) or PS portfolio credit	Students who successfully fulfill this requirement by completing the biology portfolio option will earn 1 credit for this course
4027	Biology (H)	1	Honors	S	Physical Science (PS) or PS portfolio credit	Students who successfully fulfill this requirement by completing the biology portfolio option will earn 1 credit for this course

**Science -Continued**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
4029	AP Biology	2	AP	Y	Biology or portfolio credit, Chemistry, Anatomy & 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 or Biology portfolio credit & Geometry	Or concurrent with Geometry or Algebra 2. Meets Math Experience requirement.
4055	Physics (E)	1	Extension	S	Biology or Biology portfolio credit and Geometry	Meets Math Experience requirement.
4057	Physics (H)	1	Honors	S	Biology or portfolio credit Geometry and Algebra 2	Meets Math Experience requirement.
4059	AP Physics I	2	AP	Y	Biology or portfolio credit, 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 or portfolio credit and Algebra 1	Meets Math Experience requirement.
4155	Chemistry (E)	1	Extension	S	Biology or portfolio credit and Geometry	Algebra 2 suggested. Meets Math Experience requirement.
4157	Chemistry (H)	1	Honors	S	Biology or portfolio credit and Geometry	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
4253	Astronomy & Space Science	1	Foundation	S		
4255	Astronomy & Space Science (E)	1	Extension	S		
4257	Astronomy & Space Science (H)	1	Honors	S		
4357	Anatomy & Physiology 1 (H)	1	Honors	S	Biology (E) or (H)	

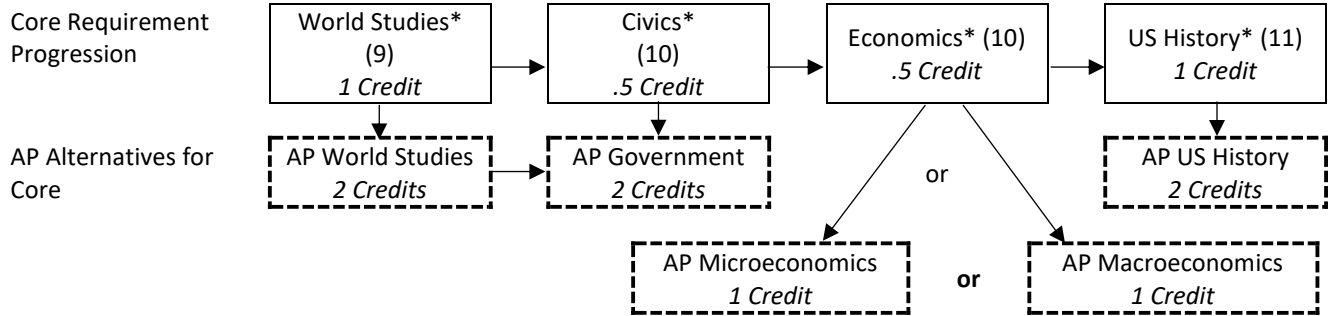
**Science – Continued**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
4423	Anatomy & Physiology	1	Foundation	S	Biology or portfolio credit	
4425	Anatomy & Physiology (E)	1	Extension	S	Biology or portfolio credit	
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 or portfolio credit	
4505	Zoology (E)	1	Extension	S	Biology or portfolio credit	
4507	Zoology (H)	1	Honors	S	Biology or portfolio credit	
4523	Environmental Science	1	Foundation	S	Biology or portfolio credit	
4525	Environmental Science (E)	1	Extension	S	Biology or portfolio credit	
4527	Environmental Science (H)	1	Honors	S	Biology or portfolio credit	
4529	AP Environmental Science	2	AP	Y	Biology or portfolio credit	Chemistry is recommended. Students are expected to take the AP exam in May
4551	Plant Science	1	Non-leveled	S	Biology or portfolio credit	
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	Physical Science and Biology	
4705	Contemporary Issues in Science (E)	1	Extension	S	Physical Science and Biology	
4707	Contemporary Issues in Science (H)	1	Honors	S	Physical Science and Biology	
4801	ELL Science	1	Non-leveled	S		Intended for students in ELL Level 1 or 2

## 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.

### High School Social Studies Course Sequence



### Electives (10, 11, 12)

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

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre- Requisite</b>	<b>Notes</b>
2011	ELL World Studies	1	Unleveled	S		ELL instructor approval required Fulfills World Studies and Geography state requirement
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/Micro Economics to fulfill state requirement. Meets Math Experience requirement.
2065	Economics (E)	0.5	Extension	Q		Students must take this or AP Macro/Micro Economics to fulfill state requirement. Meets Math Experience requirement.
2067	Economics (H)	0.5	Honors	Q		Students must take this or AP Macro/Micro Economics 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**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre- Requisite</b>	<b>Notes</b>
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	Contemporary Global Studies	1	Foundation	S		
2515	Contemporary Global Studies (E)	1	Extension	S		
2517	Contemporary Global Studies (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
9483	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

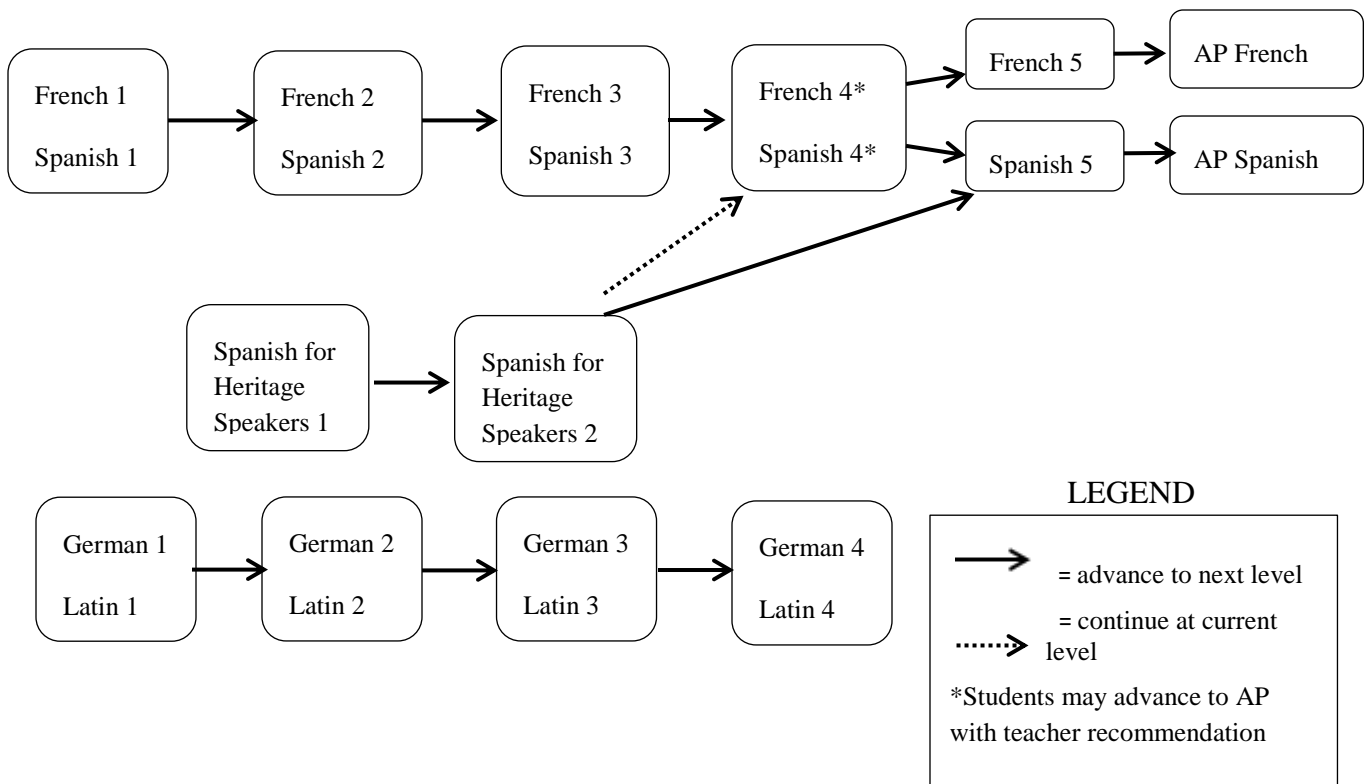


## World Languages

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.

<b>CTE Programs &amp; NTC Courses at Nashua High North</b>	<b>CTE Programs &amp; NTC Courses at Nashua High South</b>	<b>CTE Programs at North &amp; South</b>
Automotive Technology Biotechnology & Biomedical Sciences Culinary Arts Cosmetology Design & Visual Communication Drone Technology Marine Robotics	Manufacturing & Machine Technology 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

### Careers Related to Arts, Humanities Communication

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5332	Culinary Arts 1	2	Unleveled	Y		Purchase of uniform and black safety shoes required. Meets Math Experience requirement. College credit may be available.
5337	Culinary Arts 1 (H)	2	Honors	Y		Purchase of uniform and black safety shoes required. Meets Math Experience requirement. College credit may be available.
5341	Culinary Arts 2	2	Unleveled	Y	Culinary Arts 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.
5347	Culinary Arts 2 (H)	2	Honors	Y	Culinary Arts 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.
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	College credit may be available
5447	Design & Visual Communications 2 (H)	2	Honors	Y	Design & Visual Communications 1	College credit may be available
5601	Video Production 1	2	Unleveled	Y		Meets ICT and Math Experience requirement. College credit may be available.
5607	Video Production 1 (H)	2	Honors	Y		Meets ICT and Math Experience requirement. College credit may be available.
5611	Video Production 2	2	Unleveled	Y	Video Production 1	Meets ICT and Math Experience requirement. College credit may be available. NTC Director approval

### Careers Related to Arts, Humanities Communication (Cont.0

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5617	Video Production 2 (H)	2	Honors	Y	Video Production 1	Meets ICT and Math Experience requirement. College credit may be available. NTC Director approval
5761	Graphic Design 1	0.5	Unleveled	Q		Meets Math Experience requirement. Meets ICT or Art requirement.
5861	Graphic Design 2	0.5	Unleveled	Q	Graphic Design 1	Meets Math Experience requirement. Meets ICT or Art requirement.

### Careers Related to Business and Global Communication

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5011	Digital Life	0.5	Unleveled	Q		Meets ICT requirement
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 College credit may be available.
5037	College Accounting 2 (H)	1	Honors	S	College Accounting 1 or Advanced Accounting Topics	Meets ICT and Math Experience requirements College credit may be available. NTC Director approval
5041	Advanced Accounting Topics	1	Unleveled	S	Accounting Fundamentals or College Accounting 1	Meets ICT and Math Experience requirement
5047	Advanced Accounting Topics (H)	1	Honors	S	Accounting Fundamentals or College Accounting 1	Meets ICT and Math Experience requirement
5051	Introduction to Business	0.5	Unleveled	Q		Meets ICT Requirement and Math requirement
5061	Desktop Publishing	1	Unleveled	S		Meets ICT requirement. College credit may be available.
5067	Desktop Publishing (H)	1	Honors	S		Meets ICT requirement. College credit may be available.
5071	Software Applications	1	Unleveled	S		Meets ICT requirement. College credit may be available.
5101	Small Business Management	1	Unleveled	S		Meets ICT requirement. College credit may be available.
5107	Small Business Management (H)	1	Honors	S		Meets ICT requirement. College credit may be available.
5121	Sports & Entertainment Marketing	1	Unleveled	S		Students can either take Marketing 1 or Sports & Entertainment Marketing to enroll in Marketing 2, but not both. College credit may be available.
5127	Sports & Entertainment Marketing	1	Honors	S		Students can either take Marketing 1 or Sports & Entertainment Marketing to enroll in Marketing 2, but not both. College credit may be available.
5391	Business Finance 1	1	Unleveled	S		Meets Math Experience requirement. College credit may be available.

**Careers Related to Business and Global Communication (Cont.)**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
5397	Business Finance 1 (H)	1	Honors	S		Meets Math Experience requirement College credit may be available.
5401	Financial Services Internship	1	Unleveled	S		Meets ICT.and Math Experience requirements
5411	Business Finance 2	1	Unleveled	S	Business Finance 1	NTC Director approval. Meets ICT and Math Experience requirement.
5417	Business Finance 2 (H)	1	Honors	S	Business Finance 1	NTC Director approval. Meets ICT and Math Experience requirement.
5531	Marketing 1	1	Unleveled	S		Students can either take Marketing 1 or Sports & Entertainment Marketing to enroll in Marketing 2, but not both.
5537	Marketing 1 (H)	1	Honors	S		Students can either take Marketing 1 or Sports & Entertainment Marketing to enroll in Marketing 2, but not both
5541	Marketing 2	2	Unleveled	Y	Marketing 1 or Sports Enter. Mktg	NTC Director approval. Meets ICT requirement and Math Experience.
5547	Marketing 2 (H)	2	Honors	Y	Marketing 1 or Sports Enter. Mktg.	NTC Director approval. Meets ICT and Math Experience requirement.
5901	Personal Finance	0.5	Unleveled	Q		Meets ICT and Math Experience requirement

### Careers Related to Health and Human Services

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
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		College credit may be available.
5197	Human Relations (H)	1	Honors	S		College credit may be available.
5201	On Your Own	0.5	Unleveled	Q		Meets Math Experience requirement
5211	Interior Design	1	Unleveled	S		
5251	Biotechnology & Biomedical Science 1	2	Unleveled	Y	Algebra 1 or Algebra 1 Part 2, Physical Science or Physics	Satisfies Life Science/Biology graduation requirement. Meets Math Experience requirement
5257	Biotechnology & Biomedical Science 1 (H)	2	Honors	Y	Algebra 1 or Algebra 1 Part 2, Physical Science or Physics	Satisfies Life Science/Biology graduation requirement. Meets Math Experience requirement
5261	Biotechnology & Biomedical Science 2	2	Unleveled	Y	Biotechnology & Biomedical Science 1	NTC Director approval. College credit may be available. Meets ICT and Math Experience requirement
5267	Biotechnology & Biomedical Science 2 (H)	2	Honors	Y	Biotechnology & Biomedical Science 1	NTC Director approval. College credit may be available. Meets ICT and 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.
5351	Careers in Education 1	2	Unleveled	Y		College credit may be available.
5357	Careers in Education 1 (H)	2	Honors	Y		College credit may be available.
5361	Careers in Education 2	2	Unleveled	Y	Careers in Education 1	NTC Director approval. College credit may be available
5367	Careers in Education 2 (H)	2	Honors	Y	Careers in Education 1	NTC Director approval. College credit may be available



**Careers Related to Health and Human Services (Cont.)**

<b>Course #</b>	<b>Description</b>	<b>Credit</b>	<b>Level</b>	<b>Term Q-S-Y</b>	<b>Pre-Requisite</b>	<b>Notes</b>
5451	Health Sciences 1	2	Unleveled	Y	Biology	Uniform purchase required. College credit may be available.
5457	Health Sciences 1 (H)	2	Honors	Y	Biology	Uniform purchase required. College credit may be available.
5461	Health Sciences 2	3	Unleveled	Y	Health Sciences 1	1 block one semester, 2 blocks other semester. NTC Director approval.
5467	Health Sciences 2 (H)	3	Honors	Y	Health Sciences 1	1 block one semester, 2 blocks other semester. NTC Director approval.
5851	Parenting	0.5	Unleveled	Q		

### Careers Related to Math, Science and Technology

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 & Physical Science or Biology	Students must supply their own instructor- approved safety shoes. Lab coat will be provided for lab work. Meets Math Experience requirement. College credit may be available.
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. College credit may be available.
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. College credit may be available.
5271	CADD 1	2	Unleveled	Y		Meets ICT and Math Experience requirement. College credit may be available.
5277	CADD 1 (H)	2	Honors	Y		Meets ICT and Math Experience requirement. College credit may be available
5281	CADD 2	2	Unleveled	Y	CADD 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.
5287	CADD 2 (H)	2	Honors	Y	CADD 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.

### Careers Related to Math, Science and Technology (Cont.)

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5291	Construction Technology 1	2	Unleveled	Y		Meets Math Experience requirement. Requires purchase of safety shoes.
5301	Construction Technology 2	2	Unleveled	Y	Construction Tech. 1	NTC Director approval. Meets Math Experience requirement. Requires purchase of safety shoes.
5307	Construction Technology 2 (H)	2	Honors	Y	Construction Tech.1	NTC Director approval. Meets Math Experience requirement. Requires purchase of safety shoes.
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.
5491	Manufacturing and Machine Technology 1	2	Unleveled	Y	Successful completion of Geometry (E or H)	Meets Math Experience requirement.
5501	Manufacturing and Machine Technology 2	2	Unleveled	Y	Manufacturing and Machine Technology 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.
5507	Manufacturing and Machine Technology 2 (H)	2	Honors	Y	Manufacturing and Machine Technology 1	NTC Director approval. Meets Math Experience requirement. College credit may be available.
5511	HVACR- 1	2	Unleveled	Y		Meets Math Experience requirement.

### Careers Related to Math, Science and Technology (Cont.)

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5521	HVACR- 2	2	Unleveled	Y	HVACR- 1	Meets Math Experience requirement. College credit may be available. NTC Director approval
5521	HVACR- 2 (H)	2	Honors	Y	HVACR- 1	Meets Math Experience requirement College credit may be available. NTC Director approval
5551	Introduction to Engineering Design	1	Unleveled	S		Incoming freshmen enrolled in Honors Algebra may elect this course. Meets ICT and Math Experience requirement. College credit may be available.
5557	Introduction to Engineering Design (H)	1	Honors	S		Incoming freshmen enrolled in Honors Algebra 1 may elect this course. Meets ICT and Math Experience requirement. College credit may be available.
5561	Computer Networking & Cyber Security 1	2	Unleveled	Y		Meets ICT requirement College credit may be available.
5567	Computer Networking & Cyber Security 1 (H)	2	Honors	Y		Meets ICT requirement College credit may be available.
5571	Computer Networking & Cyber Security 2	2	Unleveled	Y	Computer Networking 1	College credit may be available. NTC Director approval
5577	Computer Networking & Cyber Security 2 (H)	2	Honors	Y	Computer Networking 1	College credit may be available. NTC Director approval
5741	Power Mechanics 1	0.5	Unleveled	Q		Meets Math Experience requirement
5751	Electricity/Electronics	0.5	Unleveled	Q		
5771	Woodworking 1	0.5	Unleveled	Q		Meets Math Experience requirement
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 requirement. South students will need to travel to North.
5841	Power Mechanics 2	0.5	Unleveled	Q	Power Mechanics 1	Meets Math Experience requirement.

### Careers Related to Math, Science and Technology (Cont.)

Course #	Description	Credit	Level	Term Q-S-Y	Pre-Requisite	Notes
5921	Computer Integrated Manufacturing	1	Unleveled	S	Algebra or Algebra 1 Part 2	Meets ICT and Math experience requirement. College credit may be available
5927	Computer Integrated Manufacturing (H)	1	Honors	S	Algebra 1 or Algebra 1 Part 2	Meets ICT and Math experience requirement. College credit may be available
5931	Principles of Engineering Design	1	Unleveled	S	Intro to Engineering Design	Meets ICT and Math experience requirement. College credit may be available.
5937	Principles of Engineering Design (H)	1	Honors	S	Intro to Engineering Design	Meets ICT and Math experience requirement. College credit may be available.
5941	Engineering Design & Development	1	Unleveled	S	Intro. To Engineer. Design	Meets ICT and Math experience requirement. NTC Director approval
5947	Engineering Design & Development (H)	1	Honors	S	Intro. to Engineer. Design	Meets Math experience requirement. NTC Director approval
5951	Robotics Using VEX	1	Unleveled	S		Meets ICT and Math experience requirement
5957	Robotics Using VEX (H)	1	Honors	S		Meets ICT and Math experience requirement
5241	Drone Technology	1	Unleveled	S		Meets ICT requirement

### 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	
5791	Welding 1	2	Unleveled	Y		
5801	Welding 2	2	Unleveled	Y	Welding 1	

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2021-2022

# SECTION 4

## Course Descriptions





## Course Descriptions

<b>Accounting Fundamentals</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5001</b>
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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 and Math Experience requirement.

<b>Adaptive Music</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 9231</b>
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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.

<b>Adaptive PE</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 9241</b>
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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.

<b>Advanced Accounting Topics</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5041-5047</b>
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For students who love accounting and computers, here's more! Topics include departmentalized accounting and corporate accounting. Uses software that complements text and completes a variety of computerized activities that simulate real world applications.

**Note:** Meets ICT and Math Experience requirement

**Prerequisite:** Accounting Fundamentals or College Accounting 1

<b>Advanced Drawing</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6021</b>
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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"

<b>Advanced Math Topics</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 3155</b>
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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 studies. This course emphasizes concept development and applications.

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

<b>Advanced Photography</b>	<b>Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 6311</b>
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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 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.

**Prerequisite:** Photography

<b>Advanced Placement Art History</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 6109</b>
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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.

<b>Advanced Placement Biology</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 4029</b>
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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 or portfolio credit and completion/ concurrent first semester in Chemistry. Anatomy and Physiology or Zoology are recommended.

<b>Advanced Placement Calculus-AB</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 3129</b>
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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

<b>Advanced Placement Calculus BC</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 3139</b>
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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

<b>Advanced Placement Calculus BC (FY)</b>	<b>2 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 3159</b>
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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

<b>Advanced Placement Chemistry</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 4159</b>
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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 ICT requirement.

**Prerequisite:** Chemistry, Geometry and Algebra 2.

<b>Advanced Placement Computer Science A</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 3509</b>
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This course provides college-level study in advanced data structures within the JAVA programming language. Teaches text processing, simulation, dynamic memory allocation, recursion, trees, sorting and searching algorithms and analysis programming. Also increases understanding of the social implications of computing.

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

**Prerequisite:** Successful completion of JAVA and Pre-Calculus or currently taking Pre-Calculus

<b>Advanced Placement English Language &amp; Composition</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 1039</b>
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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

<b>Advanced Placement English Literature &amp; Composition</b>	<b>2 Credits</b>	<b>Gr. 12</b>	<b>Course: 1049</b>
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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.

<b>Advanced Placement Environmental Science</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4529</b>
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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 or portfolio credit.

<b>Advanced Placement European History</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2609</b>
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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

<b>Advanced Placement French</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8619</b>
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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.

<b>Advanced Placement Macroeconomics</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2569</b>
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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.

<b>Advanced Placement Microeconomics</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2559</b>
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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.

<b>Advanced Placement Music Theory</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6239</b>
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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:** Any music course.

<b>Advanced Placement Physics 1</b>	<b>2 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4059</b>
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This Algebra-based 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; mechanical waves and sound. It will introduce electric circuits.

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

**Prerequisite:** Biology or portfolio credit, geometry and Algebra 2.

<b>Advanced Placement Physics 2</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4109</b>
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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

**Prerequisite:** Advanced Placement Physics 1.

<b>Advanced Placement Psychology</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 2309</b>
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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.

<b>Advanced Placement Spanish</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8647</b>
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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

<b>Advanced Placement Statistics</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 3259</b>
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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)

<b>Advanced Placement Studio Art</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 6259</b>
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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

<b>Advanced Placement US Government &amp; Politics</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2659</b>
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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.

<b>Advanced Placement US History</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 2039</b>
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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.

<b>Advanced Placement World Studies</b>	<b>2 Credits</b>	<b>Gr. 9</b>	<b>Course: 2019</b>
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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.

<b>AFJROTC 1A: Aviation History</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0601</b>
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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. This course will not run during school year 21/22.

<b>AFJROTC 1B: Aviation History</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0691</b>
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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. This course will not run during school year 21/22



<b>AFJROTC 2A: The Science of Flight</b>	<b>1 Credit</b>	<b>Gr. 9, 10 11,12</b>	<b>Course: 0651</b>
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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. This course will not run during school year 21/22

<b>AFJROTC 2B: The Science of Flight</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0591</b>
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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. This course will not run during school year 21/22

<b>AFJROTC 3A-Cultural Studies</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 0611</b>
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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. This course will not run during school year 21/22

<b>AFJROTC 3B: Global Awareness</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 0621</b>
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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.

<b>AFJROTC 4A: Exploring Space</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0631</b>
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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. This course will not run during school year 21/22

**Note:** Meets Math Experience requirement

<b>AFJROTC 4B: Exploring Space</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0671</b>
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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. This course will not run during school year 21/22

<b>AFJROTC 5: Management of the Cadet Corps</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0641</b>
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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.

**Prerequisite:** Recommendation by the Senior Aerospace Instructor

<b>AFJROTC 6: Survival</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 0681</b>
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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.

<b>Algebra 1 (H)</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 3207</b>
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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.

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

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

<b>Algebra 1 Continued</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3123</b>
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This course will serve as the missing link to help prepare for Geometry and Algebra 2. Topics such as solving equations, graphing, graphing linear equations, quadratics, exponents and radicals will be reinforced.

**Prerequisite:** Algebra 1 and teacher recommendation.

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

<b>Algebra 2 Continued</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course 3153</b>
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This course will serve as the missing link to help prepare for Advanced Math Topics. Focus will be given to polynomial functions, exponents and logarithms. More importantly, this course will meet the individual needs of the students becoming proficient in the mathematics competencies.

**Prerequisite:** Algebra 2 and teacher recommendation.

<b>Anatomy &amp; Physiology</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4423-4425</b>
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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.

**Prerequisite:** Biology or portfolio credit

<b>Anatomy &amp; Physiology 1 (H)</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4357</b>
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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.

**Prerequisite:** Biology (E) or (H) or portfolio credit.

<b>Anatomy &amp; Physiology 2</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4413-4415</b>
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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

<b>Anatomy &amp; Physiology 2 (H)</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4407</b>
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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.

<b>Anthropology</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course 2053-2055-2057</b>
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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.

<b>Art Experience</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6091</b>
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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.

<b>Art History</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6107</b>
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This honors level course begins the semester with a quick immersion into modern art, followed by hands-on are 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.

<b>Astronomy and Space Science</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4253-4255-4257</b>
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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.

<b>Automotive Technology 1</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 5221</b>
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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. College credit may be available

**Prerequisite:** Algebra and 9<sup>th</sup> or 10<sup>th</sup> grade science

<b>Automotive Technology 2</b>	<b>2 credits</b>	<b>Gr. 12</b>	<b>Course: 5231-5237</b>
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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. College credit may be available. Course is offered at Nashua High North. South students must travel.

**Prerequisite:** Automotive Technology 1 and NTC Director approval.

<b>Band</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6171</b>
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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.

<b>Biology</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 4023-4025-4027</b>
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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. Students may obtain credit for this by successfully completing the portfolio process. The waiver does not meet the life science graduation requirement.

**Prerequisite:** Physical Science or portfolio

<b>Biotechnology &amp; Biomedical Science 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5251-5257</b>
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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. Course is offered at Nashua High North. South students must travel.

**Prerequisite:** Algebra and 9<sup>th</sup> or 10<sup>th</sup> grade science

<b>Biotechnology &amp; Biomedical Science 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5261-5267</b>
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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 and Math 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

<b>Breaking History: Media Literacy in the Digital Age</b>	<b>1 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2703, 2705, 2707</b>
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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.

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

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

<b>Business Finance 2</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5411-5417</b>
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Explore the principles and practices for the international financial industry. Build on previous concepts from Business Finance 1 and explore international finance and financial planning.

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

**Prerequisite:** Business Finance 1, NTC Director approval

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

<b>Calculus</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course 3127</b>
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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.

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

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

<b>Ceramics</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6201</b>
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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.



<b>Challenges Facing Today's Teens</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 1055</b>
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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

<b>Chemistry</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4153-4155-5157</b>
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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

**Prerequisite:** For Extension & Honors Level: Biology & Algebra 2 suggested/encouraged. For Foundation level: Biology and Algebra 1, Part 2

<b>Child Growth &amp; Development</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5151</b>
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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.

<b>Chorale</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6181</b>
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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. 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 will also have the opportunity to participate in the NH Solo & ensemble Festival and to 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 credits students need to select for a full schedule. There is no audition requirement.

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

<b>College Accounting 1</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5027</b>
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Accounting is the language of business. Students utilize spreadsheet software to keep financial records, summarize data, and analyze information to provide assistance to 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 credit may be available.

<b>College Accounting 2</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5037</b>
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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 College credit may be available.

**Prerequisite:** College Accounting 1 or Advanced Accounting Topics, NTC Director approval

<b>College Ready Math</b>	<b>1 Credit</b>	<b>Gr. 12</b>	<b>Course: 3063</b>
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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.

<b>Computer Aided Drafting &amp; Design 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5271-5277</b>
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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 and Math Experience requirement. College credit may be available. Course is offered at Nashua High South. North students must travel.

<b>Computer Aided Drafting &amp; Design 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5281-5287</b>
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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 and Math Experience requirement. College credit may be available. Course offered at Nashua High South. North students must travel.

**Prerequisite:** CADD 1, NTC Director approval.

<b>Computer Integrated Manufacturing</b>	<b>1 Credit</b>	<b>Gr.10, 11, 12</b>	<b>Course: 5921-5927</b>
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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. College credit may be available. Course offered at Nashua High South. North students must travel.

**Prerequisite:** Algebra 1 or Algebra 1 Part 2.

<b>Computer Networking &amp; Cyber Security I</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5561-5567</b>
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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. College credit may be available. This course is offered at Nashua High South. North students must travel.

<b>Computer Networking &amp; Cyber Security 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5571-5577</b>
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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:** College credit may be available. Course offered at Nashua High South. North students must travel.

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

<b>Concert Choir</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6197</b>
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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

<b>Construction Technology 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5291</b>
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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. During Construction Technology 1, 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 will allow them to successfully build small construction projects such as a dog house and sheds. Students may participate in the construction of a modular house on-site at Nashua High South. The Construction Technology program is committed to giving students the opportunity to network within the industry and participate in community construction projects.

**Note:** Meets Math Experience requirement. Students will be required to purchase instructor-approved safety shoes. Students who have a financial hardship, should contact their guidance counselor so that assistance can be provided. Course is offered at Nashua High South. North students must travel.

<b>Construction Technology 2</b>	<b>Gr. 11, 12</b>	<b>2 Credits</b>	<b>Course: 5301-5307</b>
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Students in Construction Technology 2 will continue to develop their skills and abilities in many areas of construction. In addition to continuing to practice their skills in regard to carpentry, siding and roofing, they will learn about and practice all other aspects of new home construction such as site preparation, cabinet installation, insulation, installation of windows and doors etc. Students may construct an on-site modular house; therefore, their hands-on-activities are extensive. Students will continue to have opportunities to network within the building industry, participate in community to network within the building industry, participate in community construction projects and learn about the many diverse career and college/training opportunities available to them after high school graduation. OSHA IO certification available.

**Note:** Meets Math Experience requirement. Students will be required to purchase instructor-approved safety shoes. Students who have a financial hardship should contact their guidance counselor so that assistance can be provided. Course is offered at Nashua High South. North students must travel.

**Prerequisite:** Construction Technology 1, NTC Director approval.

<b>Consumer Math</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 3043</b>
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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

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

<b>Contemporary Issues in Science</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4703-4705-4707</b>
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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:** Physical Science, Biology.

<b>Contemporary Global Studies</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2513, 2515, 2517</b>
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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. Contemporary Global Issues is designed to help students gain an understanding of major regions of the world and current international problems. Students may study India and China, Latin America, the Middle East, Africa, and Eastern Europe. Major geographic concepts, world religions, economic and governmental systems, map skills and human rights will all be address. As part of the course, students may participate in the school's Model United Nations simulation to understand and work to solve world problems as seen through the perspective of different nations.

<b>Cosmetology 1</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 5311</b>
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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 guidance counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

**Prerequisite:** Algebra and 9<sup>th</sup> or 10<sup>th</sup> grade Science.

<b>Cosmetology 2</b>	<b>2 Credits</b>	<b>Gr. 12</b>	<b>Course: 5321</b>
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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 guidance counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

**Prerequisite:** Cosmetology 1, NTC Director approval.

<b>Crafts</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6071</b>
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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.

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

<b>Crime &amp; Justice in America</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course 2153</b>
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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.

<b>Culinary Arts 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5331-5337</b>
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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 guidance counselor so that assistance can be provided. Course is offered at Nashua High North. South students must travel.

<b>Culinary Arts 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5341-5347</b>
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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. College credit may be available. 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 guidance 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.

<b>Design &amp; Visual Communications 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5431-5437</b>
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Students will learn the history of design, principles and practices of graphic design using typographic components. This year long course will introduce students to the basic elements of graphic visual communication through lecture, demonstrations and hands-on applications in a state-of-the-art MAC lab. Adobe Illustrator software is used in exploring visual perception through a variety of creative exercises that include but not limited to: composition, graphic design principles, digital photography and typography. This program is aligned with Plymouth State University and articulation credit can be earned with successful completion of the program.

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

<b>Design &amp; Visual Communications 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5441-5447</b>
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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. Project management, collaboration, peer review, design and redesign, research and communications are essential components emphasized during the second year. Adobe InDesign and Photoshop software are used in exploring design problems, logo design and designing symbols in a state-of-the-art MAC lab. Project activities focus on further developing thinkers that translate concept into digital illustrative form. This program is aligned with Plymouth State University and articulation credit can be earned with successful completion of the program.

**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..

<b>Desktop Publishing</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5061-5067</b>
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Students create digital and print publications for business use by applying design principles. Students design logos and learn proper layout for advertisements, newsletters, brochures, flyers, and other business forms.

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

<b>Digital Life</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5011</b>
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So you think you know all the internet has to offer? Think again...This course will take your online skills to the next level so you can take full advantage of the multitude of tools that are right at your fingertips. You will explore and use up-to-date tech tools to assist in your home, school, and after work life.

**Note:** Meets ICT requirement.

<b>Discovering Computer Science</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3361</b>
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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 and Math Experience requirement.

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

<b>Discrete Math</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 3205</b>
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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

<b>Diversity in America</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2361</b>
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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.

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

<b>Drawing</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6011</b>
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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.

<b>Drone Technology</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5241</b>
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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



<b>Economics</b>	<b>0.5 Credit</b>	<b>Gr. 10</b>	<b>Course: 2063-2065-2067</b>
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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 Macro/Micro Economics to fulfill the requirement. Meets Math Experience requirement

<b>Electrical Technology 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5371</b>
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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.

<b>Electrical Technology 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5381</b>
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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.

<b>Electricity/Electronics</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5751</b>
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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.

<b>ELL Level 1</b>	<b>4 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9011 w/9021 9031 w/9041</b>
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ELL Level 1 introduces the non-native English learner to the English language through the receptive skills of listening and reading and the productive skills of speaking and writing. The course is divided into two strands: Strand A and Strand B. Strand A's primary focus is on reading and writing, while Strand B's primary focus is grammar. The four language domains are introduced, scaffolded, reinforced and developed in each strand. In January of the ELL Level 1 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success.

<b>ELL Level 2</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9101, 9121</b>
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ELL Level 2 builds on the skills learned in Level 1, although newcomers may be placed into ELL Level 2 if their performance on the WIDA ACCESS Placement Test determines it. ELL Level 2 is a grammar-based course that contextualizes learned grammar through a variety of reading and writing units specifically designed to help students use, apply and analyze the English language. Students develop the basic grammar, vocabulary and language skills needed to continue learning the English language. In January of the ELL Level 2 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success.

<b>ELL Level 3</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9131, 9141</b>
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ELL Level 3 builds on the skills learned in Level 2, although newcomers may be placed into ELL Level 3 if their performance on the WIDA ACCESS Placement Test determines it, ELL Level 3 is a grammar-based course that develops students' academic language of reading and writing through grammar instruction and its application to reading and writing. In Semester 1, students examine increasingly complex sentence and paragraph level sequencing structures. By Semester 2, students use these structures to start the essay writing process. In January of the ELL Level 3 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success.

<b>ELL Level 4</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9151, 9161</b>
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ELL Level 4 builds on the skills learned in Level 3 although newcomers may be placed into ELL Level 4 if their performance on the WIDA ACCESS Placement Test determines it. ELL Level 4 is a pivotal course in the teaching of the perfect tenses and past participles to students. Through this course, students will develop their knowledge, understanding and application of the perfect tenses and their role in enhancing the understanding of chronology in English. Likewise, students start to analyze both literary and informational texts and develop knowledge of the different styles of essay writing required of a high school student. In January of the ELL Level 3 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success.

<b>ELL Level 5</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9171, 9181</b>
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ELL Level 5 builds upon the knowledge acquired in ELL Level 4. ELL Level 5 is a grammar-based course in which students learn more challenging grammatical and academic language structures and focus on error correction in the four language domains. Students develop their essay writing skills by focusing on paragraph and essay level structures and study different types of essay writing from narrative to persuasive, to writing a research project. Likewise, students study different reading genres and produce written responses to literature, examining literacy techniques and informational text amongst others. Likewise students study different reading genres and produce written responses to literature, examining literacy techniques and informational text amongst others. In January of the ELL Level 3 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success

<b>ELL Level 6</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9191, 9201</b>
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ELL Level 6 builds upon and reinforces the knowledge gained in ELL Level 4 and Level 5. It is a grammar-base course whose primary role is to teach and reinforce correct use of complex grammatical structures. Students will study a selection of novels from contemporary literature, American literature, British literature and poetry and will know, use and analyze the use of literary devices to respond to literary and informational texts. In writing, students will use the writing process to produce detailed multiple paragraph essays that use compound complex sentences to add detail and enhance meaning for the reader. . In January of the ELL Level 3 course, all students will take the WIDA ACCESS for ELLs Language Proficiency Test, whose results along with student performance throughout the year, will determine level placement for the following academic year.

**Note:** In accordance with Federal requirements, to exit direct ELL instruction, students must achieve a passing grade on the WIDA ACCESS test for ELLs. Students who pass their English Language Proficiency exam will be monitored for a period of two years to ensure academic success.

<b>ELL Literacy</b>	<b>1 credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9003</b>
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Introduces and 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 in reading skills such as decoding, phonemic awareness, comprehension, and fluency. This course is designed for students who may need more explicit and direct English instruction than traditional beginner ELL 1 students.

**Note:** Teacher recommendation required

<b>ELL Math</b>	<b>1 credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3301</b>
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This course is designed to expose ELL Level 1 and 2 students to a wide range of mathematical language, vocabulary, and skills so that they will be ready for an entry level math course. Problem solving and critical thinking skills, along with the syntactic language needed to decipher word problems will be emphasized and reinforced throughout the course as the student becomes actively involved in the learning of math. Use of data to analyze real word problems will build background knowledge and connect the curriculum to the students' prior experiences.

**Note:** Fulfills math elective.

<b>ELL Math 2</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3302</b>
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ELL Math 2 continues the process started in ELL Math. Students will continue to build math vocabulary and math skills in preparation for entering main stream math classes. Students will learn the vocabulary of Geometry that main stream students learn prior to high school. Students will continue to build number sense and vocabulary to include integers, the operation of division, addition, subtraction, and multiplication. Students will expand their algebraic understanding to include the idea of variables, graphing, and solving one and two step equations. Upon successful completion of the course students will proceed to the appropriate level of main stream math instruction. This can include, but is not limited to, math skills review, pre-algebra, or Algebra 1, Part 1.

**Prerequisite:** ELL Math

<b>ELL Physical Science</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 4003, 4005</b>
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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 ELLs.

<b>ELL Science</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 4801</b>
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ELL Science will introduce the major concepts in chemistry, physics, and biology. Investigation and experimentation require particular discourse patterns that ELLs need to be taught in order to be successful. These include language that is connected to relationships, causation, cause-effect, conditionals if...then, and frequent use of the passive tense. This course will teach the syntactic clues an ELL student needs to use when trying to decipher a sentence in the sciences. Concepts will be investigated through laboratory experiences designed to promote and develop appropriate listening, speaking, reading, and writing skills necessary for science inquiry success. Intended for ELL Level 1 and 2 students.

<b>ELL World Studies</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 2011</b>
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World Studies builds upon the native English speakers' middle school social studies courses and helps to lay the foundation for US History in 11<sup>th</sup> grade. ELL World Studies will introduce non-native English speakers to the language of social studies and prepare them for entry into mainstream social studies classes. Beginning with the Enlightenment, ELL World Studies will explore 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. Particular focus will be given to the language of social studies with regard to tense, and aspect of historical events.

<b>Engineering Design &amp; Development</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5941-5947</b>
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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

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

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

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

<b>English 4</b>	<b>1 Credit</b>	<b>Gr. 12</b>	<b>Course: 1043-1045-1047</b>
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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 less complex works while also improving their grammar, writing, speaking, research, listening and viewing skills

**Prerequisite:** English 3

<b>Environmental Science</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 4253-4525-4527</b>
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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.

**Prerequisite:** Biology or portfolio credit.

<b>Exploring Contemporary Cooking</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5161</b>
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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.

<b>Fantasy &amp; Science Fiction</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 1103-1107</b>
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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

<b>Film Studies</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 1615-1617</b>
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Presents a literary look at great American films through the study of hallmark films of the 20<sup>th</sup> 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

<b>Financial Services Internship</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5401</b>
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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

<b>Fit for Life</b>	<b>0.5 Credit</b>	<b>Gr. 10</b>	<b>Course: 7021</b>
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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

<b>Foods Technology</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5171</b>
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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

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

**Prerequisite:** Chemistry

<b>French 1</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8117</b>
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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.

<b>French 2</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8217</b>
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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

<b>French 3</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8317</b>
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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

<b>French 4</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8417</b>
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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

<b>French 5</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8517</b>
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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

<b>Freshman Writing</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 1011</b>
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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.

<b>General Algebra 1 Part 1</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9373</b>
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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.

<b>General Algebra 1 Part 2</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9383</b>
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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.

<b>General Civics</b>	<b>0.5 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 9483</b>
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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.

<b>General Economics</b>	<b>0.5 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 9473</b>
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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.



<b>General English 1</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 9183</b>
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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.

<b>General English 2</b>	<b>1 Credit</b>	<b>Gr. 10</b>	<b>Course: 9213</b>
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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.

<b>General English 3</b>	<b>1 Credit</b>	<b>Gr. 11</b>	<b>Course: 9203</b>
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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.

<b>General English 4</b>	<b>1 Credit</b>	<b>Gr. 12</b>	<b>Course: 9223</b>
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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 less 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.

<b>General Geometry</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9433</b>
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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.

<b>General Health</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 9303</b>
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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.

<b>General Math</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9353</b>
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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.

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

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

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

<b>General US History</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 9453</b>
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Investigate the social, political and economic ideas and movements that have shaped modern American society. Emphasis is on the 20<sup>th</sup> 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.

<b>General World Studies</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 9463</b>
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This course builds upon the middle school social studies courses and helps lay a foundation for US History in 11<sup>th</sup> 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.

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

<b>German 1</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 8127</b>
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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.

<b>German 2</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8227</b>
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Go beyond the basics in this exciting course that explores housing, the community, health/wellness, and tourism in the German speaking world.

**Prerequisite:** German

<b>German 3</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8327</b>
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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

<b>German 4</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8427</b>
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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

<b>Graphic Design 1</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5761</b>
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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

<b>Graphic Design 2</b>	<b>0.5 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5861</b>
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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.

**Prerequisite:** Graphic Design 1

**Note:** Meets Math Experience requirement.

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

<b>Habits for Living</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9501</b>
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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.

<b>Health 1</b>	<b>.5 Credit</b>	<b>Gr. 10</b>	<b>Course: 7031</b>
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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.

<b>Health 2</b>	<b>0.5 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 7081</b>
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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

<b>Health Sciences 1</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 5451-5457</b>
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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 guidance counselor so that assistance can be provided. Course is offered at Nashua High South. North students must travel.

**Prerequisite:** Biology or Life Science

<b>Health Sciences 2</b>	<b>3 Credits</b>	<b>Gr. 12</b>	<b>Course: 5461-5467</b>
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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 guidance 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:** Each section of Health Sciences 2 will include a second block either in the fall or spring in addition to the full year single block. All students must have up-to-date proof of immunizations (see instructor for complete list) on file before clinical visitations.

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

<b>Heating, Ventilation, Air Conditioning &amp; Refrigeration 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11</b>	<b>Course: 5511</b>
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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.

<b>Heating, Ventilation, Air Conditioning &amp; Refrigeration 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5521-5527</b>
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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. College credit may be available. Course is offered at Nashua High South. North students must travel.

**Prerequisite:** HVACR 1 and NTC Director approval.

<b>Hospitality &amp; Hotel Management 1</b>	<b>2 Credit</b>	<b>Gr. 10, 11</b>	<b>Course: 5471-5477</b>
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Students will develop a broad understanding of the key aspects of the Hotel and Hospitality industry including different types of establishments. Year one offers an overview of hotel management. Careers, guest services and organization, front office operation, reservations, telecommunications, housekeeping, maintenance and security. This includes the guest cycle, use of technology used to provide services and the marketing and business strategies to manage the overall hotel facility. Students will demonstrate mastery of the concepts learned in this course by taking the American Hotel and Lodging Educational Institute's (AHLEI) exam at the end of the course. Students will develop a portfolio with several standardized components that they will build upon through the program. At the end of the first year, students will be able to take the Guest Service Professional (CGSP) certification exam.

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

<b>Hospitality &amp; Hotel Management 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5481-5487</b>
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Students will continue to build upon the knowledge and skills obtained from year one. It is during their second year that students will advance into careers in hospitality and hotel management. Through a partnership with the Crowne Plaza, students will play a role in the hotel's strategic planning and participate in a career rotation through six departments. National certification in Certified Hospitality & Tourism Management Professional (CHTMP) is available to students who complete this program. Students must receive a passing grade of 70% or higher on the third party, national HTMP Year 1 and HTMP Year 2 final exams, provided by the American Hotel & Lodging Educational Institute. They must also successfully complete a 100-hour, on-site internship in the hospitality and tourism field.

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

**Prerequisite:** Hospitality & Hotel Management 1 and NTC Director approval.

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

**Note:** College credit may be available.

<b>Interior Design</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5211</b>
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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.

<b>Introduction to Business</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10</b>	<b>Course: 5051</b>
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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 start up tasks, pre-launch planning, and, day to day business operations including staffing, purchasing and payments, marketing and business finances.

**Note:** Meets ICT and Math Experience requirement.

<b>Introduction to Engineering Design</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5551-5557</b>
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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:** College credit may be available. Meets ICT and Math Experience requirement.

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

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

<b>Java Programming</b>	<b>1 Credit</b>	<b>Gr. 10, ,11, 12</b>	<b>Course: 3307</b>
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Explore programming methods and algorithms. Learn why Java is the vehicle for implementing computer-based solutions to enhance dynamic web pages, modern day business problems and video game production. Class exercises will further develop your ability to problem solve and your understanding of creative uses of Java applets and will focus on proper programming techniques that incorporate manipulating sounds, images and objects. This course builds a strong foundation necessary to succeed in AP Computer Science A.

**Note:** Meets ICT and Math Experience requirement.

**Prerequisite:** Successful completion of Geometry (E) (H).

<b>Jazz Improvisation &amp; Literature</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6241</b>
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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.

<b>Jewelry Making</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6081</b>
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Jewelry may include materials from beads to metals. Using a variety of jewelry supplies that including beads, wire, synthetic gemstones and non-traditional materials such as paper & clay, students will explore a variety of ways to create necklaces, bracelets, earrings and other wearable art. No jewelry experience needed and open to all grades. This course fulfills the ½ credit required to graduate.

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

<b>Language Skills 1</b>	<b>1 Credit</b>	<b>Gr. 11</b>	<b>Course: 1065</b>
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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.

<b>Language Skills 2</b>	<b>1 Credit</b>	<b>Gr. 12</b>	<b>Course: 1075</b>
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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

<b>Latin 1</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8137</b>
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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.

<b>Latin 2</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8237</b>
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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

<b>Latin 3</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8337</b>
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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

<b>Latin 4</b>	<b>1 Credit</b>	<b>Gr. 9,10,11,12</b>	<b>Course: 8437</b>
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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



<b>Law &amp; Ethics</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 2207</b>
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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.

<b>Lifespan Nutrition</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5181</b>
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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.

<b>Lifetime Activities 1</b>	<b>0.5 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 7051</b>
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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

<b>Lifetime Activities 2</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 7061</b>
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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 include in this course.

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

<b>Literacy Center 1</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9701</b>
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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.

<b>Literacy Center 2</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9751</b>
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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.

<b>Manufacturing and Machine Technology 1</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5491</b>
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This course teaches the basics of manual and computer machining of metal products. Students will learn about machine shop safety, machining processes, blueprint reading, inspection techniques, applied math in the workplace, and the materials used in the manufacturing and machining industry. Advanced manual machine processes will be used to introduce the technology of Computer Assisted Drafting and Machining (CAD/CAM) and the set up and operation of highly advanced Computer Numerical Control (CNC) machines. Lab projects build common skills expected by manufacturing and machining employers and post-secondary schools who train machinists, technicians and engineers.

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

**Prerequisite:** Successful completion of Geometry E or H.

<b>Manufacturing and Machine Technology 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5501-5507</b>
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This course emphasizes Computer Assisted Drafting and Machining (CAD/CAM) applications for high end CNC and manual machine project design and production. Students learn and apply advanced machining skills, quality assurance, applied math, metals and composite materials, blueprint reading, and engineering basics. The students will be taught this in a "real world" workplace environment where learning is primarily "hands on". Students complete a capstone project during second semester. There may be an opportunity for internships with an industry partner.

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

**Prerequisite:** Manufacturing and Machine Technology 1, NTC Director approval

<b>Marine Robotics</b>	<b>1 Credit</b>	<b>Gr. 9 10, 11, 12</b>	<b>Course: 5821</b>
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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. This course is offered at Nashua High North. South students must travel.

**Prerequisite:** Algebra 1 or Algebra 1 Part 2.

<b>Marketing 1</b>	<b>1 Credit</b>	<b>Gr. 10, 11</b>	<b>Course: 5531-5537</b>
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Learn about the fundamentals of marketing through group projects, discussions and presentations. In the first year of this course students will learn about product/service management by creating a new product, promotion and selling, target marketing and the marketing mix. The course will culminate with the development of a promotional portfolio for a business that you will create. This course is also the foundation course for the school's DECA Chapter, a co-curricular national marketing association. DECA activities include labs, conferences, trips, social events and various workshops throughout the region. Students are encouraged to join and participate

**Note:** Students can either take Marketing 1 or Sports and Entertainment Marketing to enroll in Marketing 2, but not both.

<b>Marketing 2</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>Course: 5541-5547</b>
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Continue learning the functions of marketing (distribution, packaging, pricing and marketing information management) through practical experience gained in the school store, market research for local employers, conducting SWOT analysis for businesses, creating a new brand character. Students will be exposed to marketing experiences that will reinforce the skills you have and add skills of operations administration, leadership and business management as well as hands-on experience. Those skills will be developed with student participation in the Marketing lab located in the school store.

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

**Prerequisite:** Marketing 1 or Sports and Entertainment Marketing, NTC director approval

<b>Math Skills Review</b>	<b>0.5 Credit</b>	<b>Gr. 9</b>	<b>Course: 3003</b>
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This course is to review basic math skills and concepts to prepare students for Pre-Algebra. Topics include operations of rational numbers, order of operations, factors/multiples, percentages, decimals, absolute value, graphing basics, general vocabulary and problem solving.

<b>Metacognitive Skills Development</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9211</b>
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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.

<b>Military History</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 2351</b>
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"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.

<b>Music Theory (H)</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6147</b>
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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.

<b>Musical Ensembles</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6351</b>
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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.

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

<b>On Your Own</b>	<b>0.5 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5201</b>
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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.

<b>Parenting</b>	<b>0.5 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5851</b>
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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.

<b>Personal Finance</b>	<b>0.5 Credit</b>	<b>Gr. 10</b>	<b>Course: 5901</b>
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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 and Math Experience requirement.

<b>Personal Fitness</b>	<b>0.5 Credit</b>	<b>Gr. 10</b>	<b>Course: 7041</b>
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This course is designed for students to have the opportunity to improve their aerobic fitness, primarily through walking. The speed and distance walks are individualize to meet the student's ability, with an emphasis toward significant, personal improvement. Students will learn about the process of getting fit with an emphasis on correct walking form, and all the many benefits of walking as a lifelong activity.

**Prerequisite:** Sports Education

<b>Photography</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6301</b>
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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.

<b>Physical Condition &amp; Communication Skills</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9801</b>
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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.

<b>Physical Science</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 4013-4015-4017</b>
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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 of 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.

**Note:** Requirement for graduation. Students may obtain credit for this by successfully completing the portfolio process. The waiver does not meet the physical science graduation requirement.

<b>Physics</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4053, 4055, 4057</b>
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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.

**Prerequisite:** (F &E) Biology or Biology portfolio credit, and Geometry; (H) Biology or Biology portfolio credit, Geometry and Algebra 2

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

**Note:** Course may be repeated for credit.

<b>Plant Science</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 4551</b>
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Explores the role of plants in society in the environment. Students study their structure, function, propagation, classification and identification making use of hands-on experiences in the classroom, greenhouse and surrounding school landscape. Students will learn skills needed for careers in the “green” industry or useful to the home gardener and plant hobbyist. If time allows, students are introduced to plant crafts such as floral arranging, wreath and corsage production and bonsai.

**Note:** This course does not count toward weighted GPA.

**Prerequisite:** Biology or portfolio credit.

<b>Power Mechanics 1</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5741</b>
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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.

<b>Power Mechanics 2</b>	<b>0.5 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5841</b>
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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.

<b>Pre-Algebra</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 3013</b>
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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.

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

<b>Preparatory Foods</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9851</b>
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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.

<b>Principles of Engineering</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 5931-5937</b>
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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 and Math Experience requirement.

**Prerequisite:** Introduction to Engineering Design

<b>Probability &amp; Statistics</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: -3257</b>
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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.

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

<b>Reading</b>	<b>2 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9051</b>
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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.

<b>Reading for Success</b>	<b>1 Credit</b>	<b>Gr. 9, 10</b>	<b>Course: 9061</b>
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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.

<b>Robotics Using VEX</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5951, 5957</b>
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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 and Math Experience requirement.

<b>Select Band</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6217</b>
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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.

<b>Small Business Management</b>	<b>1 Credit</b>	<b>Gr. 10, 11,12</b>	<b>Course: 5101-5107</b>
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Develop skills for the world of business through activities, problems, and decisions involved in successfully operating and managing a business. Students create a comprehensive business plan for an entrepreneurial small business of their choice.

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

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

<b>Software Applications</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 5071</b>
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Students become proficient in the use of spreadsheets, presentations, word processing, and other applications through real-life projects. This course teaches students skills and techniques needed to be successful in both school and the workplace.

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

<b>Spanish 1</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8147</b>
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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.

<b>Spanish 2</b>	<b>1 Credits</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8247</b>
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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



<b>Spanish 3</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8347</b>
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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

<b>Spanish 4</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11,12</b>	<b>Course: 8447</b>
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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

<b>Spanish 5</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8547</b>
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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 1

<b>Spanish for Heritage Speakers 1</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 8747</b>
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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

<b>Spanish for Heritage Speakers 2</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 8847</b>
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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.

<b>Sports Education</b>	<b>0.5 Credit</b>	<b>Gr. 9</b>	<b>Course: 7011</b>
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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.

<b>Sports and Entertainment Marketing</b>	<b>1 Credit</b>	<b>Gr. 10, 11</b>	<b>Course: 5121-5127</b>
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Learn about the fundamentals of marketing through group projects, discussions, and presentations with a focus in the sports and entertainment industries. In this course students utilize marketing concepts and activities that are particularly geared to these industries.

**Note:** Students can either take Marketing 1 or Sports and Entertainment Marketing to enroll in Marketing 2, but not both.

<b>Sports Literature</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 1555</b>
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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

<b>Sports Statistics</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: -3255</b>
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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

<b>Studio Art</b>	<b>1 Credit</b>	<b>Gr. 10, 11, 12</b>	<b>Course: 6047</b>
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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

<b>The Roots of Rock &amp; Roll</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 6161</b>
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Want to learn about Rock 'n' Roll? How about hip-hop or rap? The popular music culture? 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!

<b>US History</b>	<b>1 Credit</b>	<b>Gr. 11</b>	<b>Course: 2033-2035-2037</b>
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Investigate the social, political and economic ideas and movements that have shaped modern American society. Emphasis is on the 20<sup>th</sup> 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.

<b>Video Game Programming</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3401</b>
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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 and Math Experience requirement

**Prerequisite:** Geometry

<b>Video Production &amp; Broadcasting 1</b>	<b>2 Credits</b>	<b>Gr. 11</b>	<b>Course: 5601-5607</b>
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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 and Math Experience requirement. Course is offered at Nashua High South. North students must travel.

<b>Video Production &amp; Broadcasting 2</b>	<b>2 Credits</b>	<b>Gr. 12</b>	<b>Course: 5611-5617</b>
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This class builds on the knowledge gained in the previous year by writing, producing and creating video programs for the class, the high school, the school district and the community. Students learn more about cable, satellite and web-based distribution channels. They build a portfolio and reel to help them further their education and employment opportunities.

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

**Prerequisite:** Video Production & Broadcasting 1 and NTC Director approval.

<b>Web Page Design</b>	<b>1 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 3355-3357</b>
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Provides the basics of web page design and development using HTML, JavaScript and Dream Weaver. Topics include links, tables, frames, images, forms, CSS, scripting functions, variable declaration and use, dynamic effects, design techniques and web site development. Enhance problem solving skills by analyzing the stepwise development of web sites.

**Note:** Meets ICT and Math Experience requirement

**Prerequisite:** Successful completion or may be taken concurrently with Geometry (E) (H).

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

<b>Woodworking 1</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11</b>	<b>Course: 5771</b>
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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.

<b>Woodworking 2</b>	<b>1 Credit</b>	<b>Gr. 11, 12</b>	<b>Course: 5781</b>
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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.

<b>Work Skills</b>	<b>0.5 Credit</b>	<b>Gr. 9, 10, 11, 12</b>	<b>Course: 9891</b>
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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.

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

<b>World Studies</b>	<b>1 Credit</b>	<b>Gr. 9</b>	<b>Course: 2013-2015-2017</b>
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This course builds upon the middle school social studies courses and helps lay a foundation for US History in 11<sup>th</sup> 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.

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

**Prerequisite:** Biology or portfolio credit.

### 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.

**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 guidance 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
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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	Two Year Course	2 Credits	Gr. 11,12	AL5831
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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	AL5831
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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.

<b>Heavy Duty Mechanics 2</b>	<b>Full Year Course</b>	<b>2 Credits</b>	<b>Gr. 12</b>	<b>AL5681</b>
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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

<b>Veterinary Science 1</b>	<b>Full Year Course</b>	<b>2 Credits</b>	<b>Gr.10- 11</b>	<b>AL5631</b>
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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.

<b>Veterinary Science 2</b>	<b>Full Year Course</b>	<b>2 Credits</b>	<b>Gr. 12</b>	<b>AL5641</b>
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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.

**Prerequisite:** Successful completion of Veterinary Science I

**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.

<b>Welding 1</b>	<b>Full Year Course</b>	<b>2 Credits</b>	<b>Gr. 10, 11, 12</b>	<b>AL5791</b>
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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.

<b>Welding 2</b>	<b>Full Year Course</b>	<b>2 Credits</b>	<b>Gr. 11, 12</b>	<b>AL5801</b>
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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 1





2021-2022

# SECTION 5

Programs and Services



## Programs and Services

Nashua High School South and Nashua High School North offers 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 school work.

### 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.

#### *In Gles 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.

### Driver Education

The Driver Education Program consists of 30 hours of classroom instruction and 10 hours of training behind the wheel of a properly equipped driver education car. The program is scheduled using time after school and Saturdays. To qualify, a student must be a member of Nashua High School North or South and at least sixteen (16) years of age by the completion date of the course. A fee is charged to all students who take part in the program. Upon completion of the Driver Education course Nashua students will be awarded a .5 credit. Registration for these classes is ongoing during the year and students may check with the school web site ([www.nashua.edu/nhs](http://www.nashua.edu/nhs) or [www.nashua.edu/nhn](http://www.nashua.edu/nhn)), their guidance counselor or the driving instructors about starting dates.

## **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 to interfere with academic success, students should be referred to their guidance 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 failed no more than on subject during that prior grading period. It is quarter grades, not semester or final grades that determine academic eligibility.

## **Attention Athletes -NCAA Approved Courses**

The NCAA Eligibility Center approves courses for use in establishing the certification status of student athletes applying to college. Students who have been involved in athletics in high school and who wish to continue to be eligible to participate in athletics at the college level need to know that only certain courses from Nashua High School are accepted by the NCAA (National Collegiate Athletics Association)

Students should consult the most up-to-date list of NCAA-approved classes at the NCAA Eligibility Center website at [www.ncaaeligibilitycenter.net](http://www.ncaaeligibilitycenter.net) . The list is updated as new courses are developed and the website contains the most up-to-date information. The high school codes are 300430 for Nashua High North and 300431 for Nashua High South. Students and parents are reminded that they are ultimately responsible for meeting the NCAA guidelines if they wish to be eligible at the collegiate level. For further assistance, students should see their guidance counselor.

### **\*NOTICE: SAT Policy Update**

If a student takes the current SAT before March 2016 and then takes the redesigned SAT at a later date, the NCAA Eligibility Center will not combine section scores from the current and redesigned SAT when determining the student-athlete’s initial eligibility. The NCAA Eligibility Center will only combine section scores from the same version of the test. Because the redesigned SAT varies in design and measures different academic concepts than the current SAT, a numerical score on the current test may not be equivalent to the same numerical score on the redesigned test.

## **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 Entrance Examination 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 a financial hardship, students should contact their guidance 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/and standing.

Please note that only courses which have adequate enrollment will run. Students are encouraged to discuss taking AP courses with their parents, guidance counselors and teachers. All students who participate in Advanced Placement courses are expected to take the Advanced Placement exam which is administered in May.

## Personalized Learning

Personalizing learning provides students with the chance to pursue their interests and passions as well as their goals and career/college plans. Alternative credit options are available that enable students to earn credit toward the high school diploma in a number of ways. There are specific policies and procedures in place that describe how this can take place. These policies are established by the Nashua Board of Education and can be found by contacting your school counselor and are located on-line <http://www.nashua.edu/About-Us/Board-of-Education/Polcies-and-Procedures>. Information about alternative credit options can be found at <http://www.nashua.edu/Nashua/Media/PDF-files/Policies/IMBC-Alternative-Credit-Options.pdf>

Some of the most popular options include courses taken through the Nashua Community Adult School (night school), extended learning opportunities (ELOs), on-line courses and college/university classes. These are described below. Proposals to take advantage of other learning opportunities can also be made but must meet school board policies (see link to POPPS above). **Students interested in any of these options should work with their school counselor and follow all the procedures outlined in the policies establishes by the Board of Education.**

## Nashua Center for Lifelong Learning

Adult education credit earned in the Nashua Center for Lifelong Learning (NCLL) is available to students at Nashua North and Nashua South subject to prior approval of the Director of the Nashua Center for Lifelong Learning. One high school credit will be earned for each course provided that the student meets the established competency requirements for the course. The number of high school credits granted toward graduation requirements would be determined by the high school principal in consultation with the director of the NCLL.

## 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,

- 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-Altrnative-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>).

Highly Qualified teachers must work with the students to establish a plan to earn credit for learning accomplished through extended learning opportunities.

## **Roles and Responsibilities**

All programs of study must meet or exceed the proficiencies and skills identified by the New Hampshire State Board of Education, applicable rules and regulations of the Department of education, and all applicable Board policies. All programs of study proposed through this program shall have specific instructional objectives aligned with the State minimum standards and District curriculum standards. All extended learning opportunities will comply with applicable laws and regulations, including child labor laws and regulations governing occupational safety.

Students wishing to pursue programs of study under these guidelines must first present their proposal to the person coordinating extended learning opportunities for the school. At Nashua North, please contact the Director of School Counseling at 603-966-2506 or your school counselor. At Nashua South, please contact the Director of School Counseling at 603-966-1106 or your school counselor. These people will assist students in preparing the application form and other necessary paperwork.

The Principal and/or designee will have primary responsibility and authority for ensuring the implementation of extended learning opportunities and all aspects of such programs. The Principal will determine who will be responsible for approving student eligibility and such approval will include a considerations of the overall benefits, costs, advantages, and disadvantages to both the students and the district.

The Principal and/or designee will review and determine credits that will be awarded for extended learning opportunities toward the attainment of a high school diploma. Parents/guardians and/or students may appeal decisions rendered by the Principal within the provisions below (see Appeal Process).

Students approved for an extended learning opportunity must have parental/guardian permission to participate in such a program. The Alternative Credit Option form used in applying for an extended learning opportunity must be signed by the parent/legal guardian.

### **Please Note:**

All extended learning opportunities not initiated and designed by the district shall be the financial responsibility of the student or his/her parent/legal guardian.

Students electing independent study, college coursework, internships, or other extended learning opportunities that are held off the high school campus

- Students approved for off-campus extended learning opportunities are responsible for their personal conduct, safety and well-being.
- Extended learning opportunities at off-campus sites will require a signed agreement among the school, the student, and a designated agent of the third-party host. The agreement should specify the roles and responsibilities of each party.

### **Application Process**

1. The application process is to be completed by the student/parent/guardian seeking approval for the extended learning opportunity in conjunction with the HQT teacher.
2. The application should be completed and submitted at least thirty (30) days prior to the beginning of the proposed program. However, the Board recognizes that short-term notice opportunities may present themselves to students from time to time. As such, the Principal may grant waivers to the thirty (30) day submission requirement at his/her discretion, provided all other application criteria are satisfied. Such waivers will be granted on a case-by-case basis. All required information must be attached to the application and submitted to the student's School Counselor.
3. The application will be reviewed by appropriate District staff and administration and a decision will be made within ten (10) days of receipt of the application. The student will be notified in writing of the status of the application. If additional information is requested, the information must be submitted within one week of the receipt of the request.
4. It is the student's responsibility to maintain academic standing and enrollment in the approved program. Any

failure to complete an approved program may jeopardize the student's ability to earn credit for the course. The student and parent/guardian recognize that in the event that student withdraws from the approved program, the District cannot guarantee placement in an equivalent District-offered course.

5. The District reserves the right to determine the number of credits to be awarded. All Extended Learning Opportunities will earn credit on a Pass/Fail basis and will be noted on the student's official transcript.

### **Evaluation Criteria**

The Principal and/or designee will evaluate all applications. At a minimum, all applications must meet the following criteria:

- Provides for administration and supervision of the program.
- Provides that certified school personnel oversee and monitor the program
- Requirement that each extended learning opportunity meets rigorous standards, including the minimum standards established by the State Board of Education and all other applicable District standards.

### **Appeal Process**

A student whose application has been denied may request a meeting with the Principal. The Principal will provide the student with rationale as to why the proposal was denied.

Students may resubmit alternate proposals for consideration if such proposals are made within the timelines established by this policy. If the principal rejects the resubmitted proposal, the student may appeal to the Superintendent, or designee. All decisions made by the Superintendent, or designee shall be final.

### **Program Integrity**

In order to insure the integrity of the learning experience approved under this program, the student will be required periodically or upon demand to provide evidence of progress and attendance. The Principal will be responsible for certifying course completion and the award of credits consistent with the District's policies on graduation.

- If a student is unable to complete the extended learning opportunity for valid reasons, the Principal, Principal's designee, or assigned certified teacher will make a determination of partial credit, recommend an alternative experience or allow for extended time to complete the project.
- If a student ceases to attend or is unable to complete the learning opportunity for insufficient reason (lack of effort, failure to follow through, indecision, etc.), the Principal or designee may determine that the student's transcript be adjusted to reflect the experience as a failure.
- In order to certify completion of co-curricular programs and activities based upon specific instructional objectives aligned with standards, the school will develop appropriate mechanisms to document student progress and program completion on student personnel records.
- Students transferring from other schools who request acceptance of course credits awarded through similar extended learning opportunity programs shall have their transcripts evaluated by the school counselor and Principal.
- It shall be incumbent upon the students or his/her parent/legal guardian to request that copies of the student's official transcript be sent from the former school.

### **College Courses/Dual Enrollment**

Students can also earn credit by taking a course at a college or university providing the parameters outlined in POPPS (see link in introduction above). College/university credit will only be accepted with prior approval of the high school principal or designee. One high school credit will be granted for a college course provided that a passing grade is earned, but will not be factored into calculation of the student's GPA. The following criteria will also apply:

1. College/university credit will be accepted for courses whether offered at Nashua's high schools or not.
2. A student enrolled and attending a college/university full time may be a concurrent student of Nashua's high schools. A student earning college/university credit may use those credits to meet his/her Nashua graduation requirements.
3. Students may use college/university credit to substitute for credits not yet earned.
4. College/university credit will be accepted for students who are constructing a plan to graduate from high school early.

For more information please reference POPPS <http://www.nashua.edu/Nashua/Media?PDF-files/Policies/IMBC-R-alternative-Credit-Options,-Process-and-Procedures.pdf>

## **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 school principal or designee 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/Nashua/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.**

***The awarding of credit and who is eligible to earn the credit is determined by the college.***



**RUNNING START COURSES**

<b>Nashua Community College</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b>College Credits Awarded</b>
	Anatomy & Physiology 1 (H) (4357)	Semester	4
	Anatomy & Physiology 2 (H) (4407)	Semester	4
	Automotive 1 (5221)**	Full Year	4
	Automotive 2 (5231/5237)	Full Year	4
	CADD 1 (5271/5277)**	Full Year	5
	Web Page Design (H) (3357)	Semester	3

\*\*Denotes that college credit may be available to sophomores, juniors and seniors. All other courses require students to be juniors or seniors.

Running Start Courses -Continued

<b>Nashua Community College</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># of Credits</b>
	CADD 2 (5281/5287)	Full Year	5
	Careers in Education 1 (5351/5357)**	Full Year	6
	Careers in Education 2 (5361/5367)**	Full Year	3
	Computer Networking 1** (5561/5567)	Full Year	4
	Computer Networking 2 (5571/5577)	Full Year	4
	Culinary Arts 2 (5331/5337 and 5341/5347) Successful completion of Year 1 & 2	2 Full Years	6
	Desktop Publishing (5061/5067)	Semester	3
	Photography (6301)	Semester	3
	Advanced Photography (6311)	Semester	3
	English 4 (H) (1047)	Semester	4
	Manufacturing and Machine Technology 1 & 2 (5491 and 5507/5501)	2 Full Years	6
	Human Relations** (5191/5197)	Semester	3
	Introduction to Psychology (H)** (2307)	Semester	3
	Software Applications (5071)	Semester	3
	AP Computer Science (3509)	Semester	3
	Web Page Design (H) (3357)	Semester	3

\*\*Denotes that college credit may be available to sophomores, juniors and seniors. All other courses require students to be juniors or seniors.

Running Start Courses -Continued

<b>NHTI-Concord</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	Intro to Engineering Design (IED) (PLTW) (5551/5557)	Semester	4
	Digital Electronics (DE) (PLTW) (5911/5917)	Semester	4
	Principles of Engineering (POE) (PLTW) (5931/5937)	Semester	4
	Computer Integrated Manufacturing (CIM) (PLTW) (5921/5927)	Semester	4

<b>Great Bay Community College</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	Biotechnology 2 Successful completion of Year 1 and 2 (5251/5257) and (5261/5267)	2 Full Years	3
	Video Production & Broadcasting 2 Successful completion of Year 1 and 2 (5601/5607) and(5611/5617)	2 Full Years	3

<b>Manchester Community College</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	Health Science 1 (5471/5457)	Full Year	3
	Health Science 1 (5471/5457)	Full Year	3
	HVACR 1 and 2 (5511) and (5521/5527)		
	Successful completion of Year 1 & 2	Full Year	3

**DUAL ENROLLMENT COURSES:**

<b>Plymouth State University</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	Design and Visual Communications 2 (5441 or 5447)	Full Year	<b>2</b>

<b>Rivier University</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	Business Management & Entrepreneurship (H) (5107)	Semester	<b>3</b>
	Marketing 2 (H) (5537)	Full Year	<b>3</b>
	Business Finance1 (H) (5397)	Semester	<b>3</b>
	Sports & Entertainment Marketing (5121/5127)	Semester	<b>3</b>
	Business Communication (5091)	Quarter	<b>3</b>

<b>Southern New Hampshire University</b>	<b>NHS Course Title</b>	<b>Semester/ Full Year</b>	<b># Credits</b>
	College Accounting 2 (H) (5037)	Semester	<b>3</b>
	College Accounting 1 (H) (5027)	Semester	<b>2</b>



2021-2022

# SECTION 6

School Counseling Department



The School Counseling Department offers students academic, career, and personal counseling. Students analyze test results, discuss their strengths and weaknesses, and choose courses which best fit their needs, abilities and future plans. Each student is assigned to a counselor and conferences between student and counselor take place by appointment. Counselors encourage team planning which includes the student, parent, and teachers, to help ensure optimum success and achievement for the student. Additional school counseling information is available by following the link on the school's homepage on the web ([www.nashua.edu](http://www.nashua.edu)).

## **EVENING PROGRAMS FOR PARENTS & STUDENTS**

**Informational meetings on scheduling/planning** for high school will be held to provide a general orientation to the school in addition to information regarding the course selection process and development of a four-year plan. Please check the website, newspaper and mailings from each school for dates and times of these meetings. Nashua High South meetings will be held in the South auditorium and Nashua High North meetings will be held in the North auditorium. Members of the school administration and School Counseling department will be present to answer specific questions about courses, pre-requisites, sequences, graduation requirements, and deadlines for completed course selection.

**A College Fair** is hosted in early November (at Nashua High South) and in April (at Nashua High North) in the school gymnasiums. Representative for over 200 colleges and universities are available to meet with students and parents. This is an excellent opportunity to gather preliminary information on a variety of post-secondary education options.

**A Financial Aid Workshop** is an evening presentation provided to students and parents. An expert in the field of Financial Aid explains the rationale governing financial aid and how to complete the required federal form. There is also time for answering questions of a general nature.

**College Planning Night** is offered to parents and students in early fall. This evening is designed to review college application procedures including college search, common application, teacher recommendations, scholarship and financial aid information. Counselors also review information surrounding submitting credentials through Naviance.

**Junior College Planning Night** is offered to parents and juniors in the spring of the junior year. This presentation is designed to discuss the college search, college visits, SAT and ACT, application timelines, and Naviance.

## **SCHOLARSHIP AND FINANCIAL AID INFORMATION**

Material on scholarships and financial aid is available in the School Counseling Offices and may be accessed on the Naviance website. Scholarships will be announced when the applications become available. A listing of all available scholarships is available on the Naviance website.

A Free Application for Federal Student Aid (FAFSA) is required for most types of financial aid. Some colleges also require the CSS Profile. These forms are used by college financial aid offices, the Federal Government and the State of New Hampshire to determine grant eligibility, student loans, and institutional scholarships. In addition, separate institutional financial aid applications, available from each college, must be filed with the college financial aid office according to the specific deadlines.

## THE NASHUA HIGH SCHOOLS' CAREER CENTER

The purpose of the Career Center is to help prepare students for their future by providing resources and experiences, which promote career awareness and develop career related skills. The services provided are career assessment, work-based learning opportunities, employment development and placement. The Center's reference materials and expertise of the staff are available for classes or for individual students who want to explore their career opportunities.

## TESTING INFORMATION

For those considering college, it is recommended to take examinations such as the PSAT in the fall junior year followed by the SAT Reasoning Test, SAT Subject Tests and/or the ACT Assessment. These tests are required for admission to many colleges, and students should check carefully to learn the specific testing requirements for admission to each college they are considering.

- Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT)

The PSAT/NMSQT is a test given to interested juniors, sophomores and freshmen. The PSAT is a 2 hour and 45 minute examination measuring evidence-based reading, writing, language and math. Scores are reported from a low to high score of 160-760 for each section, with total overall scoring for the test from 320-1520, which more closely mirrors the SAT scoring. There is no longer a penalty for guessing on the PSAT, you simply earn points for the questions you answer correctly, so there is no advantage to leaving answers blank. The PSAT offers practice for the SAT and is a key step in planning for college. All college bound students should plan to take the PSAT. In addition, students who elect to take the PSAT junior year may be eligible for National Merit Scholarships. The Nashua School District is currently offering the PSAT to all sophomores free of charge.

- SAT and SAT Subject Tests

Many colleges require the SAT. It is 3 hours (plus 50 minutes for the essay (optional)). The SAT has 2 (or 3 depending on if the student completes the essay) scores, each on a 200-800 scale, with total overall scoring for the test from 400-1600. Scores will include evidence based reading, writing and math. The essay is optional. The changes in the SAT are designed to measure skills and knowledge needed to be ready for college and better reflect what students learn in class. There is no penalty for guessing on the SAT. The SAT is given on Saturday morning seven times a year and students must register online at [www.collegeboard.org](http://www.collegeboard.org). **In addition, the state of NH has selected the SAT as its state assessment for reading and math and is being administered to all juniors free of charge in the spring during the school day.** For more information on the SAT tests, please refer to the College Board website. Some colleges require Subject Tests in specific areas such as Literature, American History, Intermediate and Advanced Mathematics, French, German, Spanish, Biology, Chemistry, etc. The SAT Subject Tests are one hour in length and are given on Saturdays between one and six times a year. Please check requirements of the college(s) to plan a testing schedule that meets college deadlines. A maximum of three tests may be taken at any one testing session. *Note: The math tests (Level 1 & 2) suggests the use of a scientific- graphing calculator which must be supplied by the student. It is advised that the student be familiar with the operation of this calculator prior to test day.*



- ACT Assessment

The ACT Assessment is a college admission, scholarship, guidance and placement test battery designed to provide helpful information to colleges, high schools and students. The test consists of four areas: English, Mathematics, Reading and Science. The ACT Assessment and the ACT Assessment plus Writing (30 minute tests for an additional fee) are given on Saturday mornings six times a year and students must register online. The ACT is an alternative to the SAT. You may consult with your school counselor who will discuss your testing choices with you. More information about the ACT can be found at [www.actstudent.org](http://www.actstudent.org).

- Armed Services Vocational Aptitude Battery (ASVAB)

The ASVAB is offered to students on a voluntary basis and administered by the local military recruiter.

- Other Testing Information

School Counselors can assist students in making arrangements to take a number of other tests. In school testing can be provided for career assessment and Advanced Placement purposes. In addition, information is available regarding Testing of English as a Foreign Language (TOEFL). Interested students should see the school counselors for details about these and other tests. Advanced Placement testing is offered in May, and individual teachers are in the best position to advise students about participation.

### **Requesting Accommodations for Standardized Tests for Students with Disabilities**

Testing accommodations for students with disabilities are available but must be requested months in advance.

Visit [www.collegeboard.org/ssd/student](http://www.collegeboard.org/ssd/student) for detailed information about completing a Student Eligibility Form, the review process by the College Board, and registering to take the tests.

Discuss this with your case manager with whom you can initiate and complete the process.

### **Want To Go To College?**

#### **Follow these steps...**

#### **Freshmen Year – Grade 9**

- Talk with your parents and school counselor about future plans.
- Take challenging courses that prepare you for college.
- Attend school each day.
- Explore careers that interest you.
- Participate in extracurricular activities. Keep a record of them.
- Utilize Naviance for Career/College Information.

### **Sophomore Year – Grade 10**

- Review your selection of high school courses, keeping in mind career paths and college entrance requirements.
- Talk with your parents and school counselor about your future goals.
- Take the PSAT 10 in the spring.
- Attend a College Fair.
- Continue involvement in school and community activities. You can create a portfolio of these in Naviance.
- Select challenging courses for your upcoming junior year. Consider taking honors or Advanced Placement courses in your best academic areas.

### **Junior Year – Grade 11**

- Renew your commitment to take challenging courses. If you have not taken a world language, please consider taking one. Most colleges require a minimum of two years of the same language.
- Take the PSAT NMSQT in the fall.
- Meet with college representative. The list of college representative visits is available in Naviance.
- Make a list of your abilities, interests, needs and goals, and explore your college and career options with your parents and school counselor.
- Make an initial list of colleges and careers that interest you and seek out information about them.
- Attend the Nashua College Fair in the fall.
- Begin researching colleges.
- Begin visiting colleges or attend a college open house program.
- As part of New Hampshire State Testing, all juniors are required to take the SAT in their junior year
- If you are a potential college athlete, register with NCAA Clearinghouse at [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net).
- Investigate pre-college and enrichment programs for the summer or secure a part-time summer job.

### **Senior Year – Grade 12**

- Begin college applications.
- Attend College Planning Night in the fall.
- Keep in application deadlines in mind.
- Meet with college representative. The list of college representative visits is available in Naviance.
- Apply for Scholarships. A list of scholarships is available through Naviance.
- Meet with your school counselor to discuss your college plans.
- Request a letter of recommendation from a teacher
- Avoid “senioritis” and stay focused on school.
- Attend Financial Aid Night