# **TABLE OF CONTENTS**

Pag	ge
Graduation Requirements	2
Promotion Policies	2
Curriculum Levels	3
Grade Point Average	3
Transcripts	
Program Change Policy	
Academic Policies (the "N" rule)	
Number of Required Blocks	
Plagiarism Policy	
Honor Roll	
Work Study	
Summer School	
Fine, Performing and Technical Arts Courses	
Open Courses	
Freshmen Courses	
Course Description Key	
Registration Steps	
Academic Expectations Rubic	0
Course Descriptions	
All School Programs1	
Art1	
Business Technology and Education1	
Career and Technical Education1	7
Computer Science4	8
Counseling	9
EDCO	0
English	1
English Language Learners (formally ESL)	8
History and Social Sciences	
Mathematics	5
Music	0
Physical Education	
Science	
Special Education Courses and Programs	
Study Abroad & Travel Opportunities	
Technology/Engineering	
Theater	
World Language	
Career and Vocational Technical Education Application Form74	4

The availability of elective offerings will be contingent upon budget and staffing.

## GRADUATION REQUIREMENTS

In order to participate in the graduation ceremony, students must fulfill the department requirements, 100 total credits, and the state of Massachusetts requirements.

#### **REQUIREMENTS BY DEPARTMENT**

In order to graduate from Newton North High School a student must earn 100 credits and meet the requirements listed below.

English	20	credits
Biological Science	5	credits
Physical Science	5	credits
History and Social Sciences	10	credits
United States History	5	credits
Mathematics	10	credits
Physical Education	5	credits
Fine, Performing and Technical Arts	5	credits

Courses fulfilling the Fine, Performing and Technical Arts requirement are listed on page 6

#### **REQUIREMENTS BY THE STATE OF MASSACHUSETTS**

Students must earn a competency determination in each of the following three disciplines via the Massachusetts Comprehensive Assessment System (MCAS): English Language Arts, Mathematics, and Science and Technology/Engineering.

Students must satisfy one of the following two conditions to earn a competency determination in English Language Arts and Mathematics: meet or exceed the Proficient scaled score of 240 on the grade 10 MCAS tests, or meet or exceed the Needs Improvement scaled score of 220 on the grade 10 MCAS test and fulfill the requirements of an Educational Proficiency Plan (EPP). The fulfillment of an Educational Proficiency Plan (EPP) may require a student to complete additional course work beyond that required of Newton North High School for graduation.

To earn a competency determination in Science and Technology/Engineering a student must meet or exceed the Needs Improvement scaled score of 220 on one discipline-specific high school science and technology/engineering MCAS test (biology, chemistry, introductory physics or technology/engineering). Most students at Newton North High School take the introductory physics test in the spring of their freshman year.

#### **TYPICAL FOUR - YEAR SEQUENCE**

<u>Grade</u> 9	<u>Courses</u> English Health & Wellness	Physical Education World History	Mathematics World Language	Introductory Physics		
<b>10</b> World Language	English	Physical Education	Mathematics	Chemistry	World History	
11	English	Physical Education	United States History	Biology		
10						

12 English Physical Education

This sample sequence presents a minimum of credits. We recommend that you go beyond these minimum sequences to challenge yourself academically and take advantage of the rich variety of courses Newton North has to offer. Being accepted to a four-year college requires a strong academic high school program, which includes at least two years of world language, as well as a minimum of three years of math and science. Any job that pays more than minimum wage requires technical or business skills. Exploratory and introductory courses in business or career, vocational and technical education courses can help you decide on a career path. During your junior and senior year you can major in a specific career, vocational and technical education area in order to gain the skills necessary for employment or further study in that field. Consult with your school counselor about the best balance of courses.

#### **PROMOTION POLICY**

The requirements for promotion to the next grade are as follows:

For promotion to the 10th grade a student must earn 20 credits.

For promotion to the 11th grade a student must earn 44 credits.

For promotion to the 12th grade a student must earn 72 credits.

#### **CURRICULUM**

There are three levels of courses offered at Newton North: Advanced Placement/Honors, Advanced College Prep and College Prep. Some courses do not carry a level. Students may take courses in all three curriculum levels during the same year. Considerable work outside of class is required at each level. In all levels, students develop appropriate skills to work effectively in the subject area.

Advanced Placement/ Honors	These courses are advanced placement/honors courses. They contain challenging material and are taught at an accelerated pace. Advanced placement courses prepare students for the advanced placement examinations that are given in May. Departmental admission policies for honors courses are listed with their course descriptions. Advanced placement courses are taught in the following areas: American history, biology, calculus, chemistry, Chinese, computer science, English, European history, Art History, Comparative Government, French, Latin, physics, psychology, Spanish, and statistics.
Advanced College Prep	These courses are challenging college preparatory classes. They require that students have strong academic skills, technical skills and the capacity to do independent work.
College Prep	These courses generally cover the same topics as advanced college prep and prepare students for college and tech- nical careers. Smaller classes, a more structured environment and, in some cases, team teaching arrangements allow for more individualized attention.
No Level	These courses do not carry a curriculum level.

#### CREDIT

Each full year course that meets four times a week is worth five credits. Semester courses that meet four times a week are worth 2.5 credits. Physical Education courses are worth one credit. All other credit allocations are listed in the course title line.

#### **GRADE POINT AVERAGE**

Two grade point averages (GPAs) are calculated at Newton North High School: a 5.0 weighted GPA and a 4.0 unweighted GPA. A student's weighted GPA is based on curriculum level. The GPAs are calculated twice a year, at the end of both semesters, using grades from sophomore, junior and senior year. The calculations begin after the second semester of junior year. Only courses that have an assigned curriculum level are used in calculating both GPAs. Summer school courses are not calculated into the GPA. Students must have 25 credits in leveled courses to earn a GPA, thus many transfer students do not have a GPA.

	<u>ed 5.0 GPA</u> Dainta ha Carri		<u>Unweigh</u>	ted 4.0 GPA			
Grade	Points by Curri <u>Score</u>	_	evel		Grade	Score	<u>GPA</u>
		<u>AP/H</u>	ACP	CP			
А	93-100	5.0	4.5	4.0	А	93-100	4.0
A-	90-92	4.7	4.2	3.7	A-	90-92	3.7
B+	87-89	4.3	3.8	3.3	B+	87-89	3.3
В	83-86	4.0	3.5	3.0	В	83-86	3.0
B-	80-82	3.7	3.2	2.7	B-	80-82	2.7
C+	77-79	3.3	2.8	2.3	C+	77-79	2.3
С	73-76	3.0	2.5	2.0	С	73-76	2.0
C-	70-72	2.7	2.2	1.7	C-	70-72	1.7
D+	67-69	2.3	1.8	1.3	D+	67-69	1.3
D	63-66	2.0	1.5	1.0	D	63-66	1.0
D-	60-62	1.7	1.2	0.7	D-	60-62	0.7
F	59 and below	0.0	0.0	0.0	F	59 & below	0.0
N (see p	bage 4)	0.0	0.0	0.0	Ν	0	0.0
I—Inco	mplete				Ι	0	0.0

A grade of "I" (Incomplete) must be made up by the end of the next term. An Incomplete not made up by the time limit will be considered an F for the GPA. Special circumstances should be addressed to the department head.

A grade of "M" (Medical) may be assigned for students who miss class for the majority of a quarter due to significant medical circumstances. The "M" grade and credits will be determined through consultation with the counselor, department head, teacher, and housemaster.

#### **TRANSCRIPTS**

The student's transcript records all courses a student was enrolled in for more than two weeks. Transfer students' courses and grades from their previous school are not listed on the NNHS transcript. The previous school(s) transcript(s) are attached to the NNHS transcript. Transcripts show only final course grades, not term grades. This policy does not apply to curriculum level changes or Special Education changes.

## PROGRAM CHANGE POLICY

Students are expected to select courses carefully. Because spring course requests are used to determine schedules and staffing, space may not be available for students who change their minds about courses later. All requests for changes must have department head approval as well as the signatures of the school counselor and parent. Only those requests that satisfy the guidelines listed below will be approved.

#### **IMPORTANT NOTICES:**

In an effort to decrease the number of classes that students request to drop in the fall, the Administrative Team proposes to give a "W (Withdrawn)" as a final grade in all courses that students drop, starting on the first day of school. This will hopefully discourage students from over-enrolling themselves in the spring, which negatively impacts staffing, scheduling, and student mental health. No W will be given for classes changed in Arena Scheduling due to errors, omissions or resolution of conflicts.

If a student changes course levels, or courses, near the end of a marking period, the grades from the former course may appear on the report card. Final grades for the new courses will be calculated based on the subsequent terms only.

#### During the first two full weeks of school:

Schedule changes will be made only for the following reasons:

1. to correct an error. An error occurs when:

- a. course not on your registration card appears on your schedule
- b. approved course on your registration card, which both fits your schedule and has space available does not appear on your schedule
- 2. to drop or add a course as a result of summer school
- 3. to add course(s) to fulfill 22/24 periods' -per-week requirement
- 4. to add a course during an open block
- 5. in exceptional cases

#### After the first two full weeks of school-dropping a class:

#### Half - Year Course

Students will receive a W if a course is dropped before the end of the first term. Paperwork must be submitted to the Data Center with the appropriate signatures by the last day of the first term.

Students will receive a final grade of W/F if a course is dropped after the end of the first term.

#### Full Year Course

Students will receive a W if a course is dropped before the end of the second term. Paperwork must be submitted to the Data Center with the appropriate signatures by the last day of the second term.

Students will receive a final grade of W/F if a course is dropped after the end of the second term.

#### **Curriculum Level Changes:**

#### Half -Year Course

No changes in curriculum level for half year courses will be allowed after Thanksgiving vacation. Paperwork must be submitted to the Data Center with the appropriate signatures before Thanksgiving vacation.

#### Full Year Course

No changes in curriculum level for full year courses will be allowed after December vacation. Paperwork must be submitted to the Data Center with the appropriate signatures before December vacation.

#### ACADEMIC POLICIES

- 1. Each student is required to carry 22/24 periods of classes per week, per semester (see Number of Required Blocks below)
- 2. Each student must be enrolled in an English class in every semester.
- 3. Each student must attend all classes for which s/he is scheduled. At NNHS, the "N" rule governs the consequences for a student not attending his scheduled classes.

#### NUMBER OF REQUIRED BLOCKS

Juniors and seniors who are committed to extra curricular activities may enroll in a minimum of 22, not 24, blocks. These activities must be supervised by NNHS faculty/staff, be connected to the curriculum, and have a definite product or concluding performance. Examples of such activities include school sports, school publications, theater (directing, acting or tech. crew), science/math teams, Model UN, Speech Team/Mock Trial, school supervised community service, and school supervised tutoring and educational clubs.

For more information, and/or permission to take 22 blocks, students should see their school counselor. Seniors and juniors should choose their courses at registration time with this option in mind.

#### N RULE

Students will receive an N with their academic grade if any of the following occur during a single term in a class that meets four times a week:

- Nine total absences or
- Nine total times tardy or
- three unexcused absences

In a class that meets twice a week, students will receive an N with their academic grade if any of the following occur during a single term:

- Four total absences or
- Four total times tardy or
- Two unexcused absences (continued on next page)

In each class the teacher will establish his/her tardy policy. If a student is more than 25 minutes late to class, the student will be considered absent. (Excused or Unexcused)

All absences, excused or unexcused, count toward an N except absences as a result of MCAS (and other state mandated testing), A.P. exams, Special Education testing and school sponsored exchanges.

Earning an N for a Final Grade:

- A student, who earns an "N" for one term in a one-semester course or two "N's" in a full year course, may receive an "N" for the course.
- A student who earns two "N's" in a one-semester course will receive an "N" for the course.
- A student who earns three "N's" in a full year course will receive an "N" for the course.
- A student who earns an " N " in the fourth term may receive an "N" for the course.
- A student who earns an "N" for a final grade will receive no credit for the course.
- Students receiving an N for a final grade may take summer school only with the permission of the principal.

#### POLICY ON PLAGIARISM, CHEATING AND FORGERY

No student will use anyone else's work without proper attribution. Plagiarism is the improper use of, or failure to give credit to, another person's writings, visual or musical representation, or ideas. It can be an act as subtle as inadvertently neglecting to use quotation marks or references when using another source or as blatant as knowingly copying an entire paper, or parts of a paper, and claiming it as your own.

-- edited version of statement from Plagiarism.org, p. 1, May 15, 2000

#### **Plagiarism procedure**

Teachers will discuss this plagiarism policy in every class at the beginning of a course and discuss academic and ethical reasons for not using the work of other people without proper attribution.

Teachers will make it clear that they will be vigilant about looking for plagiarism and will explain the consequences and penalties.

#### **Consequences/penalties**

If a teacher and department head believe that plagiarism has occurred, they will meet with the student. When they determine that the student has committed a first offense:

• Student receives a zero for the assignment. The teacher and department head decide whether the student deserves a chance to redo the work and how the zero will affect the term grade.

• Teacher or department head informs the housemaster. The housemaster then keeps records by student of each offense without putting an official letter in the student's file. The housemaster may choose to suspend a student for a first offense.

• Teacher, department head or housemaster will inform the parent(s) or guardian(s).

When they determine that the student has committed a second offense:

- Student receives a zero for the assignment with no make-up, and the term grade will reflect this zero.
- Student serves a one-day suspension. Suspension automatically results in a letter in the student's file.

Further offenses result in more serious disciplinary action.

#### HONOR ROLL

Newton North High School recognizes academic excellence through its honor roll each marking period. Students who achieve all A's and B's in a marking period are considered Honor Roll students.

#### POST GRADUATE

Post-graduate consideration will be made on a space available basis, and only with the approval of the principal. Applicants should see a school counselor first. The principal will review all applications submitted by the counselors and make a determination. Students will receive notification of the decision from the counselor.

#### WORK STUDY

While the primary goals of the school are related to in-school programs, the value of formal work experience for all students is recognized. Accordingly, additional supervised work opportunities related to various curriculum areas are available to all students in grades 9 through 12. Work Study combines learning experiences gained through in-school related instruction (study) and regularly scheduled supervised employment (work).

Work Study opportunities are listed under the individual department headings. For additional information you can consult with the work study coordinator, your counselor, or the department head of the department sponsoring the work study program.

#### SUMMER SCHOOL

Newton North High School only allows summer school credit from courses taken at Newton Summer School, unless the department head gives prior permission. Newton Summer School offers a wide range of programs for remedial and advanced credit. In addition to the traditional courses, there are an increasing number of enrichment classes in arts, science and athletics. Grades earned for enrichment classes are not included in a student's GPA.

Students are allowed to repeat for credit any major course offered in Summer School if the student has received an "F" in the course during the regular school year. At no time will a summer school grade replace a grade earned during the school year. Both grades will appear on the transcript.

Be sure to consult your school counselor and the *Summer School Opportunities* catalog to learn what is being offered. The Newton Summer School information number is 559-6263 and website: https://www.familyid.com/organizations/newton-summer-school

## FINE, PERFORMING AND TECHNICAL ARTS

Beginning with the class of 2013, students must earn 5 credits in the "Fine, Performing, and Technical Arts" in order to graduate from NNHS. Students in the classes of 2012 and earlier are required to earn 5 credits through classes identified as "Hands On." The "Hands On" requirement has evolved into the "Fine, Performing and Technical Arts" requirement. Classes that meet the new requirement are listed below.

Arts – Visual		
	Course Number	Arts – Applied
Art Major 1	708	Newspaper Editing and Management 146
Art Major 2	709	Yearbook Management/Publication 177
Art Major 3	710	TV Media Arts Exploratory 173
Art Major 4	711	Internship in News Production & Reporting 399
Art Minor 1	701	
Art Minor 2	702	
Art Minor 3	703	Arts – Technical
Art Minor 4	704	<b>Career and Vocational Technical Education</b>
Ceramics Major	730	All Career and Vocational Technical Education exploratory courses
Ceramics Minor 1	705	fulfill technical arts requirements.
Ceramics Minor 2	706	Automotive Technology 880
Ceramics Minor 3	707	Carpentry Exploratory 887
Ceramics Minor 4	729	Culinary Arts Exploratory 902
Photography Major 1	718	Design & Visual Communications Exploratory 978
Photography Major 2	719	Drafting Exploratory 911
Photography Major 3	720	Child Development Exploratory 894
Photography Minor 1	715	Graphic Communications Exploratory 832
Photography Minor 2	716	
Photography Minor 3	717	TV Media Arts Exploratory 173
Sculpture	731	
History of Art	712	Greengineering
AP History of Art	713	All greengineering courses fulfill technical arts requirements.
	, 10	
Arts – Performing		Technology Engineering
Music		All Technology Engineering courses fulfill technical arts requirements.
Music Theory	812	
AP Music Theory	813	Business Technology
Music Technology	814	Full Year Word Processing 869
Film Scoring	815	Half Year Word Processing 870
History of Rock Music	816	Microsoft Office 2010 866
The Music of the Beatles	819	Accounting 1 855
American Musical Theatre	8382	Accounting 2 856
Jazz/Rock Workshop	831	Web Site Development 868
Advanced Jazz Improvisation	832	Interactive Multimedia 864
Jazz Ensemble 1	811	International Business 862
Jazz Ensemble 2	833	Marketing and Management 863
Concert Choir	800	
Vocal Ensemble	801	
	802	
Family Singers		Financial Planning and Banking 861
Jubilee Singers	804	
Tiger BeBop	803	English Electives
Symphony Orchestra-Strings	805 Para 810	Journalism 165
Symphony Orchestra-Winds &		Yearbook Management/Publication 177
String Ensemble	806	Speech 171
Symphonic Band	807-808	
Wind Ensemble	809	Mathematics
		Introduction to Computer Science 549
<u>Theatre</u>		Exploring Computer Science 550
Theatre Arts 1	820	Computer Programming 551-552
Theatre Arts 2	821	Mobile Computer Science Principles 553
Introduction to Technical The	eatre 822-829	I I I I I I I I I I I I I I I I I I I
Introduction to Costume Desi	ign 837-836	D1
Stage Techniques	823	Physical Education/Wellness
Stage Productions Work Study	y 824	Child Studies in Physical Education 034
Introduction to Directing/Pra	cticum 825	
Advanced Theatrical Dir./Prac	cticum 826	
American Musical Theatre	8382	

The availability of elective offerings will be contingent upon budget and staffing.

## **OPEN CLASSES**

The following classes are open to any student in the building. No previous knowledge in the subject area is needed. The classes are listed by their meeting times, either full-year or for a semester, not by department. Students are encouraged to explore classes and subject areas that will widen their knowledge and enrich their total high school experience.

#### Classes that meet outside regular school hours

Stage Techniques – 823 Newspaper Management & Publication 167,168

#### Classes that meet Full Year, 4 blocks per week

Accounting 1 - 855\* Art Major 1 - 708 Chinese 1 - 291 Computer Repair and Support - 972 Concert Choir - 801 Engineering Technology - 636 French 1 - 211 Greengineering - 101 - 927 \* Italian 1 - 271 Latin 1 - 281 Spanish 1 - 241

#### Classes that meet Full Year, 2 blocks per week

Art Minor 1 - 701 Ceramics Minor 1, 705 Concert Choir - 800 Engineering I - 959\* Engineering II - 960\* Film Scoring - 815 Interactive Multimedia - 864 Computer Programming - 551\* Computer Programming - 552\* Introduction to Computer Science - 549 Introduction to Costume Design - 837 Introduction to Technical Theatre - 829 Jazz/Rock Workshop - 833 Microsoft Office - 866 Music Theory - 812 Sculpture - 731 Symphonic Band - 808 Web Site Development - 868 \* Word Processing - 869

#### Classes that meet a Semester, 4 blocks per week

Automotive Technology Exploratory - 880 Business Law - 857\* Carpentry Exploratory - 887 Child Development Exploratory - 894 Creative Writing - 161\* Culinary Arts Exploratory - 902 Design & Visual Communications Exploratory - 978 Drafting Exploratory - 911 Entrepreneurship - 860\* Graphic Communications Exploratory - 932 International Business - 862\* TV Media Arts Exploratory - 173 Journalism 1 - 165 Marketing and Management - 863\* Sign Language - 236, 238 Speech - 171 Theatre Arts 1 - 820 Through the Lens of Documentary Film\* - 172

#### Classes that meet a Semester, 2 blocks per week

American Musical Theatre - 8382 Exploring Technology 1, fall - 963 Exploring Technology 2, spring - 964 Fashioneering 1, fall - 976 Fashioneering 2, spring - 977 Introduction to Costume Design - 836 Introduction to Technical Theatre - 822 History of Rock Music - 816 Money Matters - 867 Music of The Beatles - 819 Music Technology - 814 Photography Minor 1 - 715 Robotics 1 - 965 Xplore Greengineering I, fall - 924 Xplore Greengineering II, spring - 925 Word Processing - 870 Write On - 163

#### Classes that meet Semester 1 time per week

Stress Management Workshop – 342 Group Workshop in Human Relations - 348

\* indicates that the course is open to grades 10 -12.



Freshmen are able to enroll in the courses listed below. This symbol is also located below the course number that freshmen may enroll in.

ber that freshmen may enroll in.	
All School	
Peer Tutoring: Tutees	no level
Understanding Our Differences	no level
School Office Activity	no level
Stage Techniques	no level
At	
Art	ACD
Art Major 1	ACP no level
Art Minor 1 Photography Minor 1	no level
Ceramics Minor 1	no level
Sculpture	no level
Business Technology and Education	
Full Year Word Processing	no level
Half Year Word Processing	no level
Microsoft Office	no level
Money Matters: Intro to Personal Finance	no level
Interactive Multimedia	no level
Career and Vocational Technical Education	
Automotive Technology Exploratory	no level
Carpentry Exploratory	no level
Culinary Arts Exploratory	no level
Design & Visual Communication Exploratory	no level
Drafting Exploratory	no level
Child Development Exploratory	no level
Graphic Communications Exploratory Introduction to Technical Theatre	no level no level
Engineering Technology	ACP
Exploring Technology	no level
Exploring Technology 2	no level
Robotics	no level
Fashioneering 1	no level
Fashioneering 2	no level
Honors Computer Repair and Support (A+ Cert.)	Н
Computer Repair and Support	ACP
Xplore Greengineering	no level
TV Media Arts Exploaratory	no level
Counseling	
Stress Management Workshop	no level
Group Workshop in Human Relations	no level
EDCO	
EDCO Academic Support (History-Math-Science)	no level
EDCO English for the Deaf & Hard of Hearing	no level
EDCO Speech and Language Therapy	СР
EDCO World History	СР
EDCO Math	СР
Intro to Physics	CP
English	
English Curriculum	ACP
English Curriculum	СР
Write On	no level
Journalism 1	no level
Newspaper Management and Publication	no level
Speech	no level
English Language Learners	
All courses should be chosen in consultation with	
the Bilingual/ELL staff	

History and Social Sciences	
World History I, 300-1815	ACP
World History I, 300-1815	СР
Mathematics	
Math 1	H
Math 1	ACP Acc
Math 1 Math 1	ACP Simms ACP
Math 1	CP
Intro to Computer Science	ACP
N	
Music Vocal Ensemble	ACP
Symphony Orchestra Strings	ACP
Symphonic Band	ACP
Jazz Ensemble 2	no level
Jazz/Rock Workshop	no level
Music Theory	ACP
AP Music Theory Music Technology	H no level
Film Scoring	ACP
History of Rock Music	no level
The Music of the Beatles	no level
American Musical Theatre	no level
Physical Education	
Physical Education Freshman Core	no level
Sexuality and Health	no level
,	
Science	
Introductory Physics	ACP
Introductory Physics	СР
ELL Introductory Physics	ACP
ELL Literacy for Science Engineering Technology	CP ACP
Exploring Computer Science	ACP
Theatre	
Theatre Arts 1	no level
Introduction to Technical Theatre	no level
Introduction to Costume Design	no level
Stage Techniques American Musical Theatre	no level no level
American Wusicar meatre	no ievei
World Language	
French 1	ACP
French 2	ACP
French 1	СР
French 2	CP
Spanish 1 Spanish 2	ACP ACP
Spanish 2 Spanish 1	CP
Spanish 2	CP
Italian 1	ACP
Italian 2	ACP
Italian 1 Italian 2	CP
Italian 2 Latin 1	CP CP
Latin 1	ACP
Latin 2	ACP
Chinese 1	ACP
Chinese 2	ACP
Sign Language 1 Sign Language 2	no level no level
Sign Language for the Deaf & Hard of Hearing	no level
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-

# Course Description Key

	<b>271</b> (a)	Italian 1 (b)	ACP (c)	<b>9-10-11-12</b> (d)	<b>full year</b> (e)	<b>4 periods</b> (f)	<b>5 credits</b> (g)	
9 (h)	(a)	Number of Course: Sometimes the	he number is follow	ved by a letter indi	cating the sem	lester the cours	se is offered.	
	(b)	Name of Course.						
	<ul><li>(c) Curriculum Level: AP, H, ACP, CP or no level.</li><li>This is the curriculum by which your grade will be weighted in computing Grade Point Average. See page 3.</li></ul>							
	(d) Grade: 9-10-11-12 These numbers indicate which grade levels may take the course.							
	(e) Length of Course: This indicates whether the course is offered for a semester or a full year. Most semester courses are offered both semesters. Students will be placed in the class during the semester that better fits their schedule. If a course is offered during only one semester, that information will be included in this column. F indicates fall semester while S indicates spring semester.							
	(f)	The number of times per week th	e course meets.					
	(g) The number of credits earned for successful completion of the course.							
	(h)	The star designates the course is a	vailable for freshm	en (9th graders).				

# **Registration Steps**

- 1) After February break, students receive a course registration worksheet in homeroom and the course catalog is viewable from the Newton North Web Site- http://newton.k12.ma.us/nnhs
- 2) Students should consult with their parents, counselors, teachers, and department heads (if necessary) to determine the proper courses for them to take.
- 3) Teachers will enter course recommendations for students into skyward (student management system).
- 4) Students will access their student account on Family Access and enter additional course requests on-line.
- 5) School counselors will check student course requests for completeness and accuracy.
- 6) On verification day, students will receive their official registration cards in homeroom, which will include the courses the teachers recommended and the courses the students added themselves.
- 7) During the registration and verification process, students and parents may confer with teachers, counselors, or department heads. It is important that the course choices are considered very carefully because it will not be possible to make changes once the verification process is completed on verification day.
- 8) Counselors will check the registration form, the verification sheet, and the schedule for each student to assure that s/he is meeting all school requirements. Then, students will receive their preliminary schedules in June.

## NEWTON NORTH ACADEMIC EXPECTATIONS RUBRIC

Expectation	Primary	Secondary
1. Be aware of their own learning styles, including their relative strengths and weaknesses, and demonstrate the ability to state goals and pursue them.	Career and Technology Education Counseling Health, PE and Wellness Library	History Science English
2. Read actively, critically and deeply	Career and Technology Education English History Library World Language	Counseling Health, PE and Wellness Math Science
3. Pose articulate questions and use appropriate and effective research methods and technologies	Career and Technology Education Counseling Health, PE and Wellness History Library Science English	Business Math
4. Demonstrate critical thinking, problem solving and decision making skills	Career and Technology Education Business Counseling Health, PE and Wellness History Library Math Science English	
5. Analyze, synthesize, and evaluate information to draw conclusions	Career and Technology Education Math History Library Science English	Business Counseling Health, PE and Wellness
6. Articulate ideas, feelings, and opinions through a variety of media	Counseling English Health, PE and Wellness History Library World Language	Art Science
7. Appreciate and participate in the fine, applied, and performing arts	Art Business Health, PE and Wellness Music	Counseling History Library World Language English
8. Show curiosity about the world and an understanding of different cultural practices and perspectives	Counseling Health, PE and Wellness History Library World Language English	Music
9. Communicate effectively within and across cultures	Counseling Health, PE and Wellness World Language English	History Library

## ALL SCHOOL PROGRAMS

319 320	Academic Study Academic Study This course provides students with instruction an academic, study, and organizational skills using assig an individualized program to meet a student's needs	gnments from t	9-10-11-12 9-10-11-12 cademic skills. St their classes and o	full year full year udents work on ther appropriate	developing s	5 credits 2.5 credits trategies to improve nis support provides
	<ul> <li>Peer Tutoring</li> <li>Peer Tutoring</li> <li>Prerequisite:</li> <li>For tutees: Students and/or parents should contact For tutors: Application process. This includes approt the subject area tutored. Applications can be found on The Peer tutoring program matches upperclassmen be trained and supervised by a faculty member. Junic based on participation and attendance. Tutoring will ir general study skills, including note taking, outlining, for the statement of the study skills.</li> </ul>	oval from the p the Peer Tutor with underclas ors and seniors aclude assistant	rogram coordinate ing website: http:/ ssmen who would will tutor an undo ce with basic conce	or and recommer //nnhspeertutor benefit from add erclassman 1 or opts in specific su	ed in the Peer adation from a ingprogram.w litional acades 2x/week. All	teacher(s) in each of rikispaces.com mic help. Tutors will students are graded
350	<b>Peer Classroom Aide</b> If you would like to share your talents with others, ers, you may help other students with a variety of sub important peer support through tutoring and other act	jects, encourag	ing them to succe	Education Depar ed and gain self-	tment. With g confidence. Y	
358	<ul> <li>Understanding Our Differences</li> <li>The "Understanding Our Differences" program is d</li> <li>disabilities and individual differences in our commun</li> <li>units to elementary school students, and then complet</li> <li>article, giving a presentation to a high school class, d</li> <li>execute this project as a team.</li> </ul>	ity." High scho e reflection logs	ool students attences. Students may al	l training session so engage in a p	ns about disab roject such as	vilities , present these writing a newspaper
840	School Office Activity This is an opportunity to support students and staff housemasters with clerical tasks to representing Newton					<b>2.5 credits</b> isting secretaries and
399	Internship in News Production & Reporting Prerequisites: Journalism or Advanced Television I interview. In this internship, students rotate through a wide w Newton's public access cable station, to produce a week videography/electronic news gathering, studio camer news segment videotape editing.	variety of respo kly local news to	nsibilities with pr elecast and other p	oduction and cro eriodic broadcas	eative teams a ts. Activities i	t NewTV, the city of nclude news writing,
401	Leadership in a Diverse Society This course explores different modes of leadership Readings include literature on identity development, a changing canon, the immigrant experience, school cult ment, and gender bias. Students participate in leader plan and carry out Freshman Orientation, as well as g Faculty submit names of students recommended for diversity of the school. Leadership satisfies the elective requirement in histor	and biographie ure vs. home cu ship activities to o on a retreat to or this course t	s. Students discus ilture, white privil through service to o Thompson's Islan o a selection comi	ss issues in educ ege, tracking, as the school and i nd.	ation such as a sessment, exp in the commu	multiculturalism, the ectation and achieve- nity. In the fall, they
478	<b>Big Brother, Big Sister</b> This is a year-long service learning program in which	<b>no level</b> h participants v	<b>11-12</b> vill serve as big bro	<b>full year</b> others/sisters to p	needy childrer	<b>5 credits</b> in Newton. The first

This is a year-long service learning program in which participants will serve as big brothers/sisters to needy children in Newton. The first marking period involves orientation to the program in weekly meetings with the social worker in charge of the program. These meetings become supervisory sessions when the young person is assigned to you in November. These sessions are held during the school day and / or on Monday nights. Participants must see the child they are assigned, after school or on weekends, for 2.5 hours per week from November through May. A journal of your experience and some simple written assignments, related to the child you are assigned, are required.

A solid academic and attendance history is required. This course is also called Newton's One to One Program. Juniors and seniors may enroll but seniors will be given priority.

## CAPS - NNHS's Senior Capstone Experience

NNHS's Capstone project provides second-semester seniors with a critical learning experience and an opportunity for intellectual problem solving, social change, and community service. The focus of CAPS is to put students in the position of the "expert" in an area of study or in acareer setting of their own choosing. CAPS projects require students to develop competency in gathering, analyzing, and reporting on data. Forseniors, it's an opportunity to interweave their learning in all these areas and to do so "in real time, in an unpredictable, complex, real-world environment." We encourage all rising juniors to consider including a CAPStone project in their senior-year planning. Students should see their counselor or the CAPS website for more information. More info at www.newtoncaps.org

#### 995 CAPS -Research

no level 12

5 credits

25hr/wk (min) 5 credits

Prerequisites: Seniors must be enrolled in CAPS Research English 160 (2.5 credits) and be in good standing. Together, 995 and 160 fulfill both English and the FPTA graduation requirements.

S

S

CAPS-R is an advanced research seminar. CAPS -R students pursue a researchable question through quantitative and qualitative research methods along with a substantial field-based inquiry project. CAPS-R offers students a chance to create an independent academic experience, with the focus on authentic inquiry. The goal of the CAPS - R is for students to merge their various interests, curiosities, and passions with their academic and intellectual lives and take shape through Original Field Research, an Inquiry Paper, a web-based Project Portfolio, and a faculty/alumni judged Community Presentation that communicate all you have learned in May. In third term, accepted students will be partnered with a faculty member who will act as advisor to the student and work on development of his/her project, paper, and presentation.

#### 996 CAPS -Internship

Prequisites: A senior in good standing, strong academic. Seniors must have at least 95 credits and distribution requirements by the end of the first semester.

12

CAPS -I is a supervised focused internship experience offered to 2nd-semester seniors. These internships provide students an opportunity to investigate a career field of interest, obtain relevant work experience, and learn about decision-making, problem-solving and relation-ship-building in the professional world. CAPS -I requires a minimum of 25 hours per week internship, attendance in an ALL CAPS class for the first three weeks of term three, monthly CAPS -I seminars after February break, a web-based Investigation Portfolio, regular meetings with a faculty mentor, and a faculty/alumni judged Community Presentation that communicate all you have learned in May.

#### Classroom Aide no level usually 11-12 time and credits to be determined by the department head

no level

Some departments/programs at NNHS have a classroom aide program. The program, and the associated student responsibilities, may vary from department to department. In all cases the student and the teacher will work together closely on tasks that are helpful to the teacher and/or her students and that are educational for the student classroom aide. The student is always directly supervised by the teacher. For many students the experience is similar to a job shadow or internship.

Students do not register for "Classroom Aide" during the spring registration period. No teacher may promise an aide position to a student in the spring. To be considered as a candidate for the position of classroom aide, all interested students must complete the application/ registration process through the appropriate department head in September. Department heads will pair selected students with a supervising teacher. The department head will take responsibility for working with counselors to add "classroom aide" to the student's schedule. A student's other classes will not be changed to accommodate adding "classroom aide" to a student's schedule. Classes may not be dropped

or moved in order to add classroom aide to the schedule.

Students are graded A/P/F. Students may only earn an A if they have a proposal for advanced work approved by the department head. Credits are awarded based on the number of blocks per week. Students earn half the number of credits as a "typical" class. For example, a student who serves as a classroom aide four blocks per week for the entire year will be awarded 2.5 credits. This course credit is not counted toward any distribution requirements but may be counted toward the 100 credits required for graduation.

#### Work Study no level 10-12 time and credits to be determined by the department head

Work Study combines learning experiences gained through in-school related instruction (study) with regularly scheduled supervised employment (work). In a Work Study placement the student is treated as an employee and has the opportunity to develop work readiness skills in addition to enhancing his/her academic and/or technical competencies. Work Study is connected to a program the student has taken or is currently in. The student uses skills/knowledge gained in the classroom setting and applies them to live work that enhances the school community. The student In Work Study provides a service to the school that is above and beyond the assignment for class. This service is NOT part of a teacher's normal responsibilities. Students earn an hourly wage and are responsible for turning in their Work Study time sheets on a weekly basis to receive their pay. The students will be evaluated by their teacher supervisor to earn course credit – credits are awarded based on the number of blocks per week. This course credit is not counted as a distribution requirement. Note that a student's other classes will not be changed to accommodate adding Work Study to a student's schedule. Classes may not be dropped or moved in order to add Work Study to the schedule. For further information see your counselor, or the department head sponsoring Work Study. Work Study forms can be picked up in the Career and Vocational Technical Education office in room 112.

# At Newton North High School, we offer a hands-on, studio-based approach to teaching Art, in order to prepare our students

to be critical thinkers, creative problem solvers, project leaders, and artists engaged in a global community. Our beautiful, state of the art studios and classrooms offer students the opportunity to work collaboratively, as well as in an interdisciplinary and multicultural

approach. By offering individualized attention in a warm, supportive setting, we welcome Art students of all abilities. Students enrolled in Art classes have the opportunity to participate in the Fine & Performing Arts Department Exchange Program with Haileybury College, Melbourne, Australia. See the department website for more details on this opportunity. 708 Art Major 1 ACP 9-10-11-12 full year 4 periods 5 credits If you love art and really want to improve your skills as an artist this is the class for you. By looking at artwork from throughout history for inspiration, you will learn to use a variety of media and techniques in the areas of drawing, painting, printmaking, and mixed media. You will gain knowledge in both the creative and technical areas of making your own artwork. In this course you will be introduced to the idea of keeping a sketchbook with weekly additions. 709 Art Major 2 ACP 10-11-12 full year 4 periods 5 credits Prerequisite: Art Major 1 Continuing to build on the techniques and skills learned in the Major 1, you will expand in the areas of drawing, painting, printmaking and mixed media and work towards developing a personal style. You will continue to maintain a sketchbook with weekly additions, developing ideas for use in and outside of class. 710 Art Major 3 ACP 11-12 full year 4 periods 5 credits Prerequisite: Art Major 2 This advanced studio class will push your abilities further with an eye towards developing a body of work in drawing, painting, printmaking and mixed media. Emphasis is on mastering techniques, in depth exploration of art concepts and personal expression. You will continue to keep a sketchbook and the work created in this class will be available for use in a college portfolio. 12 full year 5 credits 711 Art Major 4 Η 4 periods Prerequisite: Art Major 3 and department approval This advanced course is the highest level of the Art Major track. We continue to work in a variety of media culminating in a mural on the walls of Newton North. The emphasis in this class is to develop a portfolio for college admission, and although most students do create a portfolio it is not a requirement. The assignments are rigorous and in-depth giving you the opportunity to showcase your best work. 701 Art Minor 1 no level 9-10-11-12 full year 2 periods 2.5 credits This is a great introductory course to the art department, if you really enjoy art and want something different in your school day. It covers foundation principles of art in the areas of drawing, painting, print-making, and sculpture. The focus is on observation, imagination and developing basic techniques. 702 Art Minor 2 10-11-12 full year 2 periods no level 2.5 credits Prerequisite: Art Minor 1 This course continues to build on the techniques and principles learned in Art Minor I. Developing skills in drawing, paint-ing, printmaking, and sculpture, you will expand on your ability to create imaginative and skilled works of art. 703 Art Minor 3 full year no level 11-12 2 periods 2.5 credits Prerequisite: Art Minor 2 You will continue to build on the skills you have learned in the previous years, with an added emphasis on creativity and personal expression, projects are more in depth and we will be working towards developing a personal style. full year 704 Art Minor 4 no level 12 2 periods 2.5 credits Prerequisite: Art Minor 3 As a senior you will continue to work to advance both your skills and personal expression. In some cases you may want to prepare work as a supplement to your college application. 718 Photography Major 1 full year ACP 10-11-12 4 periods 5 credits Prerequisite: Photography Minor 1 or permission of the instructor In this in-depth course, we will begin learning all about digital photography, while continuing to learn advanced techniques and alternative processes in the darkroom. Students will learn Photoshop and how tto edit color for digital printing. Advanced projects will be given with a lot of freedom to explore what you can do with digital and analogue photography, and develop your own individual style. We will begin to critique work, giving you the vocabulary and analytical skills to better understand images in our media saturated world. While beneficial, it is not necessary to own a camera. 719 Photography Major 2 11-12 full year 4 periods 5 credits Prerequisite: Photography Major 1 and department approval This advanced honors course is a continuation of Photography Major I, stressing personal communication skills and advanced techniques in digital and darkroom Photography. Through independent projects, you express your individuality and ability to make photographs, with a further emphasis on printing and technical processes. At this point, we really begin to work on finding a personal style and discuss portfolio development. 12 720 Photography Major 3 full year 4 periods 5 credits н Prerequisite: Photography Major 2 and department approval

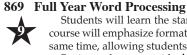
This honors level class offers more fine-tuned portfolio development for students with a focus on personal style, maturity, and growth. Independent projects are encouraged with more emphasis on research and pushing ideas in new directions.

14						
	Photography Minor 1 An introduction to photography for students with	no level	<b>9-10-11-12</b> erience, you will	F or S learn the basics		1.25 credits mera works, how to
79	develop film, and how to enlarge pictures in the dark of the art of photography and making better photog	croom. Underst	anding the techni	cal fundamenta		
716	Photography Minor 2 Prerequisite: Photography Minor 1 or permission	no level	10-11-12	full year	2 periods	2.5 credits
	In this course, we will begin to explore color in p nical aspects of film, camera, and darkroom work v photography as an art form. We will begin to critique you do not need to own a digital camera.	hotography, us will lead to an	ing Photoshop ar understanding of	the artistic pro	cess and histor	y of the medium of
717	Photography Minor 3 Prerequisite: Photography Minor 2	no level	11-12	full year	2 periods	2.5 credits
	More emphasis on your own personal expression introduced in Photography Minor 2. In addition, you may borrow a camera if you don't have one.					
730	Ceramics Major	ACP	10-11-12	full year	4 periods	5 credits
	Prerequisite: Ceramics Minor This course is for students with a strong interest i explore new techniques in hand-building, wheel-thu developing sophisticated and personal style, as well will High Fire clay and glaze, and will study historic as wire and metal.	rowing, and gla l as a continuat	zing. Emphasis w ion of critical thir	ill be on independent	endent projects v ing the envelop	with an eye towards e visually. Students
7321	Ceramics Major 2 Prerequisite: Ceramics Major and permission of t	H in structor	11-12	full year	4 periods	5 credits
2	This is the advanced class stemming from Cerami dents will focus on creating works in series. Studer alternative surface techniques such as wax resist, sc creation of portfolios. Regular critiques will provid enabling students to use critical thinking skills to se <b>Ceramics Minor 1</b> In this introductory course, you will learn a vari tionally, you will begin the adventure of learning ho <b>Ceramics Minor 2</b>	ics Major. Whil hts will use adv rafito, and Rake e an opportuni olve visual prol <b>no level</b> ety of hand bu	anced techniques u firing. Students ty for communica blems. Visits to n 9-10-11-12 ilding techniques	to experiment will learn to p ation and develo nuseums and lo <b>full year</b> a, including pin	with form, as w hotograph their opment of a visi cal artist studio <b>2 periods</b> ch, slab, coil, an	ell as incorporating work as part of the ual language, while s will be planned. <b>2.5 credits</b> nd sculpture. Addi-
	Prerequisite Ceramics 1 This course will continue to build upon the techn more complicated and elaborate projects. You will c with advanced glazing techniques.					
707	Ceramics Minor 3 Prerequisite Ceramics 2	no level	11-12	full year	2 periods	2.5 credits
	In this advanced course, students will continue to imentation. The ability to work independently is en					nanship, and exper-
729	Ceramics Minor 4 Prerequisite: Ceramics Minor 3	no level	12	full year	2 periods	2.5 credits
	This course stresses understanding the principal problem solving, and developing the ability for cri however students will also explore other materials: v and sculpture throughout the course. Critiques will The regular group and individual critiques will ena	tical analysis. 7 wood, bamboo, provide an opj	This advanced cer fabric, found mat portunity for com	amic course wi erials etc. We wi munication and	ll use clay as th ill be working w development o	e primary medium, rith wheel throwing f a visual language.
731	Sculpture This is a great course for those who like to build we and more. We will build skeletons with cardboard, a with a strong foundation of building 3 dimensional	nimal heads wi				
712	History of Art	ACP	12	full year	4 periods	5 credits
	Requirement: Department Approval Credits may be used to meet History requiremen U.S. History credit. Through lectures, group projects and independer times in which it was made. We begin with cave pai ture, and architecture will be viewed and discussed and beyond. Activities include field trips to art mus	nt research this nting and conti l for stylistic ar	course will introd nue to the art of t	luce students to he present. Imp	3000 years of a portant example	rt and the historical s of painting, sculp-
713	AP History of Art	Н	12	full year	4 periods	5 credits
	Requirement: Department Approval Credits may be used to meet History requiremen U.S. History credit. The admission process for Advanced Placement		-			

The admission process for Advanced Placement History of Art includes submission of a transcript and an interview with the department chair. In addition to the curriculum described under History of Art, students are required to write a research paper each semester. Visits to local art museums are also a requirement.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are encouraged to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

## **BUSINESS TECHNOLOGY & EDUCATION**



full year no level 9-10-11-12 2 periods 2.5 credits

Students will learn the standard keyboard technique as they familiarize themselves with word processing using Microsoft Word. The course will emphasize formatting documents such as personal business letters, business letters, book reports, and term papers, while, at the same time, allowing students to acquire the skills needed to be efficient users of the computer.

Business classes provide the student the skills necessary to meet the ever-changing trends In business, marketing, and finance.

870 Half Year Word Processing no level 9-10-11-12 F or S 2 periods 1.25 credits Students who would like to learn the standard keyboard technique as well as word processing software basics and who have limited time should take this course. Emphasis will be placed on the introduction of formatting applications using Microsoft Word. For those students who would like a more in-depth course, course 866 is recommended.



**Microsoft Office 2010** no level 9-10-11-12 full year 2 periods 2.5 credits This course will focus on the development and understanding of the 2010 Microsoft Office software package. This software is widely used in businesses and homes today. Students are taught all aspects of Office 2010 with the opportunity to earn Microsoft Office Certification. This class will offer students all the tools to learn how to express their ideas and solve problems. Each term will offer a different section of Microsoft Office - PowerPoint term 1, Microsoft Word term 2, Excel term 3, and a mixture of Onenote, Outlook, Publisher and Access term 4. Proficiency will be stressed as students learn how to create, edit and print documents using this versatile software package.

#### 867 Money Matters:

	A
2	-

9-10 n Introduction to Personal Finance no level F or S 2 periods 1.25 credits This semester course is designed to introduce students to financial literacy and related concepts while learning about how to prepare for the future. Students will learn about setting goals and financial decision making, banking services, careers and planning, budgeting, saving, investing, credit cards, loans, and consumer skills. Professional speakers in the field of finance will visit class throughout the semester.

10-11-12 full year 855 Accounting 1 ACP 4 periods 5 credits Credits may be used to meet mathematics requirements.

This course will give you a thorough background in the basic accounting procedures used to operate a business. The accounting procedures presented will also serve as a solid background for employment in office jobs and preparation for studying business classes in college. Financial literacy units including investing, personal checking accounts, and income taxes will also be presented. Computers will be used extensively for laboratory exercises and projects.

856	Accounting 2	ACP	11-12	full year	4 periods	5 credits
	Credits may be used to meet mathematics require	ements.				

This course will continue with the fundamental principles learned in Accounting 1. Students will learn more detailed information about fixed assets, depreciation, payroll accounting, bad debts and evaluation of accounts receivable, accrued income and expenses, and corporate accounting. This is a great course for students who seek employment in an accounting firm after graduation, or who wish to study accounting in college.

Computers will be used extensively for laboratory exercises and projects.

#### 858 Business Mathematics CP 11-12 full year 4 periods

Credits may be used to meet mathematics requirements.

This one-year course is divided into two major units: Personal Business Mathematics and Operational Business Mathematics. Students will review fundamental math skills before learning about financial literacy through instruction about savings and checking accounts, investment opportunities, credit cards, bank loans, etc. They will also learn math related to business operations including costs, sales, purchasing, and production.

#### 868 Web Site Development

no level full year 2 periods In this course students will learn to design and produce their own web pages. Students will learn to create digital images, animated gifs, podcasts, pdfs, movies and other elements that are found on web pages. Students will learn the programming aspects of designing a web page, including HTML and cascading stylesheets (css). The students will also learn how to create web sites with content management systems such as WordPress. The goal of the course is to give students a complete overview of web page development as it is practiced in the business world.

10-11-12

#### 864 Interactive Multimedia

857

2 periods 9-10-11-12 2.5 credits no level full year Learn how easy it is to create your own exciting computer movies. You will use the same programs as the professionals. Combine images, sound, digital movies, text and animation in your own project. A sampling of the programs we use are Flash, Photoshop, iMovie, Illustrator, audacity and Garageband. You will not believe your eyes and ears when you have completed your project. Students who wish to enroll should understand computer fundamentals.

**Business Law** 10-11-12 F 4 periods 2.5 credits no level This one-semester course will make business law meaningful to students since it covers areas of importance to all of us. Laws relating to minors, consumers, and business firms will be discussed along with contracts, warranties, real estate laws, and product liability. Discussions involving current issues related to business law will be included in the course as they occur.

**5** credits

2.5 credits

862	<b>International Business</b> This course will provide a foundation for becoming will be introduced to international business activities about fundamental aspects of global business manage as financial literacy.	and to the eco	nomic, cultural an	d political factor	s that affect it.	They will also learn
863	Marketing and Management	no level	10-11-12	F	4 periods	2.5 credits
	Learn how new products reach the marketplace. learn how to detect trends, how to work in a global m					
	projects and real-life activities. This course is designe background for those who plan to enroll in a business			about today's b	usiness world.	It provides excellent
			0			
860	<b>Entrepreneurship</b> If you think you would ever want to start your ow a small business. This course provides the opportunit your business card. Negotiate your lease. Write you the steps involved in starting a business.	y to understand	d how a small busi	iness really work	s. Learn financ	cial literacy. Design
861	<b>Financial Planning and Banking</b> Have you ever thought about preparing financially students to establish financial goals, money managen a national and global perspective. Personal finance w tablish goals related to saving and future purchases. T upon graduation.	nent skills, savii vill prepare stud	ng and investing s lents to make info	trategies, and stu ormed financial d	udy the trends c lecisions, manag	of the economy from ge resources and es-
875	Business Independent Study	no level	10-11-12	time & cred	its to be dete	rmined by Director

Business Independent Study is available to anyone who is enrolled and passing one or more business courses. time & credits to be determined by Director

**Business Office Technology Certificate** Students may take 17.5 credits from the following lists to earn the Business Technology Certificate. Courses indicated with an asterisk are required and then you may select any combination of the electives to fulfill the requirements.

16

*855	Accounting I	(5 credits)	10-11-12
*861	Financial Planning and Banking	(2.5 credits)	10-11-12
ELECTI	VE COURSES:		
856	Accounting 2	(5 credits)	11-12
857	Business Law	(2.5 credits)	10-11-12
863	Marketing and Management	(2.5 credits)	10-11-12
862	International Business	(2.5 credits)	10-11-12
860	Entrepreneurship	(2.5 credits)	10-11-12
864	Interactive Multimedia	(2.5 credits)	9-10-11-12

## **CAREER & VOCATIONAL TECHNICAL EDUCATION**

The Career & Vocational Technical Education program offers Newton Public School students opportunities to explore and develop knowledge and competency skills in a variety of career & vocational technical fields. Students will prepare for 21st-century careers and citizenship by learning how to think critically, problem solve, collaborate in teams, develop leadership skills, build effective oral and written communication skills, learn how to access, analyze, and synthesize information, and become innovative creative thinkers and designers. They will have the opportunity to explore career options and will develop an individual Career Plan designed to help them learn how to make informed choices now and for their future. Through a comprehensive sequencing of technical and academic courses, students will develop a solid foundation of knowledge and skills which is essential for a smooth transition into post-secondary education and the world of work. Upon graduation, students will be prepared and ready to pursue post-secondary education in two, or four-year colleges, vocational technical training institutes, apprenticeships, and enter the workplace. Students who complete a threeyear Major will receive a certificate of completion in their career & vocational technical program of study, earn an OSHA 10 Certification, earn an industry recognized certification (Automotive Technology, Construction Technology, Culinary Arts, and Early Education & Care), along with earning their high school diploma. The career & vocational technical education programs are approved, and are regularly reviewed by the Department of Elementary and Secondary Education in accordance with Massachusetts General Laws, Chapter 74 Regulations.

CAREER & VOCATIONAL TECHNICAL EDUCATION PROGRAMS:

Automotive Technology	Drafting
Carpentry/Construction Technology	Early Education & Care
Culinary Arts	Graphic Communications
Design & Visual Communications	Television & Video Production

**EXPLORATORY** PROGRAM provides students with the opportunity to explore career and vocational technical programs, which includes programs that are nontraditional for their gender. In the Exploratory Program students will have a chance to explore and have an experience in select vocational technical fields. Students in the Exploratory Program will work on developing the foundation of competency-based knowledge and skills in their technical field of interest which is designed to help them transition into the Major I. During the exploratory, students will research a variety of occupational and career information using an assortment of internet platforms, and they will begin to create and develop their own individualized Career Plan. The Exploratory Program meets four blocks a week for one semester. First preference into the Exploratory Program is given to 9th and 10th grade students.

**MAJOR 1** is recommended for students who have completed the Exploratory Program and would like to continue their training in the vocational technical program of study. Students will refine, hone, and expand on the foundation of knowledge and skills they established in the exploratory program. They will learn to develop leadership, collaboration, and team-building skills; understand the value of developing strong work ethics as well as continue to develop their Career Plan. The Major I meets four blocks per week for the full year. To apply for the Major 1, students must successfully complete the exploratory in the program to which they are applying, score well on the Exploratory Program Rubric, earn an Exploratory Safety Training Certificate, receive the teacher's recommendation, and fill out the Career and Vocational Technical Education program application. The student can ask for an application from their CVTE teacher, their counselor, in the CTE Office in room 112 or on page 71 in the Opportunities Handbook.

**MAJOR 2** is recommended for the students who have developed a deeper interest in the technical field and are contemplating pursuing this career pathway. In the Major 2 students will have the opportunity to apply and strengthen academic knowledge and vocational technical skills by engaging in real-world experiences in their technical learning environment. Students will be involved in a collaborative learning atmosphere - they will develop leadership and team-building skills, build presentation skills, and increase their confidence interacting with customers (school and community). The Major 2 program meets 8 blocks a week and is open to 11th and 12th grade students who have successfully completed the Major 1 in their technical field of interest. Students in the Major 2 will be registered for Health & Wellness (PE033) which is a requirement for graduation and is also a requirement to be eligible for a cooperative education work place learning experience second semester in their senior year.

**MAJOR 3** is recommended for students who have decided this is a career pathway they are interested in and are contemplating pursuing this field in post-secondary education or entry into the world of work after graduation. Students will have the opportunity to hone their foundation of academic knowledge and vocational/technical competency skills, all of which are very important for a smooth transition into post-secondary education, advanced training programs, apprenticeship programs, pursuit of a journeyman's license, or entry into the workplace. The Major 3 meets 12 blocks a week and is open to 12th grade students who have completed the Major 2. Students in the Major 3 will be registered for Entrepreneurship (759) in the fall of their senior year (with exception to those in Culinary Arts and Graphic Communications because this a central aspect of these two programs) - Entrepreneurship is a requirement to be eligible for a cooperative education work place learning experience second semester senior year.

Students who complete the Major 3 program are eligible to receive college credits through post-secondary articulation agreements when they continue their education in the vocational technical career pathway. These credits are issued after the completion of their first semester and are listed by postsecondary institution with corresponding course numbers at the end of each Major 3 program's description.

#### MAJOR 2 and 3 Honors Option:

Major 2 and 3 students may be recommended for the honors level by their teacher if they have demonstrated the following attributes:

- Possess the interest, ability and motivation to meet the challenges of an honors level course.
- Assume responsibility to be an independent learner in the program setting.
- Aspire to an advanced level of learning and critical thinking through more challenging assignments, coursework and learning opportunities.
- Assist with program/shop management.
- Handle multiple projects simultaneously.
- Work on complex projects held to a higher standard of quality.
- Commit to complete projects before or after school when necessary.
- Lead and coordinate a team of students to complete a group project.

CAREER & VOCATIONAL TECHNICAL EDUCATION COOPERATIVE WORK EXPERIENCE is available to Career & Vocational Technical Education students in the Major 3. The cooperative education work placement offers students an additional learning dimension to their educational experience and is designed to expand their knowledge and skills through a work place experience in the business community. This is a paid, supervised, instructional experience that is directly related to their career & vocational technical program. The students will be evaluated by their employer and the cooperative education coordinator, using a work-based learning plan that contains clear learning goals established by, and agreed upon by the vocational technical teacher, the employer, and the student. A student's day is divided between their academic studies and their work-site training. Students are eligible for a cooperative education workplace learning experience second semester of their senior year if they fulfill the course requirements; demonstrate an 80% or better proficiency in their competency skills, have a good attendance record, demonstrate a strong work ethic, are in good academic standing, successfully complete the safety training for their vocational technical field, earn their OSHA 10 Certification, complete their Career Plan, and receive the recommendation of their teacher.

POST-GRADUATE consideration will be made on a space available basis, and only with the approval of the principal and Director of Career & Vocational Technical Education. Applicants should see their guidance counselor to begin this process mid-way through their senior year. The guidance counselor will contact the CVTE director about the request who will then notify the principal and schedule an interview to meet with the student. The principal and director will review all applications submitted by the counselors before they make a determination. Students will receive notification of the decision from their counselor.

NOTE: The Massachusetts Community Colleges approved a statewide Articulation Agreement in 2014 in 14 vocational technical fields to provide a seamless transition for students. The programs offered by the Newton Public Schools with articulation to the community college system include: Automotive Technology (Transportation), Carpentry, Culinary Arts, Drafting, Early Education & Care (Early Childhood Education), and Design & Visual Communications (Arts & Communication). The information can be accessed on the following website: http://www.masscc.org/articulation

## AUTOMOTIVE TECHNOLOGY – CIP CODE: 470604



9-10-11-12 880 Automotive Technology Exploratory F or S no level 4 periods 2.5 credits This course is an introduction to automotive technology. The student will develop knowledge and understanding with the use of tools and equipment, develop workplace safety practices, and learn the basic systems of the automobile. The systems include brakes, engine performance, steering and suspension, electrical, and electronics. Instructional time is a combination of lecture and demonstration in related theory and applied skills training. The student will also work in the customer service office using computers to look up parts, to estimate customer work, and to learn about the various automotive systems.

#### 5 credits 882 Automotive Technology Major I ACP 10-11 full year 4 periods Prerequisite: Automotive Technology Exploratory 880

The Major I is recommended for the student who has successfully completed the Automotive Technology exploratory. The Major 1 offers students an opportunity to further develop their skills and to explore the idea of entering the automotive field and to prepare for college. They will develop new competency skills; including customer service and communication skills (verbal and written), team-building, collaboration, and leadership skills. Students will continue developing their Career Plan, explore labor market trends in automotive technology and related fields, build a personal budget based on an occupation of interest, and earn their Major 1 Safety Training Certificate. This course meets four blocks a week for a full year. Proper dress and footwear is required in the Major (1,2, & 3).

#### 8834 Automotive Technology Major 2

y Major 2	Н	11-12	full year	8 periods	10 credits
y Major 2	ACP	11-12	full year	8 periods	10 credits
ive Technology Major 1 - 882					

full year

full voor

full year

full year

8 periods

8 periods

12 periods

12 periods

10 credits

10 credits

15 credits

15 credits

12 periods

15 credits

**883 Automotive Technology Major 2** Prerequisite: Automotive Technology Major 1 - 882

The Major 2 is the continuation of an Automotive Technology program of study preparing the student to work in the field or college. Students will learn how to select and safely use hand and power tools as well as how to use equipment and machinery related to the automotive industry. Students will be given instruction in the following four areas: Brakes, Electrical/Electronic System, Engine Performance, and Suspension and Steering. The competencies in the Automotive Technology program are aligned with the competency skills and knowledge required to prepare an individual for the certification test given by the National Institute for Automotive Service Excellence (ASE). The course is organized into competency-based units of instruction as established by the National Automotive Technicians Education Foundation (NATEF). Students in the Major 2 will be registered for PE 033 for CPR and First Aid Training as part of their course requirements and this is included in the 8 period a week commitment as a Major 2. This course is a prerequisite for the student who wants to participate in a cooperative education workplace learning experience during their senior year.

#### 8844 Automotive Technology Major 3H12full year12 periods15 credits

#### 884 Automotive Technology Major 3 ACP

Prerequisite: Automotive Technology Major 2 - 883 or 8834

The students in the Major 3 will be able to work independently, has developed their leadership and customer service skills and has demonstrated a high proficiency level with their competency skills. The Major 3 is the final class of an Automotive Technology program of study intended to prepare students for working in the field or college. The student is eligible to take the ASE certification test by the end of their senior year. Students will be registered for Entrepreneurship (759) 1st semester. Entrepreneurship and the following are requirements to be eligible for cooperative education workplace learning experiences 2nd semester senior year: fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 Certification, complete their Career Plan, and receive the recommendation of their teacher.

12

POSTSECONDARY ARTICULATION AGREEMENTS include:

Benjamin Franklin Institute of Technology - TT105 Introduction to Transportation Technology, TT110 Basic Engine Theory, TT111 Basic Engine, TT112 Basic Electricity Fundamentals, and TT113 Basic Electricity Fundamentals

#### CARPENTRY/CONSTRUCTION TECHNOLOGY – CIP CODE: 460201 Carpentry Exploratory no level 9-10-11-12 F or S 4 periods 2.5 credits

Students in Carpentry Exploratory will begin developing technical competencies in construction technology. Students will develop an entry-level understanding as to the proper method and use of hand tools and they will develop safe handling practices. Students will engage in all basic operations, including measuring, cutting, planning, fastening, sanding, and finishing. Students will use applied math on a regular basis with each of their projects.

in the second se	889	Carpentry Major I	ACP	10 - 11	full year	4 periods	5 credits
--	-----	-------------------	-----	---------	-----------	-----------	-----------

Prerequisite: Carpentry Exploratory - 887

This program is recommended for the student who has completed the Carpentry exploratory program. Students will be introduced to the emerging field of green technology and the impact this has on the construction industry. Students will learn about general house carpentry and be introduced to other aspects of the construction trade. Students will develop a culture of understanding for safety; learn the importance of planning and developing strong organizational skills, and good verbal and written communication skills. Students will develop work-read-iness skills, along with healthy work ethics and values. Students will continue developing their Career Plan, explore labor market trends in construction technology and related fields, build a personal budget based on an occupation of interest, begin developing their Carpentry Technology Portfolio, and earn their Major 1 Safety Training Certificate. This program meets four times a week. Proper dress and footwear is required in the Major (1, 2, & 3).

11-12

#### 8904 Carpentry Major 2

887

0704 Cal pentry Major 2	11	11-14	iun year	
890 Carpentry Major 2	ACP	11-12	full year	

u

Η

ACP

Prerequisite: Carpentry Major I - 889

Carpentry Technology Major 2 offers a more concentrated continuation of Major I's competencies and skills. Students will have the opportunity to become more invested in "all aspects of the industry". Students will be involved with estimating, blueprint reading, building theory and history. Emphasis will be placed on honing carpentry related skills through a project-based learning in conjunction with developing industry related math skills. Reading, writing, research, and applied carpentry math are integral components of the curriculum. Students will develop a culture of understanding for safety and will be taught the importance of good planning and strong organizational skills through daily practice. Students in the Major 2 will be registered for PE 033 for CPR and First Aid Training as part of their course requirements and this is included in the 8 period a week commitment as a Major 2.

12

12

#### 8914 Carpentry Major 3

891	Car	pentry	Maj	jor	3
-----	-----	--------	-----	-----	---

Prerequisite: Carpentry Major 2 - 890 or 8904

The students in Major 3 Carpentry Technology will be guided into developing greater independent skills. Their ability to think critically and problem-solve will be enhanced as they encounter challenging construction problems. Students will study the modern methods in mill and construction carpentry. Cabinet making and engineering concepts will be introduced and skills will be strengthened. The students will be provided with a selection of materials, and taught methods of construction, job analysis, computer applications, assembling, fitting, and inspection. The students will be involved in both finish and rough work. In rough work students will erect building frames, including sub-floors, floor joists, stair stringers and rafters. In finish work, students will install molding, wood paneling, cabinets, window sash, door-frames, railing, and doors. Reading, writing research papers, and math applications are woven into the fabric of this program. Students will be registered for Entrepreneurship (759) 1st semester. Requirements to be eligible for cooperative education workplace learning experiences 2nd semester of their senior year are: successful completion of Entrepreneurship, fulfill the course requirements, demonstrate an 80% or standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 Certification, complete their Career Plan, and receive the recommendation of their teacher.

CULINARY ARTS – CIP CODE: 120503							
<b>902 Culinary Arts Exploratory</b> For students who want to explore a career in food will be introduced to quantity food preparation. In ad Students will rotate through baking and cooking stat kitchen safety skills.	dition, student	s will develop the	practical experie	nce of serving the	school community.		
<b>905 Culinary Arts Major I</b> Prerequisite: Culinary Arts Exploratory – 902 The Major I program is recommended for the studen more advanced program of study in this field. The st in the Tiger's Loft Bistro. Students in the Major 1 wil the foundation of competency skills established duri skills (verbal and written), cooperative team-building labor market trends in culinary arts and related fields Training Certificate. This program meets four times a	udents will cor I work alongsid ng their explora g skills, and lea s, build a perso a week. Proper	ttinue to build and de Major 2&3 stud atory experience, a dership skills. Stu nal budget based dress and footwea	d fine tune their dents at each diff along with deve idents will contin on an occupation ar are required ir	culinary skills by erent work station loping customer s nue developing th n of interest, and 1 the Major (1, 2, &	continuing to work n. They will build on service communication teir Career Plan, explore earn their Major 1 Safety & 3).		
0064 C1:	TT	11 10	£11	9 nominda	10		
9064 Culinary Arts Major 2	Η	11-12	full year	8 periods	10 credits		
<ul> <li>9064 Culinary Arts Major 2</li> <li>906 Culinary Arts Major 2</li> <li>Prerequisite: Culinary Arts Major 1 – 905 Students in the Culinary Arts Major 2 will do adva in quantity, such as soups, sauces, hot and cold entré to prepare menus that are nutritionally balanced. Si culinary arts and food service management. Studer students in the Major 1, helping them develop new the number of sales and earnings, and generate proc to train for, and earn, their ServSafe Certification. St part of their course requirements and this is included student who wants to participate in a cooperative exception</li> </ul>	ACP anced work in a es, salads, past tudents will de its in the Major skills. They w fuct rotation in rudents in the M t in the 8 period	11-12 a commercial kitch ries, breads, and d velop and demon : 2 will co-mentor ill learn how to us ventory reports us fajor 2 will be reg a week commitm	full year hen and be taug lesserts. They wisstrate an unders with students in se the point of sa sing the POS sys gistered for PE 0 hent as a Major 2	8 periods at the techniques ill also learn abou standing of theor in the Major 3 to c iles system (POS) tem. Students ha 33 for CPR and F . This course is a	<b>10 credits</b> for preparing foods t nutrition and how y and practice with oach and supervise , to ring sales, track ave the opportunity irst Aid Training as		
<b>906 Culinary Arts Major 2</b> Prerequisite: Culinary Arts Major I – 905 Students in the Culinary Arts Major 2 will do adva in quantity, such as soups, sauces, hot and cold entré to prepare menus that are nutritionally balanced. Si culinary arts and food service management. Studen students in the Major 1, helping them develop new the number of sales and earnings, and generate proc to train for, and earn, their ServSafe Certification. St part of their course requirements and this is included	ACP anced work in a es, salads, past tudents will de its in the Major skills. They w fuct rotation in rudents in the M t in the 8 period	11-12 a commercial kitch ries, breads, and d velop and demon : 2 will co-mentor ill learn how to us ventory reports us fajor 2 will be reg a week commitm	full year hen and be taug lesserts. They wisstrate an unders with students in se the point of sa sing the POS sys gistered for PE 0 hent as a Major 2	8 periods at the techniques ill also learn abou standing of theor in the Major 3 to c iles system (POS) tem. Students ha 33 for CPR and F . This course is a	<b>10 credits</b> for preparing foods t nutrition and how y and practice with oach and supervise , to ring sales, track ave the opportunity irst Aid Training as		

Prerequisite: Culinary Arts Major 2 - 906 or 9064

Culinary Arts Major 3 students will use the skills and competencies they developed during the Major 1 & 2 to take responsibility for supervising the daily operation of the Tiger's Loft Bistro. Students will increase their leadership skills doing advanced work in the commercial kitchen, act as a mentor to Major 1 and 2 students, become event planners, research information for new equipment, and prepare estimate proposals for purchasing, plan food orders, and work with purveyors to place orders to restock the kitchen. Students will learn the skills necessary to be successful in both the front and back of the house. To be eligible for cooperative education workplace learning experiences 2nd semester senior year, students must: fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their ServSafe Certification, complete their Career Plan, and receive the recommendation of their teacher.

Postsecondary Articulations include:

Johnson & Wales University - as a participant in the FAST program.

Newbury College- CU101 Culinary Science and Theory, CU102 American Cuisine, and CU103 Bread & Rolls

Culinary Institue of America - ServSafe

## **DESIGN & VISUAL COMMUNICATIONS – CIP CODE: 500401**



978 Design & Visual Communications Exploratory no level 9-10-11-12 F or S 4 periods 2.5 credits Have you ever wanted to make your own advertisement, 3D design, logo, or commercial? Do you have a great idea you wish could become a visual reality? This class is the first step into a world where ideas come to life. This entry-level course welcomes students of all backgrounds to learn the creative design process. Students will research solutions to design prompts, illustrate concepts, articulate and critique design ideas, and manipulate digital images. Final drafts of movie posters, 3D drawings, digital sketches, and animations will be created on the computer with professional programs such as Adobe Photoshop, Adobe Illustrator, Adobe Flash and 123D. Design is not simply knowledge, but a way of thinking, and design skills are becoming increasingly desirable in our modern age. Students will gain a strong design foundation, allowing them to approach problems with a creative mind, think more critically, and innovate beyond typical classroom boundaries. The Design curriculum offers students real-world experience and skills that are highly sought after in today's competitive markets, no matter the career path they choose.

#### 979 Design & Visual Communications, Major 1 ACP 10-11 full year 4 periods 5 credits

Prerequisite: Successfully passing Design & Visual Communications Exploratory 978. In Major 1, students will engage in a variety of projects, applying the design principles, psychology of color, and computer skills learned in the Exploratory Program. They will investigate and analyze branding, advertisements, and websites, while discussing effective marketing strategies and techniques. Through the creative use of color, images, type, and marketing themes, students will create their own commercials, 3D typography, posters, animations and advertisements. Students will start to operate as their own design firm, employing the creative design process (brainstorming, researching, sketching, articulating concepts, critiquing design ideas, and creating computer design layouts) to create the NNHS Course Catalog cover and posters for the Music and Career & Vocational Technical Education departments. Students will use professional design tools such as Adobe Photoshop, Illustrator, Flash, iMovie, Garage Band, digital cameras, and video cameras. Students in the Major 1will be encouraged to experiment with new ideas leading to innovation. Students will continue developing their Career Plan, explore labor market trends in design & visual communications and related fields, build a personal budget based on an occupation of interest, and earn their Major 1 Safety Training Certificate. This program meets four times a week.

	<ul> <li>Design &amp; Visual Communications, Major 2</li> <li>Design &amp; Visual Communications, Major 2</li> <li>Prerequisite: Successfully passing Design &amp; Visual In Major 2, students will master the creative design while operating as their own design firm. The class is production teams from companies such as Legal Sea and in groups to complete projects and foster skills se professional design presentations. They will learn the professional-level digital cameras. Depending on the m Flash, and Adobe InDesign. Major 2 students are encompleted to the second s</li></ul>	n process, advau provided with a Foods, Scienti such as commu essential eleme needs of each pro-	nced principles of opportunities to ific Publishing, au inicating with cliunts of photograph opect, students wil	design, and app work alongside p nd Lemelson-MI ents through e-m ny and its applica l use programs su	ly their skills to r rofessional desig I. Students will ail, meeting dea tion to design cou uch as Adobe Pho	gn, marketing, and work individually dlines, and giving ncepts while using otoshop, Illustrator,
983	Design & Visual Communications, Major 3	Н	11-12	full year	8 periods	10 credits
	Prerequisite: Successfully completed Advanced mended by the teacher. In Major 3, students will build on the experience This class operates as a professional design firm, and on long-term "live projects" and take on additional r included: a kids' website for Legal Sea Foods, an awar nationally recognized invention showcased at the WH as Continuum and SandCartStudio. As designers, stu ing, working with clients, and advanced design and today's competitive markets. Upon completion of the strong skill set for the pursuit of any career. To be elig year, students must fulfill the course requirements, d attendance record, demonstrate a strong work ethic, I their Career Plan, and receive the recommendation of	ce, skills, and pr students take a responsibilities rd-winning wel hite House Scie idents will deve computer tech e Design curric gible for cooper lemonstrate an be in good acad f their teacher.	rojects covered in a personal stake ir as lead designers osite for the Caree nce Fair, and colla elop new skills in niques. Skills assu ulum, students a rative education v 80% or better pro	all prior Design of their own growt for group project and Vocational aboration on spec- leadership, proje ociated with desi re fully equipped vorkplace learnir ficiency in their c	& Visual Commu th. They work m ts. Projects in pr Technical Educa tial projects with tot and time man gn are increasing with real-world ag experiences 2r competency skills	unications courses. ore independently revious years have tion department, a design firms such agement, schedul- gly sought after in a experience and a nd semester senior s, maintain a good ertificate, complete
984	Design & Visual Communications Ind. Study The self-motivated and disciplined student, on arr. including their proposal to undertake the study of ar Requirement: the student must have completed five Majors. The student must also be taking a Design & Education department head is also required. POSTSECONDARY ARTICULATION AGREEMENTS Digital Imaging/Boston University- 3D Animation & C	angement with ny subject or pr e of seven Core z Visual Comm	oject in the profe Curriculum/ Re unications course	ssion in which th equired Courses e. Approval of th	e student has a Design & Visual	particular interest. l Communications
	New England Institute of Art- Fundamentals of Design	-	a Graphic and inter	active Design		
	DRAFTIN			151201		
911	Drafting Exploratory	nG – CII no level	9-10-11-12	131301 F or S	4 periods	2.5 credits

#### 911 Drafting Exploratory

4 periods 2.5 credits

Do you like designing spaces or inventing things? Have you ever considered a career in the well-paid professions such as: Architecture, Interior Design, Engineering, Industrial Design, Landscape Design or Real Estate? If so, taking an exploratory class in Drafting could be a terrific place for you to get started in exploring the fundamental drafting skills required for these interests and their related professions. In Drafting Exploratory students learn to draft exciting 3 dimensional spaces and objects on the computer through using two different industry standard softwares: Autodesk's Revit @and Inventor @programs. These drafting software programs allow you to see your creations in a realistic 3 dimensional shape, you can create walk through videos of your buildings; you can assemble parts and even make them move! We also have a MakerBot (8) 3-D printer which allows students to print their designs into 3D plastic models. The course introduces the basic drafting principles of reading drawings, and creating spaces and objects. Many assignment opportunities allow students to apply their drafting skills into projects of their own design, for example: you could design and draft a house, a golf course, or even a cell phone case! If you like exploring how spaces or parts are designed and would like to try drawing them on the computer- than this is the class for you!

#### 915 Architectural Drafting Major 1 ACP 10-11-12 full year 4 periods 5 credits Prerequisite: Drafting Exploratory, 911 This is the Drafting Major study for students that would like to continue their drafting with the focus of the built environment using the Revit ®software as begun in Exploratory-drafting will focus in areas such as: Buildings, Interiors, Structural Design, & Landscape. In this course, the student has the opportunity to advance their emerging drafting and design skills creating projects that emphasize design standards, construction details, and presentation techniques. Students in the Major 1 will begin developing their portfolio for future college design portfolios and business/internship portfolios. Major 1 students will begin working with Lumion Software for more realistic renderings to their Revit Drafted projects. In addition to the 3-D printing on the Maker Bot-students will create traditional hand built models to explore a variety of things such as overall design concepts to foundation details. There is also an introduction to hand drawing

perspective and rendering techniques as well as a beginning introduction to historic American Architectural house styles and details. The Architectural Drafting Major offers a wide variety of projects to allow students to continue exploring the many different college & career skills for professions that specialize with the built environment.

9164 Architectural Drafting Major 2	H	11-12	full year	8 periods	10 credits
916 Architectural Drafting Major 2	ACP	11-12	full year	8 periods	10 credits
Prerequisite: Major I, 915.			-	-	

The Architectural Drafting Major 2 study is a continued development of a student's Architectural Drafting and Design techniques: including continued development of Revit® and Lumion software knowledge, construction document drawings, recreation of a historical architectural building, continued exploring historical architectural styles and designing a variety of different projects and building types. Students also continue to work on their hand drafting/rendering & model building skills; there is also continued development of the student's portfolios for possible future college portfolio submissions and business/internship opportunities. There are potentials for students to work in community projects as well. The Major 2 offers students continued development and exploring of the many different college & career skills for professions that specialize with the built environment. Students in the Major 2 will be registered for PE 033 for CPR and First Aid Training as part of their course requirements. They will also be registered in Art Minor 1 so they can begin developing their portfolio which is a requirement of many postsecondary institutions for drafting. Each of these will be done during the 8 blocks while in the Major 2.

9174 Architectural Drafting Major 3	Н	12	full year	12 periods	15 credits
917 Architectural Drafting Major 3	ACP	12	full year	12 periods	15 credits

Prerequisite: Major 2, 916 or 9164

The Architectural Drafting Major 3 student will continue to strengthen their Architectural Drafting and Design skills as developed in previous years- the Major 3 will also include adding in the mechanical and structural systems into the Revit® BIM software, and creating a small set of Construction Documents for a single family residence. There is continued development of the student's portfolio to demonstrate the culmination of design, drawing, model building and construction details that a student has been developing through independent and community drafting work over their Architectural Drafting Major Studies. Students will be registered for Entrepreneurship (759) 1st semester. Entrepreneurship and the following are prerequisites to be eligible for cooperative education workplace learning experiences 2nd semester senior year: fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 certification, complete their Career Plan, and receive the recommendation of their teacher.

## 919 Engineering Drafting - Mechanical Major I ACP 10-11-12 full year 4 periods 5 credits

Prerequisite: Drafting Exploratory, 911

This is the Drafting Major study for students that would like to continue their drafting with the focus of the manufacturing engineering and technology fields using the Inventor & Revit ®software as begun in Exploratory-drafting will focus in areas such as: technical drawing, graphical computation, and descriptive geometry. In this course, the student has the opportunity to advance their emerging drafting and design skills creating projects that emphasize 3-D modeling, assembling and presentation techniques. Students in the Major 1 will begin developing their portfolio for future business/internship portfolios. Or college when needed. The students will also have the opportunity to learn more about the many drafting career pathways in the Manufacturing, Engineering, and Technology fields.

9204 Engineering Drafting -Mechanical Major 2	Н	11-12	full year	8 periods	10 credits
920 Engineering Drafting -Mechanical Major 2	ACP	11-12	full year	8 periods	10 credits

Prerequisite: Engineering Drafting Major 1, 919

The Mechanical Major 2 continues to focus on more intermediate level drafting challenges using Inventor® and Revit **®Software**. Students will learn to produce 3 dimensional and solid modeling graphics to produce mechanical parts that they may also be able to print on the 3-d printer or layout mechanical systems in a 3-D modeled building. Mechanical Major 2 students look at additional drawing practices for advanced assemblies, weldment and sheet metal drawings. Some of the work will be used as part of the student portfolio package for possible future internships or college when needed. The Mechanical Major 2 student has opportunities to work on community projects as well. This course is aimed at the student wishing to become proficient in 3 dimensional and solid modeling, and is preparing to pursue engineering in college. Students in the Major 2 will be registered for PE 033 in CPR and First Aid Training as part of their course requirements and this is included in the 8 period a week commitment as a Major 2

9214 Engineering Drafting -Mechanical Major 3	Н	11-12	full year	12 periods	15 credits
921 Engineering Drafting -Mechanical Major 3	ACP	11-12	full year	12 periods	15 credits
Duana anticitar Encine contine Dualities Materia 2,020 a	- 0204				

Prerequisite: Engineering Drafting Major 2, 920 or 9204

The Mechanical Major 3 program continues to focus on more advanced intermediate level drafting challenges using Inventor® and Revit **®Soft-ware**. This is the course for a student who wants to become proficient in 3 dimensional and solid modeling and is preparing for employment in the industry and/or to pursue engineering in college. The students will develop a portfolio selecting the pieces of work representing the scope of their skills. Students will be registered for Entrepreneurship (759) 1st semester. Entrepreneurship and the following are prerequisites to be eligible for cooperative education workplace learning experiences 2nd semester senior year: fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 certification, complete their Career Plan, and receive the recommendation of their teacher.

## EARLY EDUCATION AND CARE – CIP CODE: 131210

894 Child Development Exploratory no level 9-10-11-12 F or S 4 periods 2.5 credits Students will study the intellectual, emotional, social, and physical domains of early child development. Students will identify components of development domains as related to play, discipline, reasoning and psychological theories. Class time will include observing and assisting in the preschool laboratory setting. Students will participate in periodic staff meetings where discussions regarding their questions and observations of the children will take place. Actual infant simulators will be used in conjunction with the study and analysis of general infant development. Professional articles will be used to further discuss topics of study, in addition to the textbook, *The Developing Child*, by Holly Brisbane

#### 895 Early Education and Care Major I ACP 10-11 full year 4 periods 5 credits

Prerequisite: Child Development Exploratory 894

If the Exploratory class sparked interest and excitement regarding working with young children, then this second level child development program is for you! Students will continue to build knowledge and skills by working and studying children in the preschool classroom setting. A more in-depth understanding of toddler/preschool aged children will be gained in addition to an emerging concentration on development in relation to the child care environment. Students will continue to observe and assist in the laboratory classroom while beginning to prepare and teach "hands-on" projects with the children. They will also learn about the many career opportunities in the Early Education and Care field (Education Cluster). Research projects will focus on developmental theories, educational philosophies, and early childhood programs; and professional articles will be used to further discuss topics for study in addition to the textbook, *Working with Young Children*, by Joyce Herr. Students will continue developing their Career Plan, explore labor market trends in early education & care and related fields, build a personal budget based on an occupation of interest, and earn their Major 1 Safety Training Certificate.

8964 Early Education and Care Major 2	Н	11-12	full year	8 periods	10 credits
896 Early Education and Care Major 2	ACP	11-12	full year	8 periods	10 credits

Prerequisite: Early Education and Care - Major I, 895

Do you think you want to work with children in some capacity one day (education, child care, counseling, psychology, pediatrics, nursing, etc.)? If you have, then the Early Education & Care Major 2 course is the next logical step! Students will alternate weeks of studying and developing early childhood curriculum in the academic classroom along with working in the toddler/preschool early childhood classroom setting. Students will continue to build on their knowledge and understanding of the development of young children through practical applications and observations. They will be responsible for developing and implementing standards guided curriculum with the children (using formal frameworks) and assisting the teachers in the preschool/toddler classroom. Students will develop a portfolio documenting their curriculum development, class work, and professional development opportunities. Students will also earn the Major 2 Safety Training Certificate as part of preparation for their cooperative education placement in their senior year. In addition, students will be registered in Early Childhood Physical Education course (034) to fulfill Infant/Child CPR and First Aid certification requirements OR the Career Fitness PE course (033) for adult CPR and First Aid certification - this is included during the 8 blocks. This course is a prerequisite for the student who wants to participate in a cooperative education workplace learning experience during their senior year. Upon successful completion of the Major 2 and 3, students are eligible to apply for state certification in Early Education and Care.

23

8974 Early Education and Care Major 3	Н	12	full year	12 periods	15 credits
897 Early Education and Care Major 3	ACP	12	full year	12 periods	15 credits

Prerequisite: Early Education and Care - Major 2, 896 or 8964

Early Education and Care Major 3 builds on the competencies learned in Major 2. Students will gain and develop a more in-depth understanding of the early education and care profession by continuing to alternate weeks of academic class instruction with a greater responsibility and involvement in the preschool lab. In addition, students will study current issues relating to the field, early childhood program policies, licensing laws, and professional expectations and responsibilities. Students will be registered in Early Childhood Physical Education course (034) to fulfill Infant/Child CPR and First Aid certification requirements OR the Career Fitness PE course (033) for adult CPR and First Aid certification - this is included during the 12 blocks. Upon successful completion of the Major 2 and 3 in the Early Education and Care program, students will be eligible to apply for state certification in Early Education and Care. Students will be registered for Entrepreneurship (759) 1st semester. The following are requirements to be eligible for cooperative education workplace learning experiences 2nd semester senior year: successful completion of Entrepreneurship, fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 Certification, complete their Career Plan, and receive the recommendation of their teacher.

POSTSECONDARY ARTICULATION AGREEMENTS include: Bay State College - Early Childhood Education • Fisher College - ED103 Introduction to Early Childhood Education Roxbury Community College - ECE101 Child Growth and Development and ECE102 Observing/Recording Child Behavior

## **GRAPHIC COMMUNICATIONS – CIP CODE: 100301**

9-10-11-12 F or S **932** Graphic Communications Exploratory no level 4 periods 2.5 credits

This course will introduce the student to a variety of graphic communications techniques. The students will design their own memo pads, flyers, folders, T-shirts, business cards, greeting cards, stickers and stationery on a Macintosh computer. The students will use InDesign, Photoshop, Freehand, Illustrator, Acrobat, and Microsoft Word software. They will learn how to make plates and print their project on an offset press. Students will also produce work on a digital 4-color press and learn how to silk screen on T-shirts. They will be introduced to the career opportunities listed in the Arts and Communications Cluster.

934	Graphic Communications Major I	ACP	10-11	full year	4 periods	5 credits
	$\mathbf{D}_{1}$	0.00				

Prerequisite: Graphics Communication Exploratory – 932

This course is recommended for a student who has completed a Graphic Communications exploratory and wishes to continue in the Graphics Communications course of study. The Major 1 will build on the skills and techniques developed in the exploratory class and the students will begin producing work for the school and community as well as do individual class projects. They will learn how to use the large format printer, develop customer service skills, learn how to do cost estimates and pricing, and how to make and manage cold-calls with customers. They will also continue developing their Career Plan, explore labor market trends in graphic communications and related fields, build a personal budget based on an occupation of interest, and earn their Major 1 Safety Training Certificate.

9354 Graphic Communication Major 2	Н	11-12	full year	8 periods	10 credits
935 Graphic Communication Major 2	ACP	11-12	full year	8 periods	10 credits
Prerequisite: Graphic Communication Major I - 9	34		·	•	

This course is recommended for the student who has completed the Graphics Communication Major I and wishes to continue in the Graphics Communications. This course will build on the skills and techniques developed in the Major I course of study. Students will produce work design calendars, program brochures, posters, and work on larger scale projects that cover all-aspects of the industry. They will interact with customers more often and will have the opportunity to follow through on the project from inception to completion which includes all the redesign iterations in between - how to let go of your idea and embrace your customer's is an important step in the design world. Students will have the opportunity to learn more about the many career pathways available in the Graphics Communication (Arts and Communication Services Cluster). Students in the Major 2 will be registered for PE 033 for CPR and First Aid Training as part of their course requirements and this is included in the 8 period a week commitment as a Major 2.

9364 Graphic Communication Major 3	Η	12	full year	12 periods	15 credits
936 Graphic Communication Major 3	ACP	12	full year	12 periods	15 credits
Prerequisite: Graphic Communications Major	2 - 935 or 9354		-	-	

Prerequisite: Graphic Communications Major 2 - 935 or 9354

The student will learn the different techniques and skills required to transform rough ideas and copy into a finished printed product. The student will gain design experience through participation in a range of projects and involvement at all stages of print production. Working with client needs and specifications, the student will develop the customer's design concept request and follow it through to its execution and final production stages. The student's hands-on experience will include designing customer projects, generating layouts and typeset copy using a variety of desktop applications on a Mac platform. The student will learn the concepts and operations of various output devices including photo offset lithography presses, digital 4-color press, and finishing equipment. The student will also have the opportunity to visit various commercial/graphic arts facilities during the course. Students must complete the following requirements to be eligible for cooperative education workplace learning experiences 2nd semester of their senior year: fulfill the course requirements, demonstrate an 80% or better proficiency in their competency skills, maintain a good attendance record, demonstrate a strong work ethic, be in good academic standing, successfully complete the safety training, earn the Major 3 Safety Training Certificate, earn their OSHA 10 certification, complete their Career Plan, and receive the recommendation of their teacher.

POSTSECONDARY ARTICULATION AGREEMENTS include:

Digital Imaging/Boston University - Graphic and Interactive Design

## **TV MEDIA ARTS & COMMUNICATIONS – CIP CODE: 500401**

	<b>TV Media Arts, Exploratory</b> This class provides students with the opportun to entertain, inform, persuade, and challenge, us visual storytelling to create multiple original sho from behind the scenes to shoot, edit, and weave setting to unfamiliar environments where they'll	ing state-of-the-a rt films and new together short v	rt multimedia equi s stories. Working i ideo segments. Pro	pment. Students in teams, they eit jects will take st	will learn the fun ther report stories udents from the tr	damental aspects of on camera or direct raditional classroom
1754	TV Media Arts, Major 1	н	10-11-12	full year	4 periods	5 credits
175	<b>TV Media Arts, Major 1</b> Prerequisite: Successful completion of TV Med In Major 1, students engage in a variety of proj the program. Assignments will include documer students will learn script writing, interview tech gain additional experience by filming school fur students earn money. Each production will air on education channel, NewTV. This class meets four	ects and explore ntary segments, nniques, news a nctions and even NNTV's YouTub	new genres of film PSAs, commercials nchoring, live stud ts. These filming o	, and studio new lio filming, and pportunities are	vs broadcasts. Thi control room dire often paid positi	cough these projects, ecting. Students can ons where qualified
1764	TV Media Arts, Major 2	Н	11-12	full year	4 periods	5 credits
	TV Media Arts, Major 2 Prerequisite: Successful completion of Interme Major 2 students will create content for multiple N show, Newton North Update, which will air live and travel to new locations throughout our community NewTV, and NNTV's YouTube channel. Students this class, students will have gained the skills, ke employment in this rapidly growing field.	INTV shows. Each e during homero to capture short do s segments may b	week students will om. Students will also cumentary segments be entered into loca	o pitch ideas, conta for the show Tiger ` 1 and national fil	nct sources, conduct Vision. This semi-mo Im competitions. A	interviews, film video, onthly show will air on At the completion of
1784	TV Media Arts, Major 3	н	12	full year	8 period	10 credits
1784 178	TV Media Arts, Major 3 TV Media Arts, Major 3 Prerequisite: Successful completion of TV Media A In Major 3, students will have the freedom to v media arts portfolios. Students will also run their city. As producers, students foster skills develope deadlines, and giving professional presentations market. Upon completion of this curriculum, stu- of any career.	ACP rts Major 2 176, a work on their ow own independe ed in leadership, Skills associated	12 with a grade of 80 or a n productions span nt production comp communicating wi with TV Media An	<b>full year</b> above and be recom- nning any genre panies by design th clients, time mets are increasing	<b>8 period</b> <i>umended by the teac</i> of their choosing a ing projects for cli nanagement, film a ly sought after in	<b>10 credits</b> <i>her.</i> and produce college tents throughout the scheduling, meeting today's competitive
	<b>TV Media Arts, Major 3</b> <i>Prerequisite: Successful completion of TV Media A</i> In Major 3, students will have the freedom to media arts portfolios. Students will also run their city. As producers, students foster skills developed deadlines, and giving professional presentations market. Upon completion of this curriculum, stu- of any career.	ACP rts Major 2 176, a work on their ow own independe ed in leadership, Skills associated dents are fully e	12 with a grade of 80 or a n productions span nt production comp communicating wi with TV Media An	<b>full year</b> above and be recom- ning any genre panies by design th clients, time m rts are increasing world experience	<b>8 period</b> <i>umended by the teac</i> of their choosing a ing projects for cli nanagement, film a ly sought after in	<b>10 credits</b> <i>her.</i> and produce college tents throughout the scheduling, meeting today's competitive

4 periods Pre-requisite: Students must have passed or currently be enrolled in SIMMS, Math 501, Math 511, Math 517, or Math 543. This course is designed to expose students to some of the many forms of engineering. In this class the students will explore Mechanical and Structural engineering concepts in some depth. In the Mechanical Engineering portion of this class the students will learn about gearing, pulleys, and lever systems. Students will be using SolidWorks and C.N.C. machinery to manufacture individual projects that they themselves have engineered to meet certain criteria. In the Structural Engineering portion of this class the students will learn about the many processes of design construction. The students will learn about the various techniques of engineering roof trusses, and floor beams to be able to carry dead and live loads. Using a variety of materials the students will be able to build and test scale model trusses and beams to determine the amount of loads they can handle.

#### 961 Honors Engineering 3

Η 10-12 full year 4 periods 5 credits Pre-Requisite - Students must have successfully passed Engineering 1 and 2. Students who complete this course will learn the engineering methods and skills involved in the production of consumer grade goods. The students will build upon and increase their knowledge of Physics, Chemistry, Electrical, Mechanical and Manufacturing Engineering to design various projects throughout the year. They will be working as members of cooperating engineering teams to design, engineer, and produce products that could be mass manufactured. The students will learn engineering design techniques such as the Axiomatic Design Process, methods of mass production, and safe handling of production equipment, i.e.,: lathe, mill, CNC equipment, robotics, vacuum forming, and injection molding. A large portion of this class will also focus on the methods of project management.

636	<b>Engineering Technology</b> Students will learn important technological and Construction Technologies, Communication Techno Students will be designing, building and testing pro measurements using a variety of instruments and tec concepts to the real world. This course Is aligned wi the students to choose to take the MCAS for Techno requirement.	logies, and Ene totype models chnologies, app th the MA State	ergy and Power Te that cover these co ilication of algebra e Frameworks for S	chnologies (Flu ncepts. Student to engineering p science and Tech	id, Thermal and s will learn prod problems, and ap mology/Enginee	Electrical systems). uct design, accurate pplication of physics ering and will allow
963	<b>Exploring Technology 1</b> This course will be taught as a hands-on project- chanical Technology, and Manufacturing Technology these technologies.	<b>no level</b> based course v y. Through the b	<b>9-10-11-12</b> where the students building and testing	<b>F</b> will learn abou g of projects, stu	t Electrical/Pow	<b>1.25 credits</b> Yer Technology, Me- the concepts behind
964 9	<b>Exploring Technology 2</b> This course will be taught using a hands-on appre Technology, Communications Technology, and Struc	<b>no level</b> oach similar to ctural Technolo	<b>9-10-11-12</b> Exploring Technol gy by designing, bu	<b>S</b> ogy I. The stud uilding and test	ents will learn al	<b>1.25 credits</b> bout Transportation s.
965	Robotics 1	no level	9-10-11-12	F or S		1.25 credits
	Robotics 2		9-10-11-12	F or S		
<b>70</b> /	<b>RODOTICS 2</b> Prerequisite: 965 is a prerequisite for 967	no level	9-10-11-12	r or <b>5</b>	2 periods	1.25 credits
	Robotics is a hands-on building and demonstratic specific tasks. The tasks start simple and progressive are: Simple machines, Gear and Pulley Systems, Tra gramming language. Robotics 2 is a continuation of and programming techniques.	ly get more con ansmission Sys Robotics 1. Th	nplicated througho tems, and Comput ne projects will get	ut the course. So ter Programmir more complicat	ome of the topics ag. We will be u red with the addi	that will be covered sing Lab View pro- tion of new sensors
968	Honors Robotics 3	Н	10-12	full year	4 periods	5 credits
	Pre-requisite- Students must have successfully passed In this course students will develop a strong under trical and electric circuit fabrication, electronic contro Python, C++, Arduino, and Lab View. U - on comp shoot custom made robots.	erstanding of in ol systems, mot	ndustrial robotic au or control systems	itomation. The and programm	y will learn mech ing in multiple la	inguages including,
976	Fashioneering 1	no level	9-10-11-12	F	2 periods	1.25 credits
	Fashion Engineering "Fashioneering" will be ta gineering principles to the design and production of systematic problem solving engineering principles w The students will be creating 3D models, jewelry and	aught as a hanc all aspects of f vithin the fashic	ls-on project based iber, textile and apj	course where s parel processes,	tudents will app products and m	ly scientific and en- achinery. The use of
977	Fashioneering 2	no level	9-10-11-12	S	2 periods	1.25 credits
9	This course is a continuation of Fashioneering 1. of fiber, textile and apparel processes, products and r will include the design, assembly and large-scale pro	nachinery. The	students will be lea			
969	Engineering Research Project 1-2 -Major 1	ACP	10-11-12	F or S	2 periods	1.25 credits
971	Engineering Research Project 3-4 -Major 2 Pre-Requisite: Permission of the instructor This course is designed for the self-motivated stu already passed 5 credits of a technology/engineerin The students, working in the technology laborate Robotics, Computer Aided Design and Manufacturi tronics Technology, Structural Technology and Transp of particular interest to him/her and investigate it in complete a semester project in their chosen technology	g course. ory, will perfor ng, Desktop Pu portation Techn n depth. The si	m a cursory invest ıblishing, Plastics T ology. Each studen	igation of the r fechnology, Mu t will then choos	nany forms of te ltimedia Design, se an area of techi	chnologies such as, Electrical and Elec- nology/engineering
972	<b>Computer Repair and Support</b> This is an intensive full year course that will instru- use of lecture and hands on activities the students w Hardware Basics: Basic electronics, mother boards and DMA, CPUs, expansion bus architecture, physical system startup sequences, and portable computers. and Linux.	vill learn about s, computer cas al memory, data	all aspects of the po es/power supplies a storage, I/O ports	ersonal comput s, battery backu s and connectors	er (P.C.). Some of ps, system settin s, I/O devices, pr	f the topics include: gs: BIOS, IRQ, I/O, inters and scanners,

973 Honors Computer Repair and Support H 9-10-11-12 full year 4 periods 5 credits (A+ Certification) The Honors level course prepares students to sit for the CompTIA A+ computer certification exams. Students who take this class must be highly motivated and already possess a strong computer background. The course moves at an accelerated pace with emphasis on preparation for the rigorous A+ examination.

## GREENGINEERING

#### WWW.GREENGINEERS.WIKISPACES.COM

924 Xplore Greengineering	no level	9-10-11-12	2 blocks	F	1.25 credits
925 Xplore Greengineering	no level	9-10-11-12	2 blocks	S	1.25 credits

Xplore GNRG is a wonderful introduction to our award-winning STEM programs. Xplore GNRG is designed around focused workshops that introduce students to cutting edge green engineering and design. The workshop model provides the balance between weekly guided seminars on 'green' topics with hands-on projects utilizing the Engineering - Design Process (EDP). The semester split below provides a proper introduction and exploration of GNRG topics and allows students to take both semesters without overlap. Students will earn an Exploratory Safety Training Certificate.

Fall Semester

1. GNRG Bootcamp - shop/lab safety protocols, materials/equipment, GNRG philosophy

2. Basic Green Technology (solar, wind, micro-hydro, peddle-power, electrical/mechanical systems)

3. Appropriate technology solutions using items from the waste stream

Spring Semester

4. GNRG Bootcamp - shop/lab safety protocols, materials/equipment, GNRG philosophy

5. Basic bags (fused plastics, material re-engineering, cradle to cradle philosophy)

6. Basic bio-engineering (Algae - as fuel, Mycelium - biomaterial engineering, Aquaponics-urban agriculture)

#### **927** Greengineering 101 no level 10-11-12 4 blocks full year 5 credits Imagine creating and distributing energy from sunlight, water, and wind. Imagine designing new products made from recycled materials. In this dynamic 'green-tech' course, students will design and build photovoltaic, micro-hydro, and wind power systems. Students will also create new products from recycled materials. The goal of Greengineering 101 is for students to engineer new and sustainable solutions through research and project-based learning. Greengineering is an integrated and interdisciplinary class that combines Science, Engineering, and Economics. This course offers students remarkable hands-on opportunities for intellectual problem solving, social change, and industry collaboration. Students will earn their 101 Safety Training Certificate. Participation/Leadership in the Greengineering Club is strongly encouraged.

928 Greengineering Independent Study	no level	10-11-12	time & credits to be determined by Director
Greengineering Independent Study is available for	students in G	reengineering cou	rses 929 and 930.

#### 929 Greengineering 201 no level

Prerequisite – Greengineering 101, or Advanced Design 981, or Engineering Tech 636 or Instructor Recommendation In GNRG 201, students will immerse themselves in design thinking protocols to tackle local and global issues with greengineers inspired solutions. Monthly green-thematic design challenges include: Students apply design, engineering, and consulting skills to create comprehensive solutions for challenges faced by communities far and wide. Multi-disciplinary student teams collaboratively design products and process prototypes, implementation plans, and user experiences as solutions.

11-12

4 blocks

full year

5 credits

In this advanced 'green-design' course, students will build on the experience, skills, and projects covered throughout our Engineering and Design courses. They will be expected to work independently on design solutions and take more responsibility as chief engineers and business leaders. Students will develop new skills in project management, balancing problem variables with constraints, challenges, building business partnerships while learning working with clients, as well as advanced engineering design, ISO 9000: I 4000, and Total Quality Management (TQM) standards and techniques. Students will research, study, and control all the aspects of a 'real-world' green-design think tank and prepare a major green innovation project collaboratively with an industry or community partner. Students will earn their 201 Safety Training Certificate. Greengineering 201, is a 21st century classroom that offers students project-based, research driven, collaborative learning.

## **930** Greengineering 301 no level 11-12 8 blocks full year 10 credits Note: GNRG 301 is run concurrently with Xplore GNRG

Prerequisites: either GNRG 101 or 201

GNRG 301 is a collaborative-service based curriculum. Students split time between co-teaching the Xplore GNRG and working with community groups on green issues. Students engage local businesses and environmental groups and work on making the Newton community as sustainable as possible. Leadership, collaboration and professional project management will become critical tools in tackling complex problem with green-designed solutions, such as building-based energy audits with the Green Decade Coalition, Newton's High Performance Building Coalition, and BU engineering; Students also contribute to green product/process design engineering with partnering companies and universities, such as MIT, Ecovative Design, Save That Stuff, Legal SeaFood, Whole Foods Market, Preserve, The Earth Day Network, UPS, Boston Tree Service, Newton Community Farm, Newton Conservators, etc. Students will earn their 301 Safety Training Certificate.

ENGIN	EERING CERTIFICAT	E – Total 55 Credits for	Certificate		
Engineer	ring Certificate Electives -	- Sub Total 10 Credits	Science Electives – Cho	oose 15 Credits from the follo	owing
965	Robotics 1	1.25 Credits	601, 611, 621, 641	Biology	5 Čredits
967	Robotics 2	1.25 Credits	602, 608, 612, 622	Chemistry	5 Credits
			605	Advanced Placement Biology	5 Credits
959	Engineering 1	2.5 Credits	606	Advanced Placement Chemistry	5 Credits
960	Engineering 2	2.5 Credits	607	Advanced Placement Physics	5 Credits
911	Drafting	2.5 Credits	613, 603, 623	Physics	5 Credits
			631	Meteorology	2.5 Credits
			632	Astronomy	2.5 Credits
			637	Forensics	5 Credits
Science – M	ust choose one – Sub Tota	l 5 Credits635	Oceanography	5 Credits	
614, 670, 644	Introductory Physics	5 Credits	633	Modern Physics	2.5 Credits
			636	Engineering Technology	5 Credits
			961	Engineering 3	5 Credits
Math – S	Sub Total 20 Credits		General Technology E	lectives – Choose 5 Credits	
501, 511, 516	Math	5 Credits	972	Honors Computer Repair & Supp	ort5 Credits
502, 512, 517	Math	5 Credits	973	Computer Repair and Support	5 Credits
503, 513, 518	Math	5 Credits	927	Greengineering 101	5 Credits
581, 582, 583	Math	5 Credits	929	Greengineering 201	5 Credits
			930	Greengineering 301	10 Credits
			969, 971	Engineering Research Projects	
			550, 551	Computers 1	5 Credits
			919, 920, 921	Engineering Drafting	5 Credits
			725	Web Site Development	5 Credits
				-	

975 Honors Computer Repair and Support and 976 Computer Repair and Support are A+ Certification preparatory classes.

	Career and Vocational Technical Education							
	Typical Four-Year Squence							
					World	PEHW/Study	CVTE	
	English	World	Physics	Math	Language	2 Blocks per	Exploratory	
9th	4 Blocks	History	4 Blocks per	4 Blocks per 4 Blocks per		Week/ per course	4 Blocks per	
Grade	per Week	4 Blocks per	Week	Week	Week	both Semesters	Week	
		Week			Academic Study	Academic Study	per Semester	
					World	PEHW/Study	CVTE	
	English	World	Chemistry	Math	Language	2 Blocks per	Major 1	
10th	4 Blocks	History	4 Blocks per	4 Blocks per	4 Blocks per	Week/ per course	4 Blocks per	
Grade	per Week	4 Blocks per	Week	Week	Week	both Semesters	Week	
		Week			Academic Study	Academic Study		
				Additional	Additional	CVTE	CVTE	
	English	United States	Biology	Math, World	Math, World	Major 2	Major 2	
11th	4 Blocks	History	4 Blocks per	Language,	Language,	includes	8 Blocks per	
Grade	per Week	4 Blocks per	Week	Elective or	Elective or	PHEW	Week	
		Week		Academic Study	Academic Study			
		PEHW/Study	Additional	Additional	CVTE	CVTE	CVTE	
	English	2 Blocks per	Math, World	Math, World	Major 3	Major 3	Major 3	
12th	4 Blocks	Week/ per course	Language, Science,	Language, Science,	includes	12 Blocks	12 Blocks	
Grade	per Week	both Semesters	History, Elective or	History, Elective or	Entrepreneurship	per Week	per Week	
		Academic Study	Academic Study	Academic Study				
9th Grad	e - Exploratory	/ Program - 4 Blocks per	Week - 1 Semester (stud	lents can take the Explore	atory Program both Sem	esters)		
10th Gra	de - Major 1 - a	after completing the Exp	oloratory Program studer	nts can apply to become a	a Major 1 - 4 Blocks per \	Veek - Full Year		
11th Gra	de - Major 2 - :	after completing the Ma	ajor 1, students can advar	nce to the Major 2 - 8 Blo	cks per Week (includes I	PEHW) - Full Year		

12th Grade - Major 3 - after completing the Major 2, students can advance to the Major 3 - 12 Blocks per Week - Full Year

## Career and Vocational Technical Education Prospective Schedule Worksheet

					World	PEHW/Study	CVTE	
	English	World	Physics	Math	Language	2 Blocks per	Exploratory	Total
9th	4 Blocks	History	4 Blocks per	4 Blocks per	4 Blocks per	Week/ per course	4 Blocks per	28 Blocks
Grade	per Week	4 Blocks per	Week	Week	Week	both Semesters	Week	
		Week			Academic Study	Academic Study	per Semester	
					World	PEHW/Study	CVTE	
	English	World	Chemistry	Math	Language	2 Blocks per	Major 1	Total
10th	4 Blocks	History	4 Blocks per	4 Blocks per	4 Blocks per	Week/ per course	4 Blocks per	28 Blocks
Grade	per Week	4 Blocks per	Week	Week	Week	both Semesters	Week	
		Week			Academic Study	Academic Study		
						CVTE	CVTE	
	English	United States	Biology			Major 2	Major 2	Total
11th	<b>English</b> 4 Blocks	United States History	<b>Biology</b> 4 Blocks per			-		Total 28 Blocks
11th Grade	U U		0,			Major 2	Major 2	
	4 Blocks	History	4 Blocks per			Major 2 includes	Major 2 8 Blocks per	
	4 Blocks	History 4 Blocks per	4 Blocks per		CVTE	Major 2 includes	Major 2 8 Blocks per	
	4 Blocks	History 4 Blocks per Week	4 Blocks per		CVTE Major 3	Major 2 includes PHEW	Major 2 8 Blocks per Week	
	4 Blocks per Week	History 4 Blocks per Week PEHW/Study	4 Blocks per		-	Major 2 includes PHEW CVTE	Major 2 8 Blocks per Week CVTE	28 Blocks
Grade	4 Blocks per Week English	History 4 Blocks per Week PEHW/Study 2 Blocks per	4 Blocks per		Major 3	Major 2 includes PHEW CVTE Major 3	Major 2 8 Blocks per Week CVTE Major 3	28 Blocks Total

## COUNSELING

342Stress Management Workshopno level9-10-11-12F or S1 period1 creditPositive and negative stress is a part of everyday life. Test anxiety, relationships, time management, and feeling overwhelmed<br/>can adversely affect physical and mental health as well as successful functioning. This workshop will teach you how to reduce<br/>and manage stress.

344 Guidance Aide Program no level 11-12 full year 2 homerooms/wk 1.25 credits Upper class students assist freshmen in homeroom as they become a part of the Newton North community. A training session focuses on techniques for building rapport with the freshmen, helping them with their transition to high school, and developing skills for creating a sense of community within the homeroom. This program provides students with an opportunity to be of service to Newton North while learning valuable skills. Students are selected via an application process in the 10th and 11th grade.

## 345 Peer Mentor Programno level10-11-12full year1/2 day training1 credit& X2 meetings

More than 100 students will transfer into Newton North during the school year. Can you imagine what it must be like to be a new member of our student body? Responsibilities will include connecting with new students and taking an active role in orienting new students to Newton North's academic, technical, cultural and extracurricular opportunities. You will also be responsible for hosting prospective students who would like to visit and see first hand what a day at Newton North is like. This is a student-centered program. Students are selected via an application process in the fall or spring.

# **347 College Planning and Transition no level 12 Term 2 X2 Block 1 credit** This course is designed for seniors who need help with the college admissions process and help with the details of staying organized and applying to any type of post-secondary institution. This class is especially helpful for students whose families may be unfamiliar with the college application process. Students may work on a number of tasks including using Naviance for college searches, creating a resume, completing the Common Application, and becoming familiar with the financial aid process.

## **348** Group Workshop in Human Relations no level 9-10-11-12 half year 1 period .5 credit/term Pass/fail



These workshops are for anger management, emotional regulation, DBT coping skills, and/or alcohol and other drug groups. Students learn to become more aware of their feelings about self and others, and learn how to change patterns of behavior that have become obstacles to their success. If you wish to join a group like this see your counselor.

## **EDCO** Secondary Education Program For The Deaf and Hard of Hearing

	EDCO Academic Support EDCO Academic Support This course is designed to support students working	<b>no level</b> <b>no level</b> g on developing s	<b>9-10-11-12</b> <b>9-10-11-12</b> trategies to improv	<b>full year</b> <b>full year</b> ve academic, stu	<b>1 period</b> <b>2 periods</b> dy, organizationa	<b>no credit</b> <b>no credit</b> Il skills and life skills
<b>X</b> 352	<ul> <li>by using lessons and assignments from core conten</li> <li>EDCO Transition Planning</li> </ul>	no level	9-10-11-12	full year	2 period	2.5 credits
2	This course is designed to support a student's underst process. This course will emphasize the transition pla gainful employment, post-secondary education or trai to augment their understanding of hearing loss and th	nning process de ning and indepe	signed to assist stu ndent living. Addi	udents in meetir	ng their post-seco	ndary goals, such as
	<b>Understanding Deafhood</b> This course is an introduction to the Deaf Community the history, culture, contributions and contemporary li	<b>no level</b> and the sum of a ives of Deaf peop	<b>9-10-11-12</b> All positive meanin ale in America.	<b>full year</b> ngs of the word '	<b>2 period</b> 'Deaf". This cou	<b>2.5 credits</b> urse exposes students
54	EDCO Post-Secondary Planning	no level	12	full year	2 period	2.5 credits
92	be covered as well as how to secure financial aid ( learn what human service resources are available EDCO English for the Deaf & Hard of Heari	e to people who a				
	EDCO English Lab	CP	9-10-11-12	full year	2 periods	2.5 credits
	<b>EDCO English Lab</b> Reading, writing, grammar, and vocabulary are em English literacy skills. Work is designed to meet ind	<b>CP</b> phasized in this	9-10-11-12 lab tutorial program	full year	1 period	1 credit
90 9	<b>EDCO World History</b> This small group course is part of a two-year W will examine the fall of the Roman Empire up t by working with primary source documents, se	<b>CP</b> Vorld History see o the French Re	<b>9</b> quence. Beginning volution. The focu	us will be on de	eveloping histori	ical analytical skills
9	<b>EDCO World History</b> This small group course is part of a two-year W will examine the fall of the Roman Empire up to	CP Jorld History see o the French Re econdary readin CP istory sequence.	<b>9</b> quence. Beginning volution. The foct gs, maps and vid <b>10</b> It includes the stud	g with a study of us will be on do deos. Basic reso <b>full year</b> dy of nationalism	of ancient world eveloping histori earch skills will <b>4 periods</b> n, industrializatio	religions, students ical analytical skills also be addressed. <b>5 credits</b> on and imperialism
91	<ul> <li>EDCO World History This small group course is part of a two-year W will examine the fall of the Roman Empire up t by working with primary source documents, se </li> <li>EDCO The Modern World This small group course is part of a two-year World H within the context of World War I, World War II, and the second sec</li></ul>	CP Vorld History see o the French Re econdary readin CP istory sequence. he Cold War. Stu CP and social histor vill use maps, pri	9 quence. Beginning volution. The foct gs, maps and vid 10 It includes the stud dents will continue 11-12 ry of the United St mary source docu	g with a study of us will be on do deos. Basic reso <b>full year</b> dy of nationalist te to develop and <b>full year</b> tates, emphasizi ments, secondar	of ancient world eveloping histori earch skills will <b>4 periods</b> n, industrialization lytical skills and <b>4 periods</b> ng the founding y readings, and w	religions, students ical analytical skills also be addressed. <b>5 credits</b> on and imperialism be expected to write <b>5 credits</b> of the United States
<b>1</b> 91	<ul> <li>EDCO World History This small group course is part of a two-year W will examine the fall of the Roman Empire up t by working with primary source documents, se </li> <li>EDCO The Modern World This small group course is part of a two-year World H within the context of World War I, World War II, and t analytical essays and a major research paper. </li> <li>EDCO U.S. History This small group course will examine the political and the period from 1865 to the present. Students v</li></ul>	CP Vorld History see o the French Re econdary readin CP istory sequence. he Cold War. Stu CP and social histor vill use maps, pri nent analysis to f	9 quence. Beginning volution. The foct gs, maps and vid 10 It includes the stud dents will continue 11-12 ry of the United St mary source docu urther develop cri 9-10-11-12	g with a study of us will be on do deos. Basic reso <b>full year</b> dy of nationalist te to develop and <b>full year</b> tates, emphasizi ments, secondar itical reading and <b>full year</b>	of ancient world eveloping histori earch skills will <b>4 periods</b> n, industrialization lytical skills and <b>4 periods</b> ng the founding y readings, and working skills. <b>4 periods</b>	religions, students ical analytical skills also be addressed. <b>5 credits</b> on and imperialism be expected to write <b>5 credits</b> of the United States rideos in their work. <b>5 credits</b>

This course is taught in conjunction with section 614. With the support of a Teacher of the Deaf, students will learn important science related skills and their application to the real world. Topics covered include forces, motion, electricity, magnetism, waves, light, sound and heat.

2

## ENGLISH

The English Department offers a strong program of classic and contemporary literature from diverse voices that challenges students to think about timeless issues that shape our lives. Students are required to take an English course each of their four years at Newton North in order to meet the twenty-credit requirement. For those students interested in pursuing English related topics beyond the requirements, we offer a variety of electives as well.

Students in all curriculum levels read a core of important works in many genres, including *The Odyssey*; stories and poetry from the Bible; Sophocles' *Oedipus Rex*; Shakespearean plays (including *Romeo and Juliet, Macbeth,* and *Hamlet*); Mark Twain's *Adventures of Huckleberry Finn*; Zora Neale Hurston's *Their Eyes Were Watching God*; and selected writings of Martin Luther King, Jr. Other texts that students may read include: *The Catcher in the Rye, Of Mice and Men, The House on Mango Street, The Laramie Project, The Curious Incident of the Dog in the Night-Time, When the Emperor was Divine, The Glass Castle, Interpreter of Maladies, Angels in America, Death of a Salesman, The Great Gatsby, Into The Wild and The Things They Carried.* Through class discussions of the ideas and artistry in these and other works, we help students learn to read with greater insight, sensitivity and pleasure.

We strive for excellence in writing by requiring students at every grade and curriculum level to write analytically, personally, critically, imaginatively — and often. Students use the process of writing to focus, clarify, deepen and expand their thinking. They learn to support their reasoning with coherent arguments and specific evidence.

Students also learn to revise, edit, respond to written comments, reflect upon their progress, and take responsibility for their own work. They keep yearly, cumulative folders and confer regularly with their teachers. Through the development of portfolios over four years, students learn to see the world as writers and understand that writing, as well as reading, is a vital part of life.

### FRESHMAN ENGLISH

Students entering grade nine take one of the following courses according to placement suggested in grade eight. In this first year of high school English, students explore portrayals of heroism, tragedy, and love from ancient and modern cultures. Students study *Romeo and Juliet, The Odyssey*, the book of *Genesis* in the Bible, writing skills and vocabulary in each course. Throughout freshman English, students will gather writing samples for their English Portfolio as part of their coursework.

 100
 English 9
 ACP
 9
 full year
 4 periods
 5 credits

 The Advanced College Prep sequence consists of rigorous courses for students who are highly motivated to read independently, to think carefully about what they've read, and to work hard to improve their writing. Beyond the study of *The Odyssey*, students undertake a close reading of *Romeo and Juliet* and a number of contemporary works rich in symbolism (e.g. *The Catcher in the Rye, The House on Mango Street*, Of Mice and Men, Persepolis, *The Absolutely True Diary of a Part-Time Indian*, and a wide selection of poetry).

Most of the writing assignments focus on developing informed responses to the literature as students work at becoming better inferential readers. By learning to support what they say with details and examples from the texts, students move beyond subjective interpretations and literal recountings of plot to deeper understandings of theme and symbolism. The ninth grade course also emphasizes creative experiments involving forms of literature the class is studying. Vocabulary building exercises, review of grammar skills and targeted lessons in essay structure further enhance students' development as writers and thinkers.

#### 101 English 9



nglish 9CP9full year4 periods5 creditsThe College Prep sequence provides extra support in reading comprehension, writing, and study skills for students. In this first high schoolEnglish course, students read The Odyssey and other myths and stories from many cultures about heroism, tragedy, and love. They readand discuss Shakespeare's Romeo and Juliet, and a number of contemporary movies (e.g. The Catcher in the Rye, The House on Mango Street, OfMice and Men, Persepolis, The Absolutely True Diary of a Part-Time Indian, and a wide selection of poetry). They also write about the meaningof these works and their emotional impact. Students reflect upon the reasons people tell stories and how stories become literature. Theyalso make connections between the literature and their own lives.

In writing, students brainstorm, draft, revise, edit and proofread, as they did in middle school. They learn new vocabulary, practice discussion and oral presentation skills, brush up on grammar and usage, and improve their composition of good sentences and paragraphs. Students also learn study skills in organization, time-management and note-taking so that they can become successful independent learners. (TECH PREP 2+2 eligible)

#### SOPHOMORE ENGLISH

Students entering grade ten take one of the following recommended courses according to the placement suggested in grade nine. All sophomores complete a unit on Shakespeare, Greek tragedy and Martin Luther King, Jr. All students will also practice responding to specific reading and writing prompts as well as learn test-taking strategies to prepare for the English Language Arts MCAS in the spring. Throughout sophomore English, students will gather writing samples for their English Portfolio as part of their coursework.

Students who show very strong inferential reading and analytical writing skills, a passion for literature, and consistent excellent effort in their English classes may be recommended for honors (H) courses.

#### 110 English 10 H 10 full year 4 periods 5 credits Honors Sophomore English is a course for students who have been recommended by their ninth grade teacher based on the criteria in our English placement guidelines. Students find both the pace and the complexity of literary study substantially greater at this level than in ninth grade classes. They typically read *Oedipus Rex, Macbeth, The Stranger, The Glass Castle,* "Letter from the Birmingham Jail" and an extensive collection of poetry, and/or independent selections from a variety of cultures each term. Honors students are expected to be prepared to participate actively in class discussions; to write almost every day; and to think deeply about the meaning of figurative language, tone, and details of plot and characterization in the works they study.

Writing assignments are mostly analytical, as students experiment with different ways to organize support for a thesis. Assuming a mastery of fundamentals of grammar and usage, teachers help students vary their sentence and paragraph structures to make their writing more sophisticated and precise. Students also have opportunities to experiment with creative writing and to respond personally to reading and ideas. A major writing and public speaking activity in the sophomore year is the Martin Luther King, Jr. Speech Contest, where students speak on an important, relevant topic that advocates a change in attitude or incites a call to action.

# 111 English 10 ACP 10 full year 4 periods 5 credits Sophomore Advanced College Prep students are challenged to think and write more critically about their reading, which typically includes

Oedipus Rex, Macbeth, The Curious Incident of the Dog in the Night-time, "Letter from the Birmingham Jail" and stories and poetry from many other cultural traditions.

A major writing and public speaking activity in the sophomore year is the Martin Luther King, Jr. Speech Contest, where students speak on an important, relevant topic that advocates a change in attitude or incites a call to action. Throughout the year, students also work to make their written interpretations of literature more precise and profound through specific analysis of figurative language and artistic form in the works. They learn to organize their ideas by using a variety of outline forms and by developing substantial paragraphs in their essays. Students also learn to make their sentence structure more effective through focused lessons on grammar and punctuation.

#### 112+(113) English 10 (Power English)CP10full year6 periods7.5 credits

Sophomore College Prep English students are challenged to think and write more critically about their reading, while also getting support in order to meet these challenges. Reading this year includes *Oedipus Rex, Macbeth, The Curious Incident of the Dog in the Night-time*, and several other literary works in a variety of genres. Critical writing includes careful, substantiated responses to questions about the text and focuses on the development of organized paragraphs in students' essays. A major writing and public speaking activity in the sophomore year is the Martin Luther King, Jr. Speech Contest, where students speak on an important, relevant topic that advocates a change in attitude or incites a call to action. Oral presentations throughout the year reinforce critical thinking and communications skills.

Because the MCAS examination at the end of the sophomore year plays such a significant role in students' lives, determining whether or not they can earn a high school diploma, all tenth grade CP English classes meet for two extra periods each week. These "power periods" have only half the students in them at any time, thus enabling the teachers to work with students on individual reading and writing issues and on preparation for the test. Students, therefore, must enroll in both 112 and 113. (However, only 5 of the 7.5 credits may be used for the graduation requirement in English.) (TECH PREP 2+2 eligible)

#### **JUNIOR ENGLISH**

Students entering grade eleven take one of the following yearlong courses according to the placement recommended in grade ten. Every junior English course emphasizes reading in American literature to complement American history courses that students also take in grade eleven. All juniors will study both classic and contemporary works such as Adventures of Huckleberry Finn, Their Eyes Were Watching God, The Great Gatsby, Death of a Salesman, Into the Wild and Interpreter of Maladies. In addition, all junior students will prepare an entry for the Heintzelman creative writing contest and will gather writing samples for their English Portfolio as part of their coursework.

129 AP Language and Composition 5 credits Η 11 full year 4 periods AP Language and Composition is a course for juniors who have been recommended to study (or continue studying) English at the honors level based on the criteria in our English placement guidelines. The Advanced Placement course in Language and Composition mirrors the instruction of an introductory college composition course, preparing students for the kinds of writing they do across courses in college. In addition to three junior core texts, students will study rhetoric and read classic and contemporary essays, articles from current popular magazines, and works of non-fiction such Michael Patrick MacDonald's All Souls and Truman Capote's In Cold Blood. Students will write personal, argumentative, and expository essays and explore journalistic forms of writing to develop their own voices as writers. This course will prepare students for the AP Language and Composition exam in the spring.

#### 120 English 11 Η 11 full year 4 periods 5 credits Honors Junior English is a course for juniors who have been recommended by their sophomore English teacher to study (or continue studying) English at the honors level based on the criteria in our English placement guidelines. At this level, students are expected to prepare carefully for class, to read and reread texts, and to bring interesting or perplexing ideas to class discussions. They engage in a sustained study of American writers such as Emerson, Thoreau, Hawthorne, Twain, Hemingway, Miller, Fitzgerald and Hurston. Beyond gaining a sense of the literary background and diversity of many of our country's most significant novelists, playwrights, and poets, as well as some writers from other countries, students come to understand more sophisticated critical approaches to literature by exploring recurrent motifs, narrative structures, and ironies. Challenging analytical assignments in both writing and speaking focus on continuity, logic, and emphasis. Imaginative assignments stress techniques of showing instead of just telling. Class instruction and conferences give attention to subtle integration of quotations and transitions, precise use of vocabulary, and fine points of punctuation.

**121** American Studies full year 4 periods Η 11 5 credits

Honors American Studies is a course for juniors who have been recommended to study (or continue studying) English at the honors level based on the criteria in our English placement guidelines. American Studies is a rigorous interdisciplinary exploration of American experience through primary source documents, literary texts, critical commentaries, and supplementary art works and films. Students come to understand the American values that developed during the colonial period and trace the changes in these values during the period of the Revolution, the Jacksonian era, the Civil War and the rise of America from a nation of immigrants to a global super power.

In addition to the history text, students read original letters from the Conquistadores, Puritan sermons and lectures, and works by authors such as Hawthorne, Emerson, Thoreau, Hawthorne, Twain, Douglass, Hurston, Fitzgerald, as well as a selection of American poetry and contemporary drama.

Most of the written and oral assignments require careful analysis of texts; but students also write fiction, poetry, and personal narratives. Students learn through cooperative work, oral presentations and a sustained focus on reflective, analytical note-taking skills during animated class discussion. At the end of the year students do an extensive project on the nature of American culture(s) and values.

Together English 121 and History 438 prepare students for the Advanced Placement exam in American History offered in the spring.

#### 122 English 11 ACP 11 full year 4 periods 5 credits Junior Advanced College Prep students engage in a sustained study of American poets, dramatists, essayists, and novelists. Course readings

typically include Adventures of Huckleberry Finn, The Great Gatsby, A Streetcar Named Desire and Their Eyes Were Watching God. Beyond gaining a sense of the literary background and diversity of significant writers from our own and other cultures, students explore patterns of language, imagery, and irony in literature.

Writing and speaking assignments focus on continuity, logic, and emphasis, as well as the techniques of showing and not just telling. Class instruction and conferences give special attention to the use of transitions, expansion of vocabulary, and smooth and effective integration of quotations into analytical essays.

#### 123 American Studies

4 periods ACP 11 full year 5 credits English 123 and History 439 combine to form the Advanced College Prep American Studies program, integrating American literature and history through a chronological and thematic approach. Students examine the fundamental values, institutions, and mores established in early American history and explore how they have evolved over time to the 21st century. Students focus on American notions of individualism, the environment, democracy, capitalism, and our international affairs. Adventures of Huckleberry Finn, The Great Gatsby, Their Eyes Were Watching God, and A Streetcar Named Desire are among the readings. Students also discuss excerpts from such authors as Douglass, Emerson, and Thoreau. Writing focuses on creative papers, personal reflections, and analytical and critical essays. The American Studies program satisfies the junior year English and history requirements.

124 English 11 СР 11 full year 4 periods 5 credits Junior College Prep students study American poets, dramatists, essayists, and novelists, while getting the continued support they need to strengthen their reading and writing skills. Course readings typically include Adventures of Huckleberry Finn, The Great Gatsby, Their Eyes Were Watching God and All Souls. In regular writing assignments and oral presentations, students focus on explaining writers' use of repeated motifs and satiric tone. Students continue to build their vocabulary, their understanding of grammatical structures, and their communication skills. (TECH PREP 2+2 eligible)

#### 125 American Studies

CP 11 full year 4 periods 5 credits English 125 and History 433 combine to form the College Prep American Studies program, integrating American literature and history through a chronological and thematic approach. Students examine the fundamental values, institutions, and mores established in early American history and explore how they have evolved over time to the 21st century. Students focus on American notions of individualism, the environment, democracy, capitalism, and our international affairs. Adventures of Huckleberry Finn, All Souls, Their Eyes Were Watching God, and The Lone Ranger and Tonto Fistfight in Heaven are among the readings. Students also discuss excerpts from such authors as Douglass, Emerson, and Thoreau. Writing focuses on creative papers, personal reflections, and analytical and critical essays. The American Studies program satisfies the junior year English and history requirements. (TECH PREP 2+2 eligible)

#### SENIOR ENGLISH

All students will select a yearlong English course. Students will complete units on the personal essay and Shakespeare's tragedy Hamlet during the first term. During the second and third terms, students will complete a curriculum based on the specific theme of the course. In the fourth term, all students will complete an extensive senior project focused on the area of study within their chosen course. This senior project will include both oral and written components and will be the culmination of a student's four years of English study at Newton North. All students will also edit their English Portfolios and write a reflection on their growth as readers, thinkers and writers. This portfolio will be bound and given to seniors at the end of the year as a celebration of their achievements.

#### SENIOR HONORS COURSES

#### 130 AP Literature and Composition

Η 12 full year 4 periods 5 credits AP English Literature and Composition is a course for seniors who have been recommended to continue studying English at the honors level or who have been recommended based on the criteria in our English Placement Guidelines. Students are expected to draw significant connections between the ideas and artistic structure of classic and contemporary works such as Tim O'Brien's The Things They Carried, Tom Stoppard's Rosencrantz and Guildenstern are Dead, Junot Diaz's The Brief Wondrous Life of Oscar Wao, Toni Morrison's Song of Solomon, Shakespeare's Hamlet and Jane Austen's Pride and Prejudice. Students also engage in substantial close reading of poetry and undertake a culminating literary project in the spring. Writing is more independent than in previous courses — often without the benefit of class discussion of the works under study. Some of the writing is done in class, under pressure of time, to help students prepare for the AP exam and for college essay tests. Beyond these frequent analytical assignments, students write extensively about personal experience and try their hand at imaginative pieces, often in the form or style of works they are studying.

This course prepares students for the Advanced Placement examination given in May by the College Board thus the curriculum may vary slightly from the standard year-long model. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

#### SENIOR MIXED-LEVEL COURSES

130 Philosophy as Literature	Н	12	full year	4 periods	5 credits	
1304 Philosophy as Literature	ACP	12	full year	4 periods	5 credits	
Philosophy as Literature is a course for seniors re-	Philosophy as Literature is a course for seniors recommended to continue studying English at the honors or ACP level. It requires a					
strong capacity for abstraction and a sincere commit	ment to rigo	rously deciphe	r challenging texts. Wh	at is the relations	ship between per-	
contion and reality? What othical principles define a	rood life an	d should form	the basis of a just socio	ty? Can sufforing	the transconded or	

Η

ception and reality? What ethical principles define a good life and should form the basis of a just society? Can suffering be transcended or made meaningful? What is the nature of the self? In this course, students will ask these questions and many more that have troubled and inspired philosophers, novelists, and poets for thousands of years. Students will begin by exploring the works of Western philosophers including Plato, Aristotle, Descartes, Kant, Sartre, Buber, and many more. Students will also investigate the highest poetry and literature from Hindu, Taoist, and Buddhist traditions. Students will read fiction, including Hamlet, that represents and challenges philosophical constructs. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

12

full year

4 periods

5 creditst

#### **132** Diverse Perspectives in Literature:

**Beyond the Single Story** 

#### **133** Diverse Perspectives in Literature:

**Beyond the Single Story** ACP 12 full year 4 periods 5 credits This course will examine modern novels, short stories, poems, films and critical essays with a focus on authors from a variety of backgrounds. It will focus on writers who provide a diverse perspective on universal themes such as race, class, gender, sexual identity, justice, exile, and censorship. The sharing of diverse perspectives and the honest exploration of prejudices, stereotypes, and personal biases are the basis for our classroom discussions. Texts may include Corona by Bushra Rehman, Angels in America by Tony Kushner, The Brief Wondrous Life of Oscar Wao by Junot Diaz, Apex Hides the Hurt by Colson Whitehead, Kindred by Octavia Butler, Monstress by Marjorie Liu, and short stories, essays, and poems by a variety of writers. Films such as Anna Deveare Smith's Twilight: Los Angeles, Charles Burnett's Killer of Sheep,

and Siddiq Barmak's Osama enhance students' understanding of cultures both in America and throughout the world. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component. Students taking this course for honors credit have been recommended to study, or continue studying, English at the honors level.

134	Short Story	Н	12	full year	4 periods	5 credits		
135	Short Story	ACP	12	full year	4 periods	5 credits		
	Writers have long used the form of the short story as studies for particular moments in human experience. Smaller in scope and scale							
	than the novel, the short story can often look more acutely at an author's intention and a character's emotions and motivations. A plethora of authors will be read, including Joyce Carol Oates, Margaret Atwood, Lauren Groff, Flannery O'Connor, Ernest Hemingway, Sherman							
	Alexie, Raymond Carver, Jhumpa Lahiri, Chimimanda Adichie, Gabriel Garcia Marquez, Isabelle Allende, Ray Bradbury, and Kurt Von-							
	negut. Students will have an opportunity to write which they work. During the fourth term, students	will engage in	a Senior Project	related to the year's s	tudy that include	es both an oral and		
	written component. Students taking this course for ho	onors credit have	been recommend	led to study, or continue	e studying, English	<i>i</i> at the honors level.		
136	The Art and Technique of Film	Н	12	full year	4 periods	5 credits		
137	The Art and Technique of Film	ACP	12	full year	4 periods	5 credits		

Through guided viewing, class discussion, and writing, students will gain a new appreciation of film as a form of artistic and cultural expression. Students will study how the film form reflects the film content, in other words how filmmaking choices create meaning. Topics for investigation include directing, editing, cinematography, set design, acting, screenwriting, and sound. Throughout the course students will complete several creative and analytical projects that reflect their growing awareness of how movies are made. Reading is from the textbook *Understanding Movies* and from several articles. Films may include *The Graduate, Do the Right Thing, The Royal Tenenbaums, Psycho, Fruitvale Station,* and *Citizen Kane,* as well as movies from a variety of genres and eras, including experimental, foreign, and documentary films. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component. *Students taking this course for honors credit have been recommended to study, or continue studying, English at the honors level.* 

# 138Asian American LiteratureH12full year4 periods5 credits139Asian American LiteratureACP12full year4 periods5 credits"Until our lives are validated in literature, we do not truly exist"--Darrell H.Y. Lum

This course will expand the scope of American literature, we do not thuy exist *a*-Darlen 11.1. Edit on images of Asians and Asian Americans as depicted in literature, television, film, and music. Through their study of contemporary texts, the media, and popular culture, students will examine such universal issues as generational conflicts, the American dream, immigrant experiences, stereotypes, and the creation and negotiation of one's identity. Typical course texts may include David Wong Louie's *The Barbarians are Coming*, John Okada's *No-No Boy*, and Jhumpa Lahiri's *Interpreter of Maladies*. Films will include *My America*, or *Honk if You Love Buddha*, *Rabbit in the Moon*, *American Aloha*, *Desi*, and *The Wedding Banquet*. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component. *Students taking this course for honors credit have been recommended to study, or continue studying*, *English at the honors level*.

140 Modern Plays and Playwrights	Н	12	full year	4 periods	5 credits
141 Modern Plays and Playwrights	ACP	12	full year	4 periods	5 credits

This course will focus on contemporary plays and playwrights, whose work can be seen on stage right now. Small but powerful, these stories will help us think more deeply about situations that are familiar and realistic or strange and absurd. Like a series of short stories, our readings will move fast and show different worlds that can be beautiful, funny, frightening or philosophical. In discussing these plays together, we will look at the language these authors use but also characters, costumes, music, and performances on stage. These plays are meant to be seen as well as studied. Students will learn about dramatic elements by thinking like a director, an actor, a playwright and a member of the audience. Writing assignments will be both analytical and creative. Potential plays for this class might include: Neil Labute's Reasons to be *Pretty*, Suzan-Lori Parks' *Topdog/Underdog*, Tracy Letts' *August: Osage County*, Martin McDonagh's *The Beauty Queen of Leenane*, Yasmina Reza's *Art*, or Sarah Ruhl's *Eurydice*. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

Students taking this course for honors credit have been recommended to study, or continue studying, English at the honors level.

142 Literature and Composition for College	ACP	12	full year	4 periods	5 credits
143 Literature and Composition for College	СР	12	full year	4 periods	5 credits

Do you feel ready for college? Do you feel that, if you committed more time to your reading and writing, you could be a stronger English student? Are you ready to move beyond a CP English course, but need support to do so? If so, you should consider Literature and Composition for College, a rigorous course that requires students to manage their time in order to meet frequent reading and writing deadlines. In this course, students will develop active reading strategies to prepare for college level class discussions by reading books such as The Kite Runner, Hamlet, and The Rule of the Bone. Through individual writing conferences and revision exercises, students will strengthen both personal and analytical writing. As students work through these challenges and other senior activities, they will develop good time management and study skills. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

144 Hiphop: Its Literature, Culture, and Music	ACP	12	full year	4 periods	5 credits
145 Hiphop: Its Literature, Culture, and Music	СР	12	full year	4 periods	5 credits

The culture of Hiphop has been called many things: from the Black CNN to buffoonery to a cause of urban violence to part of the persistence of the academic achievement gap. This course will critically examine the importance and effect of this culture and music upon US popular culture and society. Starting as party music, empowerment, and presently being the driving monetary force of popular culture, this course will look at how Hiphop was created musically, culturally, and lyrically. Texts include *Can't Stop Won't Stop* by Jeff Chang, *Book of Rhymes* by Adam Bradley, *Black Noise* by Tricia Rose, *Ruminations* by KRS-One, various articles from scholarly and non-scholarly sources, as well as the music itself. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

146 English Scholars	ACP	12	full year	4 periods	5 credits	
147 English Scholars	СР	12	full year	4 periods	5 credits	
		A 11 A	1	1 0 7		

Have you struggled with time management, working independently or following through with your goals? Is writing or reading something that is difficult for you? If so, register for English Scholars, a course for students from a variety of backgrounds, countries, and traditions, who are trying to surpass their previous achievements in reading and writing. In order to meet students' individualized goals, this course will strike a balance between whole group and individualized study. Students will collaboratively read and discuss such challenging literary works as Shakespeare's *Hamlet* and Tim O'Brien's *The Things They Carried*. Students will also receive focused, individualized coaching to help develop analytical reading and writing skills and to support the writing of strong personal and creative pieces, including the college essay. In English Scholars, students will be prepared to work with increasing levels of independence in academic scholarship. During the fourth term, students will engage in an in-depth Senior Project related to the year's study that includes both an oral and written component. (TECH PREP 2+2 eligible)

148 Contemporary Voices	ACP	12	full year	4 periods	5 credits
149 Contemporary Voices	СР	12	full year	4 periods	5 credits

Where do our values come from? What can we learn about a person's or community's values from contemporary texts such as *Fight Club*, *Friday Night Lights, Tuesdays With Morrie* and *Water By the Spoonful*? How do contemporary voices reveal and reflect truths about class, culture, family, self, society? By connecting works of fiction and non-fiction to issues ripped from the headlines of periodicals, television, and the internet, students will engage in activities that push them to make direct, relevant, personal connections with the issues covered. Through analytical, creative and personal writing, students will increase their ability to think and write critically about their place in today's world. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

150	Dystopian, Apocalyptic, Horror and Sci-fi Literature	ACP	12	full year	4 periods	5 credits
151	Dystopian, Apocalyptic, Horror and Sci-fi Literature	СР	12	full year	4 periods	5 credits

Horror, Apocalyptic, Dystopian and Sci fi literature often imagine worlds that seem different from our own; however, upon closer inspection, we often find eerie similarities despite the exotic locations, futuristic settings or fantastical creatures. These texts ultimately subvert our complacence and sense of safety. They force us to challenge our basic assumptions and question whether or not the ideal worlds imagined may be more troubling than the imperfect world we live in. They also inspire us to hold tight to the values that matter most to us, the values that make us most human. Among works studied may be: V for Vendetta, The Martian, World War Z, and Ready, Player One; films such as The Shining; TV shows including The X Files; short stories by Ray Bradbury, Stephen King, Philip K. Dick; and poetry ranging from Edgar Allan Poe to David Bowie. During the fourth term, students will engage in a Senior Project related to the year's study that includes both an oral and written component.

#### SENIOR CAPSTONE PROJECT

#### 160 CAPS Research English

no level 12

S

4 periods 2.5 credits

Linked with CAPS Research, CAPS Research English is a course that emphasizes reading research, sophisticated writing, and an ability to articulate ideas clearly in a classroom setting. This class must be taken along with CAPS Research 995. (See the CAPS description in the All School Programs section of Opportunities for more information.)

Throughout the course, students will incorporate outside reading to revise and refine their project, delivering several oral presentations to the class. In addition, a culminating research paper will be produced that ties students' projects to a tangible academic product. Along with collaborative learning experiences, students will have time to plan and organize the logistics of their Field Experience. By the course's completion, students will have all the background (research, evidence) they need to conduct their independent project fieldwork. This course contributes to the 20-credit English graduation requirement.

### **ENGLISH ELECTIVES**

The English department also offers a variety of elective offerings for students wishing to pursue further study in a particular area of interest. All of the courses are meant to complement, support and enrich students' work in our four-year program of studies. (Electives do not typically count toward the 20 credit English requirement. However, in some rare circumstances, and with department head approval, an elective course may fulfill the English requirement.) All English elective classes may be used to meet the overall 100 credit graduation requirement.

161 Creative Writing 10-11-12 F or S 4 periods 2.5 credits no level Do you ever wonder what it takes to tell a compelling story or craft a powerful poem? If you read and write poetry, plays or fiction on your own - or would like to try - then take this creative writing course. Emphasis will be on the "workshop model" where students write, edit, share and revise their work in a supportive, instructive and engaging environment. Students will also learn how to see their writing, as well as the writing of others, through a critical and observant lens.

### 163 Write On

no level 9-10-11-12 F or S 2 periods 1.25 credits Does writing frustrate you? Do you find yourself staring at a blank page? You are not alone! Writing has become a lost art form. Those who can do it are hired by corporations and even presidents to write for them. But writing is not something that you either can or cannot do; it is something you can learn to do. Everyone can write. We offer this course to help students gain clarity and structure in their writing. Students will learn various forms of writing (persuasive, informative, explorative, personal) and receive a comprehensive review of English grammar. This course will give confidence to any anxious or struggling writer.

### 165 Journalism

171

no level 9-10-11-12 F or S 4 periods 2.5 credits If you are interested in how a newspaper works; if you want to make your writing more concise, accurate, and appealing; and especially if you are interested in working on the Newtonite, take Journalism. As you write and analyze news stories, sports stories, features, and editorials, you will learn to write for different audiences. Exercises in research, reporting, interviewing, writing, copy editing, and layout will teach you about the process of putting newspapers together. Students can expect to write several short pieces a week — in class and at home. Readings and discussions focus on practical and ethical problems of news gathering.

167 Newspaper Management and Publication	no level	10-11-12	F	H block	2.5 credits
168 Newspaper Management and Publication	no level	9-10-11	S	H block	2.5 credits

Requirement: Students must apply to be an editor or manager. Newspaper Management and Publication is required for Newtonite editors and managers. Students develop their journalistic skills as they work to produce this school's award-winning newspaper using Creative Suite software. Through assigning, writing and editing articles, shooting and editing photographs, designing and laying out pages, and gaining and maintaining advertising accounts, Newtonite editors and managers complete independent projects every issue. They advance their understanding of publishing a newspaper through their projects, as well as through ongoing discussions, challenges and critiques with every issue of the paper. Every editor and manager works on the Newtonite for 4 periods a week.

S	Speech		9-10-11-12			2.5 credits
	Newton North's Speech class is, essentially, a cou	rse in public spea	king. Students dev	velop speaking	g skills – articulatio	on, pace, inflection,
	loudness, pauses – how to organize speeches, and h					
	impromptu in nature – on topics both hilarious and		1	,	· 1	,
5	evaluating speeches of famous speakers throughou	ıt history and the	e present day, stud	ents evaluate	and critique each o	other – verbally as
	well as through video. This course is for novices lo	oking for exposu	re to public speak	ing, as well as	s students who like	e speaking in front
	of others, but may lack the skills to successfully org	anize and delive	r a speech with fin	esse. (TECH	PREP 2+2 eligible)	

172 Through the Lens of Documentary Film no level 10-11-12 F or S 4 periods 2.5 credits In recent years, documentary films have transformed into a dynamic and engaging movie-going experience, a way for all of us to explore a variety of social, artistic, and political topics. This elective will study the origins of the genre and its progression through the past 100 years, focusing on contemporary changes in both content and technique. Students study the role of propaganda and the question of bias, the difference between documentary and journalism, the ethics and legal considerations of documentary, and the ways documentaries portray subcultures. Technical topics will include film structure, the role of interviews and reenactment, video and sound editing, and music. Viewing will select among movies such as Roger & Me, Good Hair, Hoop Dreams, Exit Through the Gift Shop, and selections from various short films.

177 Yearbook Management and Publication 10-11-12 full year H Block no level 2.5 credits As part of this course students learn writing and editing skills, page layout, photo selection and sizing, and graphic design, business management, and organizational skills for publishing our school's yearbook, The Newtonian. Yearbook Management and Publication is required for all Newtonian editors. The requirements of this course include four periods each week either after school (H-block) and during free periods for work on the Newtonian. Students must receive written approval and staff position application from the advisor prior to enrollment. Students receive a Pass/Fail grade for the course.

196 Classroom Aide in English F or S 4 periods TBD no level 11-12 This course offers an opportunity for very strong English students to assist a teacher in a course with younger students. Places in this program are limited and require the approval of your current teacher, the teacher with whom you will work, and the English department head. This work must be undertaken along with a regular English class. See the description in the All School Programs section of Opportunities for important detailed information.

# ENGLISH LANGUAGE LEARNING

The English language learning courses are offered in the academic areas of science, history, math and English for students for whom English is not a first language. Placement in these courses is determined based on previous schooling as well as a score on the WIDAScreener Placement Test. This English language proficiency "screener" is administered to incoming students who may be designated as English language learners. Results of the assessment are used to determine a student's English proficiency level and course placement. All courses listed below should be chosen in consultation with ELL staff.

The ELL Department offers a strong program of academic and English language development courses. These courses have been developed to align with the Common Core State Standards and WIDA standards for English development.

Students are required to take an English course each of their four years at Newton North in order to meet the twenty-credit requirement. The English courses offered through the ELL Department may have students enrolled from across all grade levels since courses are leveled by English proficiency and not grade level. When students meet the exit criteria they are moved to their grade-level English class.

Students at all proficiency levels study short stories, novels, plays and nonfiction books and texts. Students will study grammar, including parts of speech, parts of a sentence, mechanics and usage. Writing assignments will help students write well-developed paragraphs and essays. Students will focus on study skills, public speaking and vocabulary.

ACP 181 ELL 1-2/ Entering/ Emerging English 9-10-11-12 5 credits full year 4 periods This course is for students who are reading and writing at grade level in their native language and have had some exposure to English but are new to English. Students will use reading comprehension strategies to access beginner-level text and develop vocabulary as well as build an understanding of elements of literature. Students will enhance their listening skills to understand social and academic English. Writing will focus on sentence structure, paragraphs and short essays and students will present information about themselves, literature, and informational text.

182 ELL 3 / Developing English ACP 9-10-11-12 full year 4 periods 5 credits This course builds on skills learned in ELL English 1-2. Students will read a range of texts and produce a variety of forms of writing. Students learn to use textual evidence to justify or defend ideas and opinions. Students continue to expand their academic vocabulary in all modes of communication. Activities will help students to develop their oral presentation skills and acquire study skills (including note-taking and summarizing skills) that will enhance their ability to learn in all subjects.

183 ELL 4 / Expanding English ACP 9-10-11-12 full year 4 periods 5 credits This course builds on the skills learned in ELL English 3 class. Students interpret and analyze a variety of texts and genres. The class focuses on reading, listening comprehension, speaking and pronunciation skills, and writing multiple-paragraph compositions that demonstrate organization of ideas, use of a thesis statement, and supportive elements. Basic research, presentation, and computer skills are also part of the curriculum.

184 ELL 5 / Bridging English ACP 9-10-11-12 full year 4 periods 5 credits This course prepares students to transition to a mainstream English class. Students learn to analyze literature and write multi-draft essays of various forms. Emphasis is placed on literary analysis and studying the conventions of English writing through both personal as well as analytic essays. In this course, English language learners use their strong vocabulary, grammar, and communication skills more strategically and effectively for academic purposes.

426 ELL World History ACP 9-10-11-12 full year 4 periods 5 credits This is an intensive, standards-based World History course for students at WIDA levels 3/4. This course follows the mainstream 10th grade World History curriculum from the French Revolution through the twentieth century. The course focuses on the political, economic, and social history of the rise of the European nation-states, imperialism, the world wars, colonial independence movements, communist China, and the modern Middle East. In addition to covering these topics, emphasis will be on developing academic vocabulary and language, developing critical thinking skills and writing analytically.

436 ELL US History

ACP 9-10-11-12 full year 4 periods 5 credits This is an intensive, standards-based U. S. History course for students at WIDA levels 4/5 In addition to covering major U.S. history topics, emphasis will be on improving academic study skills, vocabulary, reading comprehension and writing ability. Students begin by gaining foundational language through the study of geography, climate and location during colonial American History. The course will also explore political, economic and social history of the U.S. through the twentieth century. Students will use a variety of materials including primary and secondary sources and U.S. History texts. Students will be required to conduct research, write analytical and biographical essays as well as participate in discussions.

**ELL Introductory Physics** 

ACP 9-10-11-12 full year 4 periods 5 credits Through this Introductory Physics course designed to best support students with developing English proficiency, students will learn important science related skills including experimental design, accurate measurement using a variety of instruments and technologies, quantitative and qualitative observations, construction and interpretation of data tables and graphs, unit analysis, application of algebra to science problems, and applications of science concepts to the real world. Laboratory experiments will examine forces, motion, electricity, magnetism, waves, light, sound, and heat. Energy will be emphasized throughout the entire course. This student-centered course will provide the foundation for all future science courses. Study skills, reading strategies, vocabulary-building and scientific writing will be emphasized. Students taking this course MUST also sign up for course 645 - ELL Power Physics. Courses 644 and 645 together are designed to prepare students for the Introductory Physics MCAS exam.





645 ELL Power Physics ELL Power Physics is designed to support H MUST sign up for both classes. This course is gr in ELL Intro Physics, and will particularly help w a science textbook, strategies for learning science	aded on an A/P/N/ vith English language	F scale. The conter e-based needs. The	t of the course w focus of this cou	vill support the s urse will include s	tudents' coursework strategies for reading
<b>185 ELL Power English 1</b> This common core standards guided course in English Language Arts and who are relative a student's normal English class. Skills that are	ly new to the study of	of English. This is	a supplementar	y class, and is no	ot offered in place of
<b>186 ELL Power English 2</b> This common core standards guided course English Language Arts. This is a supplementar on the MCAS are emphasized, as well as partice	y class, and is not of	fered in place of a	<b>full year</b> ELL students w student's norm	<b>2 periods</b> ho have not yet al English class.	<b>2.5 credits</b> passed the MCAS in Skills that are tested
<b>194 ELL Components of Reading for English</b> This is a foundational reading course with a for writing systems who would benefit from intens sequenced skills that include print knowledge, fluency, spelling and reading strategies.	ive instruction on let	ter-sound associat	ions in order to	decode new wor	ds. Lessons focus on
<b>188 ELL Support</b> This class supports students in their ELL and small group work (in home language if needed					<b>2.5 credits</b> action. Individual or
<b>195 ELL Aide</b> Students who wish to tutor ELL students car encouraged to apply. Please apply to the ELL de					<b>credits vary</b> ently are particularly
<b>197 ELL Independent Study</b> Under special circumstances, a student may by vision of a teacher. Enrollment only after consu			chieve specifical	<b>times vary</b> ly designated go	<b>credits vary</b> als, under the super-
<b>ENGLISH LA</b> We have a rich English Language Literacy cu interrupted schooling or specific language needs. ' skills. Students typically take all 5 courses togethe	rriculum at Newto This course will pr	on North. This 4	-course progr	am is for newc	
179 ELL English Literacy-Reading This course is for newcomers to English who and writing. Students learn reading strategies i to develop academic language through listenin standard paragraph, and short content-based es	in order to advance t g and speaking. The	heir reading comp y learn to expand	orehension skills oral comprehen	. Students at this sion and write c	s level are beginning omplete sentences, a
<b>180 ELL English Literacy-Writing</b> This course is for newcomers to English who	<b>CP</b> may have experience	<b>9-10-11-12</b>	<b>full year</b>	4 periods	<b>5 credits</b> skills in reading and

This course is for newcomers to English who may have experienced gaps in their schooling and / or need foundational skills in reading and writing. Students learn writing strategies in order to advance their writing skills. Students at this level are beginning to develop academic language through listening and speaking. They learn to expand oral comprehension and write complete sentences, a standard paragraph, and short content-based essays. This course is taught concurrently with 179 ELL English Literacy -Reading.

417 ELL History for Beginning English Learners CP 9-10-11-12 full year 4 periods 5 credits This Common Core based course is offered to new ELL students who are working on developing the four English skills. Students study maps, geography, economics, and the structure of governments and other power structures through individual and group work on projects. In addition, students develop academic English vocabulary related to both history and modern society. Course goals include development of academic skills, learning strategies, vocabulary building and expository writing.

652 ELL Science and Engineering СР 9-10-11-12 full year 4 periods 5 credits This thematic, Next Generation Science Standards based introductory laboratory science course is for students with very limited English proficiency. The course draws connections between physical and life sciences and connects to our ELL History for beginning English learners class through the development of science related skills and content. Course goals include development of academic skills, learning strategies, vocabulary building and scientific writing.

СР 540 ELL Math 9-10-11-12 full year 4 periods 5 credits This course is aligned with the Common Core based standards and is for students with very limited English who are new to the study of secondary school math. The math content is highly differentiated based on the needs of individual students. Students will learn the content and vocabulary necessary for the successful study of high school mathematics. Students generally progress to Math 541 or 542 after this course.

# HISTORY AND SOCIAL SCIENCES

The History and Social Sciences program seeks to encourage informed democratic citizenship through the study of World and American History and the social sciences. We want students to:

- appreciate the historical and cultural influences that shape their individual identities, our national identity, and the cultures and countries that share our planet.
- understand and reason about successes, failures, triumphs and tragedies in human history, particularly as they are reflected in the ideas and actions of the people we study.
- gain a clear understanding of American institutions and traditions.
- prepare for adult lives of informed and active citizenship and civic engagement.
- learn to work as historians and social scientists, demonstrating analytical thinking, clear oral and written expression of ideas and strong research skills.

Students are required to take a two-year World History sequence in grades nine and ten, and a year of American History in grade eleven. Seniors may choose from a variety of offerings in history or the social sciences.

The department offers honors courses beginning in the tenth grade. Students must be recommended by their ninth grade history teacher to register for honors history.

### **GRADE NINE**

5 credits
e ci cuito
urse, it includes the rld History: Human uments, secondary skills, and teaches
ıme

### **GRADE TEN**

420	World History II, 1787-Present	Н	10	full year	4 periods	5 credits
421	World History II, 1787-Present	ACP	10	full year	4 periods	5 credits
422	World History II, 1787-Present	СР	10			5 credits

Following sequentially on World History One, this course examines World History from the French Revolution through the twentieth century. It includes study of nationalism and industrialization and their consequences in Europe, European imperial expansion and non-Western responses to it, the World Wars, decolonization, communist China, and the modern Middle East.

Enrollment in 420 requires the approval of your freshman year history teacher. The advanced college prep and honors textbook is *World History* by Jackson Spielvogel. The college prep textbook is *World History: Human Legacy* by Ramirez, Stearns, and Wineburg. In addition to their textbooks, students will use maps, primary source documents, secondary readings, and videos in their work. The course teaches students to think and write like historians, emphasizing analytical skills, and teaches basic research skills. Students will write analytical essays and a major research paper.

The following course is also available to sophomores and juniors (see page 44):

470 Close-Up

### **GRADE ELEVEN**

### UNITED STATES HISTORY

American History is a requirement for all juniors. As part of the course, students on al levels will write a major research paper. You cannot pass American History without successfully completing this paper. Courses 430-439 fulfill the U.S. History requirement.

430 Advanced Placement American History H 11-12 full year 4 periods 5 credits AP American History is a full survey of United States History from the colonial era to the present, focusing on political and social history, which prepares students for the College Board Advanced Placement Examination in United States History. This is a rigorous and demanding course that emphasizes writing, analysis of primary and secondary sources, and articulate discussion of sophisticated material. All students will write analytical essays and a major research paper. Summer reading is required; students registered for this course must obtain a summer reading assignment in June of their sophomore year. Class will begin in September with work directly related to the summer reading. The course textbook is Garraty, *The American Nation*. In addition to their textbooks, students will use maps, primary source documents, secondary readings, and videos in their work. Other readings will be selected by the teacher. Enrollment in 430 requires the approval of your sophomore year History teacher.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

<b>431</b> A	American History	ACP	11-12	full year	4 periods	5 credits
<b>432</b> A	American History	СР	11-12	full year	4 periods	5 credits
	This course is a political and social history of	the United States	omphasizing the	founding of the Un	ited States and th	e period from 1865

This course is a political and social history of the United States, emphasizing the founding of the United States and the period from 1865 to the present. Particular attention is given to the changing role of the federal government, the United States' position in the world, and the evolution of and relationships among diverse groups in American society.

In addition to their textbooks, students will use maps, primary source documents, secondary readings, and videos in their work, and will write analytical essays and a major research paper. The advanced college prep textbook is *United States History* by Lapansky-Werner et al; the college prep textbook is *American Anthem* by Ayers et al.

### AMERICAN STUDIES

These courses are coordinated with the English department's junior year course in American literature. Students taking 438 **must** register for English 121, students taking 439 must register for English 154, students taking 433 **must** register for English 125; the same students will be in each class. **Be advised that this can make schedule changes extremely difficult if a student decides to switch levels or change courses once the school year has begun.** 

438	Advanced Placement American Studies	Н	11-12	full year	4 periods	5 credits
	Advanced Placement American Studies is an extr	emely rigor	ous course that prepare	es students for the	e College Board A	dvanced Placement
	Examination in United States History. In addition t	to completir	ng an AP level political	and social surve	y of U.S. History,	students will make
	connections to American literature and culture three	ough shared	assignments and joint	t class meetings v	vith the English s	ection. All students
	will write analytical essays and a major research pa	per. Summ	er reading is required;	students registere	ed for this course	must obtain a sum-
	mer reading assignment in June of their sophomore					
	The textbook is Garraty, The American Nation; In a	ddition to th	eir textbooks, students	s will use maps, p	rimary source do	cuments, secondary
	readings, and videos in their work. Other reading	s will be sel	ected by the teacher. E	Inrollment in 438	requires the app	roval of your soph-

omore year History and English teachers.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

439	American Studies	ACP	11-12	full year	4 periods	5 credits
433	American Studies	СР	11-12	full year	4 periods	5 credits

This course coordinates the study of American History with the English department's junior year course on American literature. In addition to completing a U.S. History course, students will explore thematic connections between American history, literature and culture through shared assignments and joint class meetings with the English section.

In addition to their textbooks, students will use maps, primary source documents, secondary readings, and videos in their work, and will write analytical essays and a major research paper. The advanced college prep textbook is *United States History* by Lapansky-Werner et al; the college prep textbook is *American Anthem* by Ayers et al.

The following course is also available to sophomores and juniors (see page 44): 470 Close-Up

### **GRADE TWELVE**

### **HISTORY & SOCIAL SCIENCES ELECTIVES**

Senior electives in history and social sciences are offered at the AP/Honors and advanced college prep levels. Students who took U.S. history in summer school and who wish to take an AP or honors course must obtain the permission of their sophomore year history teacher or the history department chair.

Students who took college prep history in junior year are eligible to take advanced college prep electives. These courses provide a "safety net" should the course expectations become too challenging. When first term grades are reported, those students may choose to take the course "pass/fail", which will indicate either a "P" or "F" on the transcript. For the elective courses that are mixed level honors/ advanced college prep, there is no "safety net" and juniors who took college prep history will not have that option.

440Advanced Placement European HistoryH12full year4 periods5 creditsAdvanced Placement European History is a political and social survey of European History from the end of the Middle Ages through the<br/>twentieth century that prepares students for the College Board Advanced Placement Examination in European History. This is a rigorous<br/>and demanding course. As seniors, students are expected to show strong writing and analytical skills and independent work habits. Summer<br/>reading is required; students registered for this course must obtain a summer reading assignment in June of their junior year. Class will<br/>begin in September with work directly related to the summer reading.

The course textbook is Kagan, Ozment & Turner, The Western Heritage. Additional readings may include Voltaire's Candide and Heilborner's The Worldly Philosophers and others chosen by the teacher. Enrollment in 440 requires the approval of your junior year History teacher. This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

442	Mid East, Asia, and Latin America Since '45	Н	12	full year	4 periods	5 credits
443	Mid East, Asia, and Latin America Since '45	ACP	12	full year	4 periods	5 credits

Since the end of World War Two the Middle East, India, China, and Latin America have been areas of tremendous growth and change. All of these regions are important players in today's world, and all for different reasons. Why is there so much conflict in the Middle East? What is behind the rise and development of India and China? Why is Brazil rising rapidly, while other countries in South and Central America suffer from violent politics and failing economies? And why is there often anti-American sentiment in each region?

This is a history course that will attempt to answer these questions and more as we try to make sense of today's world. This course will focus on the recent history of the Middle East, India and China, and Latin America. In each of these modules we'll consider themes such as economic and cultural globalization, revolution and the role of social media, anti-colonialism, religion, immigration, technology, and international conflict and cooperation.

Coursework will include lectures, readings, discussions, debates, role-playing simulations, films, documentaries, and analysis of TV and web news coverage. Students will be expected to write papers and keep up with current affairs in the regions we study.

444 East Asian Studies	Н	12	full year	4 periods	5 credits
445 East Asian Studies	ACP	12	full year	4 periods	5 credits

This course will explore the reason for the rise of East Asia (China, Japan and Korea) in the 21<sup>st</sup> century. By examining the tumultuous history of East Asia for the past 100 years, the course hopes to understand not only the relationship these countries have with each other, but also the role they play in the global economy, culture and zeitgeist. Challenging stereotypes, this course will examine the interactions of traditions and modernity in China, Japan and Korea. Using an interdisciplinary approach, the course will look not only at the political and economic developments, but also at literature, film, manga, anime, fashion and cuisine.

This course will be an exciting exploration. Enthusiasm and engagement are most welcome. Students of both Asian and non-Asian background are encouraged to sign-up. Honors level students will complete additional readings and pursue independent research projects.

446 Africa and the New World	Н	12	full year	4 periods	5 credits
447 Africa and the New World	ACP	12	full year	4 periods	5 credits

This course explores the historical and present-day linkages between Africa and the Americas. It focuses on selected themes in the history of nearly four hundred years of trans-Atlantic socio-cultural, economic, political and diplomatic exchanges. It also examines current institutions and organizations in both Africa and the Americas that seek to consolidate and promote the interests of Africans in Africa and in the Diaspora.

The course will begin with an examination of the social and political institutions of pre-colonial West Africa and the origins of the trans-Atlantic slave trade. We will then study the middle passage and the New World setting of slavery, Africanisms in the Americas, pan-Africanist movements, apartheid and Jim Crow, and current issues facing those of African descent in the Americas, including the movement to claim reparations for slavery. Throughout this sequence students will be responsible for pursuing in-depth case studies of selected topics, including but not limited to the history and culture of particular countries and regions, African cultural enclaves and rituals in the Americas, African nationalisms and "black nationalism."

Students may elect to take this course on either the honors or advanced college prep level. The course will use a variety of texts and materials, including Joseph Holloway's *Africanisms in American Culture*, videos, primary sources, and others.

### **448 American History Through the Hollywood Lens ACP 12 full year 4 periods 5 credits** Since the beginning of the 20th century, movies have been an important source for describing American history, and a key factor in shaping

the American identity. This course will use popular Hollywood films as a lens through which to examine important historical topics including, but not limited to race relations, women in the workforce, and politics. For each topic we'll watch a series of popular movies from different time periods, studying how they deal with the issues and how they change (or don't change!) over time. We will see some early classics, such as Gone With the Wind and Mr. Smith Goes To Washington, and more modern films such as Primary Colors, Baby Boom, and Crash. Students will write about how the movies choose to portray the historical reality they claim to describe, and will compare and contrast films from different eras. After completing the course students will have a clearer understanding of the ways Americans define themselves over time, and a greater appreciation of a classic American art form.

### 450 Advanced Placement Psychology

full year 4 periods 5 credits This is a broad but intense and rigorous introduction to the scientific study of human behavior and mental processes. It covers the major areas in contemporary psychology, including neuroscience, perception and sensation, development, cognition, learning, memory, emotions, personality and psychopathology. In addition, there is an emphasis on understanding and learning to design the types of research that psychologists use to build their base of knowledge. This course prepares students for the College Board's Advanced Placement examination in Psychology. It requires strong science skills. The course text is Gray's Psychology, supplemented by various articles and books. Enrollment in 450 requires the approval of your junior year History teacher.

12

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### 451 Introduction to Psychology ACP 12 full year 4 periods 5 credits

Η

This course introduces students to the scientific study of human behavior and the mind as understood by contemporary psychology. Why do we act as we do in different situations, remember some things and not others, and perceive the world accurately most of the time? It addresses an age-old puzzle: how do we go about understanding our human nature?

After developing familiarity with the methods by which psychologists research aspects of behavior and mental processes, we will explore such specific topics as memory, developmental psychology, social psychology, learning and language. Our study of abnormal psychology will examine disorders such as schizophrenia, depression, obsessions and compulsions, eating disorders, attention deficit disorders and dissociative disorders.

We examine these topics through the use of readings, experimentation / demonstration, lecture, discussion and films. The primary reading is Myers' Exploring Psychology. This is a college level text which may be difficult for some students. There may also be various supplementary texts.

### 453 Ethics in the Modern World ACP 12 full year 4 periods 5 credits

In the Disney version of The Little Mermaid, Ursula, the evil sea witch, tells Ariel that, "Life is full of tough choices." She's right. For centuries, philosophers have tried to help us think about how we should make those choices. How do we know we are "doing the right thing" when the needs of others make difficult demands on us? Is what we choose to do with our lives our own business, or should it be open to the judgments of others? Whose judgments should be important and how should they be made?

We face such dilemmas all the time. Is it all right to lie if telling the truth would hurt someone's feelings? Can we believe in the value of each individual human life but support someone's "right to die", capital punishment, or a war where innocent civilians are killed? This course will explore such questions with the traditions of moral philosophy as our guide. We will read Aristotle, Hume, Kant and Mill, whose works established these traditions, and contemporary philosophers who build upon them, to analyze the ethical choices in our everyday lives. The texts for the course will be The Elements of Moral Philosophy by Rachels and Today's Moral Issues by Bonevac. It will include excerpts

from, among others, Nicomachean Ethics by Aristotle, An Enquiry Concerning The Principles of Morals by Hume, Grounding the Metaphysics of Morals by Kant and Utilitarianism by J.S. Mill.

### 455 Economics ACP 12 full year 4 periods 5 credits

As more economic issues move from the business page to the front page, it is vital to understand the complexity and wonder of economics. How does the stock market work? What are NASDAQ and the S&P 500? What are deficits, interest rates, and the Federal Reserve? What are the chances of "going from rags to riches," or the other way around, in today's society? These are the kinds of topics we will discuss as we learn the language and concepts of economics. During the first semester we will attempt to demystify the business page through our study of fundamental U.S. economic systems and institutions. Second semester, we will focus on a case study of an American industry such as automobiles or high technology. We will also discuss issues of globalization and the role that we as U.S. citizens play in world economics.

### Advanced Placement Comparative Government H 12 full year 4 periods 5 credits 456

Politics is power! This course examines current politics, government, and power in six major countries: Britain, Russia, Mexico, Nigeria, Iran, and China. Each country has a different type of government, faces different domestic and foreign issues, and has reacted in its own way to the challenges of development and world events. There are also common themes, such as globalization, democratization, political change, public policy, and citizen-state relations. We will use the six country studies to examine important political theories and concepts, focusing on how power is gained, maintained, and wielded, and how ordinary citizens connect with, interact with, and participate in government. Enrollment in 456 requires the approval of your junior year history teacher.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### 4 periods 460 Law and Society ACP 12 full year 5 credits

Did you ever think about just what a police officer can pull you over for, or how your constitutional rights change when you enter Newton North High School? This course will answer those questions, while teaching you about three areas of law: constitutional, criminal and civil. We review the whole criminal process, from the theories as to why people commit crimes, the definitions of the crimes themselves, the process of police investigation, and the defense and prosecution of criminals. Each class will have a mock civil trial at the Newton District Court House, where one side of the class will sue the other side in a real courtroom. Guest speakers from law enforcement and the legal system, including judges, defense attorneys, and prosecutors, are also part of the course.

### 462 Contemporary Conflicts ACP 12 5 credits full year 4 periods

What do you think about legalizing drugs? The war on terrorism? Privacy and the internet? Affirmative action? Abortion? The next presidential election? Same sex marriage?

This is a course about disputed issues in American society, and a few international issues as well. Each month, the class will focus on particular issues from a broad range of topics. Articles from a variety of sources will often provide a starting point for class discussions, while additional research and readings will put each issue in context. The class will examine findings from the social sciences, especially political science, sociology, economics and psychology. You will be presented with conflicting perspectives and analyses, and will need to either reconcile those views or be able to defend your position with sound reasoning and appropriate evidence.

Classes will involve lectures, discussions, debates, and role-playing simulations. As appropriate, the course will include films and guest speakers. During fourth quarter the class examines topics of world-wide interest, including global warming and genocide.

# 464Science in Society: Making the Modern WorldH12full year4 periods5 credits465Science in Society: Making the Modern WorldACP12full year4 periods5 creditsHow did the theories of scientists like Galileo, Copernicus, and Darwin change the course of human history? How did the development of

steel and glass transform cities? How much does DNA explain who we are and what we do? From the atomic bomb to DNA, science plays a central role in modern society. Through episodes in the history of science, this inter-disciplinary co-taught course examines links between science and history. Students will explore these connections through analysis of primary sources, group discussions, and independent research projects. Students are expected to have completed courses in physics, chemistry, and biology as well as World and U.S. history.

### 712 History of Art

Requirement: Department Approval

Credits may be used to meet History requirements. Approval of both department chairs is needed. The course canot be used for U.S. History credit.

12

full year

F

full year

4 periods

4 periods

5 credits

The historical sequence begins with cave painting and continues to the art of the present. Important examples of painting, sculpture, and architecture will be viewed and discussed for stylistic and content in the various historical periods. Activities include field trips to art museums.

### 713 AP History of ArtH12full year4 periods5 credits

ACP

Requirement: Department Approval Credits may be used to meet History requirements. Approval of both department chairs is needed. The course cannot be used for U.S. History credit

The admission process for Advanced Placement History of Art includes submission of a transcript and an interview with the department chair. In addition to the curriculum described under History of Art, students are required to write a thesis each semester that requires extensive out-of-class research. Visits to local art museums are also a requirement.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### **ADDITIONAL COURSES**

### **470 Close Up: Seminar in Government no level 10-11 full year 2 periods 2.5 credits** The Close Up course deals with current issues in the American National Government. Based on regular reading and writing assignments from the Current Issues textbook, students explore and discuss American history, politics, and government. A one week intensive course in Washington D.C. in March is an optional part of the course. The cost of the trip must be paid by students who choose to participate.

### 476 Museum Internship no level 11-12

This after school course offers an opportunity to learn the skills, methods and tools of museum work at the Jackson Homestead, the Newton's Historical Society and Museum on Washington St.

Students will help plan and lay out exhibits, assist visitors, do research on Newton's history, and assist with many other tasks associated with museum work. Students will have to get to the museum on their own after school for one or more afternoons a week and will be trained and supervised by museum staff.

Students may sign up for this course for the fall semester, for spring semester, or for both by so designating on their registration form.

### **481** Independent Study no level 10-11-12 F or S 2 credits maximum An enthusiastic student, on arrangement with a history and social sciences teacher and with the approval of the department head, will sign a contract to undertake the study of any subject in history or the social sciences in which he or she has a particular interest. Independent study may not substitute for courses offered in the department. Pass/Fail grading only.

no level

### 485 Legal Studies Project

no level 10-11-12

5 credits

TBD

credits vary

Requirement for students participating in the Legal Studies Interdisciplinary Certificate Program. See Certificate Program Coordinator for details.

### 480 Classroom Aide in History

This course offers an opportunity for very strong History students to assist a teacher in a course with younger students. Places in this program are limited and require the approval of your current teacher, the teacher with whom you will work, and the English department head. This work must be undertaken along with a regular History class. Please see the description on page 11.

11-12

# MATHEMATICS

Most students want to study mathematics as a tool for effective citizenship, as a tool for functioning in a technological world, as a system in its own right, or as a fulfillment of requirements — high school graduation or college entrance.

The Newton North High School supports students in these endeavors through courses that cater to a variety of interests and learning styles. Our courses prepare students for state assessments as they are developed from the Common Core State Standards in addition to exposing students to the content assessed on college entrance and Advanced Placement exams (when applicable). All courses support students in their development and mastery of the Standards of Mathematical Practice.

Throughout their experience at Newton North High School, students will have opportunities to interact with various technological tools to support their learning of mathematics. These opportunities range from access to websites and lessons in how to use spreadsheets to utilizing dynamic geometry software. In particular, students will be taught how to use a graphing calculator to support their exploration and understanding of mathematical concepts.

Honors Math courses 501-8 are appropriate for you if you have exceptional ability and interest in the subject, enjoy the challenge of figuring out problems with little teacher scaffolding and regularly seek the most efficient methods in your problem-solving practices.

Accelerated Advanced College Preparatory (ACP Acc) Math courses 511-514 are appropriate for you if you can handle abstractions easily, have a general enjoyment of the subject and like to work out problems with only occasional teacher support.

SIMMS (ACP) Math courses 581-584 are appropriate for you if you prefer an exploration-based approach rooted in real-world investigations while working collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that you transfer your collaborative knowledge/experience for your individual understanding and mastery.

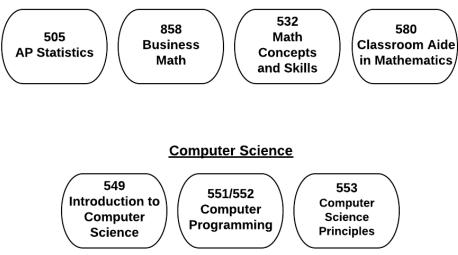
Advanced College Preparatory (ACP) Math courses 516-519 are appropriate for you if you can handle abstractions and like to solve problems after your teacher has provided additional practice within a structured learning experience.

College Preparatory (CP) Math courses 541-544 are appropriate for you if you prefer concrete mathematical situations where you can use your inductive reasoning in a highly structured setting.

	н	ACP Acc	SIMMS	ACP	СР
Grade 9	501	511	581	516	541
Grade 10	502	512	582	517	542
Grade 11	503	513	583	518	543
Grade 12	504/508	508/514	584	519	544/858

### Mathematics Courses

**Other Offerings** 



### The Math 501 to 504 Sequence

Honors Math courses 501-8 are appropriate for you if you have exceptional ability and interest in the subject, enjoy the challenge of figuring out problems with little teacher scaffolding and regularly seek the most efficient methods in your problem-solving practices.

501	<ul> <li>Math 1</li> <li>Math 1 Honors begins the integrated study of course is designed for students who have exceptibility the teacher scaffolding and regularly seek the <i>Prerequisite: recommendation of your 8th grade m</i></li> </ul>	otional ability and most efficient me	d interest in the su thods in their pro	ubject, enjoy the cha blem-solving practi	llenge of figuring	
502	Math 2 Math 2 Honors completes the integrated stud concepts in probability. The course is designed of figuring out problems with little teacher scaft <i>Prerequisite: 501 and recommendation of your ma</i>	H y of second-year for students wh folding and regul	<b>10</b> algebra and geom o have exception arly seek the mos	<b>full year</b> etry with an introduced al ability and interest efficient methods	st in the subject,	enjoy the challenge
503	Math 3	<b>H</b> f trigonometry ar	<b>11</b> Indepre-calculus inc	<b>full year</b> luding the pre-calcu	<b>4 periods</b> lus of parametric a	<b>5 credits</b>
	Math 3 Honors offers a comprehensive study o and an introduction to limits. The course is desig of figuring out problems with little teacher scaft <i>Prerequisite: 502 and recommendation of your ma</i>	ned for students folding and regul	wĥo have excepti	onal ability and inte	rest in the subject,	enjoy the challenge
508	and an introduction to limits. The course is design of figuring out problems with little teacher scafe	ned for students folding and regul	wĥo have excepti	onal ability and inte	rest in the subject,	enjoy the challenge

 504
 Math 4
 H
 12
 full year
 4 periods
 5 credits

 AP Calculus BC\*\*

 AP Calculus BC is the culmination of the 4-course Honors sequence. Students are offered a college-level calculus course as outline

AP Calculus BC is the culmination of the 4-course Honors sequence. Students are offered a college-level calculus course as outlined in the course description offered through the College Board. This course includes ALL topics of AB Calculus in derivatives and integrals, as well as additional techniques and applications. Further, the BC Calculus course offers the study of infinite series, including Taylor Series and Taylor Polynomials.

Prerequisite: 503 and recommendation of your math teacher

\*\*508 and 504 prepare students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### The Math 511 to 514 Sequence

Accelerated Advanced College Preparatory (ACP Acc) Math courses 511-514 are appropriate for you if you can handle abstractions easily, have a general enjoyment of the subject and like to work out problems with only occasional teacher support. This sequence is a continuation of the Accelerated Math course offered in 8<sup>th</sup> grade.

511	Math 1 Accelerated Math 1 ACP Accelerated provides an integrated basic statistics at an accelerated pace. This course is the subject and like to work out problems with or course offered in 8 <sup>th</sup> grade. <i>Prerequisite: recommendation of your 8th grade mat</i>	study of mather is designed for s nly occasional te	students who c eacher support	ng algebra, geometry, a an handle abstraction: This sequence is a co	s easily, have a ge	eneral enjoyment of
512	Math 2 Accelerated Math 2 ACP Accelerated continues an integrated and probability at an accelerated pace. This course the subject and like to work out problems with on <i>Prerequisite: 511 and recommendation of your math</i>	is designed for ly occasional tea	natics including students who c acher support.	can handle abstraction		angle trigonometry,
513	Math 3 Accelerated Math 3 ACP Accelerated offers a study of pre-ca is designed for students who can handle abstraction only occasional teacher support. <i>Prerequisite: 512 and the recommendation of your me</i>	ons easily, have	ration for stude			
514	<b>Introduction to Calculus</b> Introduction to Calculus continues the study of calculus. This course will sustain student interest ar					

Introduction to Calculus continues the study of advanced algebra/pre-calculus and the foundational topics in differential and integral calculus. This course will sustain student interest and give students flexibility and the required background to approach the next mathematics course with more understanding. This course is designed for students who can handle abstractions easily, have a general enjoyment of the subject and like to work out problems with only occasional teacher support.

Prerequisite: 513 and recommendation of your math teacher

### The Math 581 to 584 Sequence

SIMMS (ACP) Math courses 581-584 are appropriate for you if you prefer an exploration-based approach rooted in real-world investigations while working collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that you transfer your collaborative knowledge/experience for your individual understanding and mastery. By successful completion of SIMMS Pre-Calculus, you will be fully prepared to pursue college level mathematics.

9

full year

4 periods

5 credits

### 581 Math 1 SIMMS ACP

SIMMS 1 provides an integrated study of mathematics including algebra, geometry, and basic statistics. This course is appropriate for students who prefer an exploration-based approach rooted in real-world investigations while working collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that students transfer collaborative knowledge/experience for individual understanding and mastery. Prerequisite: recommendation of your 8th grade math teacher or permission of the NNHS department head

### 582 Math 2 SIMMS ACP 10 full year 4 periods 5 credits SIMMS 2 provides an integrated study of mathematics including algebra, geometry, an introduction to sequences and series, and basic probability. This course is appropriate for students who prefer an exploration-based approach rooted in real-world investigations while working

collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that students transfer collaborative knowledge/experience for individual understanding and mastery. Prerequisite: 581, 511 or 516 and recommendation of your math teacher

583 Math 3 SIMMS ACP 11 full year 4 periods 5 credits SIMMS 3 provides an integrated study of mathematics including second-year algebra and trigonometry. This course is appropriate for students who prefer an exploration-based approach rooted in real-world investigations while working collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that students transfer collaborative knowledge/experience for individual understanding and mastery. Prerequisite: 582, 512 or 517 and recommendation of your math teacher

### 584 Pre-Calculus SIMMS ACP 12 full year 4 periods 5 credits

SIMMS 4 offers a comprehensive study of second-year algebra and pre-calculus. Students are expected to function in collaborative groups for discovery of math concepts and how they work. This course is appropriate for students who prefer an exploration-based approach rooted in real-world investigations while working collaboratively with classmates in discovery of math concepts and how these concepts work. This course requires strong communication skills, both orally and in writing, and requires that students transfer collaborative knowledge/experience for individual understanding and mastery. By successful completion of SIMMS Pre-Calculus, you will be fully prepared to pursue college level mathematics.

Prerequisite: 583 or equivalent and recommendation of your math teacher

### The Math 516 to 519 Sequence

Advanced College Preparatory (ACP) Math courses 516-519 are appropriate for you if you can handle abstractions and like to solve problems after your teacher has provided additional practice within a structured learning experience. This college-preparatory sequence allows more time to use the math concepts and skills you have studied. By successful completion of Math 519, you will be fully prepared to pursue college level mathematics.

516 Math 1 ACP full year 4 periods 5 credits Math 1 ACP provides an integrated study of mathematics including algebra, geometry, an introduction to sequences and basic statistics. This course is designed for students who can handle abstractions and like to solve problems after the teacher has provided additional practice within a structured learning experience.

Prerequisite: recommendation of the your 8th grade math teacher or permission of the NNHS department head

ACP

### 517 Math 2

4 periods 5 credits Math 2 ACP continues an integrated study of mathematics including an introduction to concepts in second-year algebra, geometry, right triangle trigonometry, and probability. This course is designed for students who can handle abstractions and like to solve problems after the teacher has provided additional practice within a structured learning experience. Prerequisite: 516 or 541 (with supplemental summer work) and recommendation of your math teacher or permission of the NNHS department head

10

full year

518 Math 3 ACP 11 full year 4 periods 5 credits Math 3 ACP continues an integrated study of mathematics containing strands of second-year algebra, sequences and series, and additional introductory trigonometry topics. This course is designed for students who can handle abstractions and like to solve problems after the teacher has provided additional practice within a structured learning experience. Prerequisite: 517 and recommendation of your math teacher

519 Pre-Calculus ACP 12 full year 4 periods 5 credits Math 4 ACP begins the study of pre-calculus, continues the study of trigonometry and includes additional units of study in statistics and personal finance. This course is designed for students who can handle abstractions and like to solve problems after the teacher has provided additional practice within a structured learning experience.

Prerequisite: 518 and recommendation of your math teacher

### The Math 541 to 544 Sequence

College Preparatory (CP) Math courses 541-544 are appropriate for you if you prefer concrete mathematical situations where you can use your inductive reasoning in a highly structured setting. By successful completion of Math 544, you will be prepared to pursue college level mathematics.

541	Math 1 Math 1 CP builds on the pre-algebra begun in eigeometry and basic statistics. This course is appropriate inductive reasoning in a highly structured setting. <i>Prerequisite: recommendation of your 8th grade material</i>	priate for stude	nts who prefer conc	rete mathematica		
542	Math 2 Math 2 CP continues an integrated study of m Students who complete this course will have suffi students who prefer concrete mathematical situati <i>All students registering for 542 should also register</i> Prerequisite: 541 and recommendation of your r	cient exposure ons where they for course 532.	to topics tested on t	he 10th grade M	ACAS. This cours	e is appropriate for
543	Math 3 Math 3 CP continues an integrated study of mat polynomials from Math 2, sequences and series, an mathematical situations where they can use their i <i>Prerequisite: 542 and recommendation of your math</i>	d right triangle nductive reasor	trigonometry. This	course is approp		
544	Math 4 Math 4 CP continues an integrated study of m functions and major unit of study on personal fina where they can use their inductive reasoning in a <i>Prerequisite: 543 and the recommendation of your m</i>	nce. This course highly structure	e is appropriate for s	full year on modeling wi students who pre	<b>4 periods</b> ith linear, quadrat efer concrete math	<b>2.5 credits</b> tic and exponential mematical situations
	For students planning to take all of our Conceptuation of the computer P take any combination of the courses, in any conceptuation of the courses, in any conceptuati	omputer Scier Programming,	and then Compu	iter Science Pr	A	
549	Introduction to Computer Science In this 2x/week course, students will be introduce HTML. Intro to Computer Science enables studer advanced courses in the future. No previous progra Prerequisite: none	nts to dip their	toes into principles			
551	<b>Computer Programming</b> The Computer Programming elective offers stud and then move on to Python, the language used to will tackle more challenging problems requiring a <i>Prerequisite: recommendation from current math</i> or	drive websites stronger mathe	anging from Google matics background	e to NASA to Ins	tagram. At the Ho	
552	<b>Computer Programming</b> The Computer Programming elective offers stud and then move on to Python, the language used to o work at the pace appropriate for their level of exper <i>Prerequisite: recommendation from current math or</i>	drive websites ra rience, whether	anging from Google they are new to codi	coding. Studen to NASA to Insta ng or have been	ngram. At the ACP writing computer	ock-based program, level, students will
553	<b>Computer Science Principles</b> The newest Computer Science offering is a proje computing topics, ranging from the basic functioni ming. Students will utilize both MIT's App. Invent	ng and parts of	a computer to conce	pts in cyber-secu	rity to the fundan	nentals of program-

ming. Students will utilize both MIT's App Inventor programming environment and the C programming language to create applications. The course is adapted from the Computer Science Principles curricula of Harvard's CS50 course and the Mobile Computer Science Principles course of the College of St. Scholastica and Trinity College.

Prerequisite: concurrently taking 503, 504, 505, 508, 513, 514, 518, 519, 583 or 584 and recommendation from current math teacher or computer science teacher

### Other Offerings

### 505 AP Statistics

### 11-12 full year 4 periods 5 credits

This course will introduce you to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four major themes are: exploratory analysis using graphical and analytical techniques to study patterns and departures from patterns; data collection according to a well-developed plan; use of probability to anticipate data distribution; use of statistical inferences to select reasonable models. AP Statistics is not a traditional math course. It is very language based and requires a lot of reading, interpretation, and writing in English. Students who find success in History and English *and* who have outstanding work habits are good candidates for this course.

AP Statistics is an elective course and should be taken *in addition to* the student's traditional math course.

H

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

Prerequisite: Successful completion of 502, 512, 518 or 583, and recommendation from current math teacher

### 858 Business Mathematics CP 11-12 full year 4 periods 5 credits

Credits may be used to meet mathematics requirements.

This one-year course is divided into two major units: Personal Business Mathematics and Operational Business Mathematics. Students will review fundamental math skills before learning about financial literacy through instruction about savings and checking accounts,

investment opportunities, credit cards, bank loans, etc. They will also learn math related to business operations including costs, sales, purchasing, and production.

### 532 Mathematics Concepts & Skills no level 10 full year 2 periods 2.5 credits

For students concurrently in Math 542 or 572 who would benefit from targeted support (as determined by 8th grade MCAS scores or teacher recommendation) in mathematical concepts and skills, as well as test-taking strategies.

### 580 Classroom Aide in Mathematics no level 11-12 F or S Time and Credits TBD

Students must complete the application/registration process through the department head to be considered as a candidate for the position of mathematics classroom aide. Selected students will be paired with a supervising math teacher. The math classroom aide and the supervising teacher will work together closely on tasks that are helpful to the teacher (and/or her students) and that are educational for the student. The program is open to responsible upperclassmen that have taken math classes at all curriculum levels. For many students the experience is similar to a job shadow or internship. Students are graded P/F. Credits are awarded based on the number of blocks per week.

# MUSIC

The music department offers students a number of exciting opportunities to explore, create and perform music. NNHS has thirteen performing ensembles, as well as courses in theory, composition, technology, history & appreciation. These course offerings are designed to present opportunities for all students: students looking to study music in college, as well as students looking to gain a well-rounded education. Participation in the NNHS Music presents many additional opportunities for students outside of the school day as well. North music ensembles perform locally and internationally. In April of '09, students from each of North's nine ensembles performed at the Forbidden City Concert Hall in Beijing, China! In 2010 another group of students traveled to Italy. In April 2014 & 2016, North music students traveled to our Fine & Performing Arts sister school in Melbourne, Australia. Many students participate in MMEA's District & All-State Festivals (with a yearly Symphony Hall performance). They have had the opportunity to perform their own music live at the Singer-Songwriter Symposium & Concert alongside some of America's top musicians. They perform with their peers involved in theatre for school musicals. They create their own compositions in music technology and film scoring. They make lifetime friends and learn skills to take them through a lifetime. The opportunities are endless.

Students enrolled in Music classes have the opportunity to participate in the Fine & Performing Arts Department Exchange Program with Haileybury College, Melbourne, Australia. See the department website for more details on this opportunity.

### PERFORMING ENSEMBLES

Important for students in Performing Ensembles -

Students are required to be present for and stay for the entire performance of any concert in which they participate.

Students are required to complete the full year of study to gain credit for the course.

### **Choral Ensembles Structure**

Vocal Ensemble	Grade 9	non-auditioned
Concert Choir	Grades 10-12	non-auditioned
Family Singers • Jubilee Singers • Tiger BeBop	Grades 10-12	auditioned

801 Vocal Ensemble

ACP 9 full year 2 periods 2.5 credits Vocal Ensemble is the chorus for ninth grade students and is the beginning of North's choral program. This non-auditioned group prepares students for Concert Choir and eventually to audition for the Jubilee Singers, Tiger Bebop and the Family Singers. In Vocal Ensemble you will develop choral singing skills, perform music in a variety of styles, and have a ton of fun making music together at North. The Vocal Ensemble performs regularly with other ensembles on music department concerts.

800 Concert Choir ACP 10-12 full year 2 periods 2.5 credits Concert Choir is for students, grades 10-12, who have a passion for singing and learning multi-part choral music from many styles and periods of music. This course is an essential foundation for anyone who wants to be part of the Jubilee Singers, Tiger Bebop and the Family Singers. The curriculum is designed to make students the best musician they can be through exposure to such diverse styles as Jazz, Spirituals, Folk Music, Broadway and Madrigals. Each winter, the Concert Choir combines with the Family Singers and NNHS Orchestra to perform a major choral work; recent concerts include Schubert's Mass in G, Thompson's Frostiana, Haydn's Mass In Time of War (with Newton South) and Beethoven's Choral Fantasy. Members of Concert Choir have recently traveled to Italy, China, and soon to Australia. Come join a truly interesting, diverse and fun ensemble of singers!

802 Family Singers Η 10-11-12 full year 4 periods 5 credits The Family Singers is an award-winning, balanced, SATB chorus. Members for this honors chorus are selected by audition. Family Singers has won numerous awards from he Music Educators National Conference on local and national levels and has had the chance to participate in concert tours of Europe, Canada, Mexico and the United States. Literature to be sung is selected from all periods of music and each year a major choral work is sung with the NNHS Orchestra such as Vivaldi's Gloria, Mozart's Requiem, Haydn's Mass In Time of War and Beethoven's Choral Fantasy. Active in community events, the Family Singers has been part of many fund raising concerts and memorials in the local community of Greater Boston. Come join one of the premiere high school vocal ensembles for an unforgettable musical experience.

ACP

803 Tiger BeBop

full year 4 periods Tiger Bebop is the vocal jazz component of the NNHS choral program. Tiger Bebop is comprised of a balanced group of young men and women who have a passion for singing music from the Great American Songbook. Music is selected from many unique jazz vocal groups such as Manhattan Transfer, New York Voices, Cadence and The Real Group. Tiger Bebop sings both A Cappella and in combination with jazz instrumentalists for a truly exciting performance experience. Students are encouraged to explore scat singing and solo opportunities. Each year Tiger Bebop travels for participation in the Berklee Jazz Festival as well as the MAJE Festival and has been featured on the Gold Medal Showcase at the Hatch Shell in Boston. If you enjoy singing and are interested in a new challenge then Tiger Bebop is the group you have been waiting for!

10-11-12

5 credits

804 Jubilee Singers ACP 10-11-12 full year 4 periods 5 credits The Jubilee Singers perform music drawn from the African Diaspora including jubilees, spirituals, contemporary and traditional gospel, as well as traditional and contemporary African Pieces. Students may audition for the Jubilee band (piano, bass, drums, guitar, horns) in addition to the choir if desired. Students are required to learn all music, and attend all performances as well as two night rehearsals before each concert. In preparation for the concerts we will learn a wide variety of musical styles and expressions in addition to learning about the social and historical contexts that birthed the traditions we will draw on.

### **Instrumental Ensembles Structure**

Strings	Symphony Orchestra	Grades 9-12	non-auditioned
	String Ensemble	Grades 10-12	auditioned
Bands	Symphonic Band	Grades 9-12	non-auditioned
	Wind Ensemble	Grades 10-12	auditioned
Jazz	Jazz Ensemble 2	Grades 9-12	non-auditioned
	Jazz Ensemble 1	Grades 10-12	auditioned

ACP

805 Symphony Orchestra-Strings

9-12

full year 4 periods 5 credits

4 periods

5 credits

Join your fellow violinists, violists, cellists and string bass players and make music with the NNHS orchestra. We play a variety of orchestral repertoire from baroque to contemporary, from Bach to Coldplay. Recent works we have performed include Mozart's Impresario Overture, selections from Mendelssohn's A Midsummer Night's Dream and Copland's Hoedown. The orchestra is a major class that meets during two regularly scheduled blocks and Tuesday evenings from 7:00 to 9:00 PM. Wind and percussion instruments, auditioned from Wind Ensemble, join us to make a full orchestra.

Each winter, the Orchestra collaborates with the Family Singers and Concert Choir to perform a major choral work; recent concerts include Vivaldi's Gloria and Beethoven's Choral Fantasy. Additionally, Juniors and Seniors are invited to audition for the yearly Concerto Competition. The accepted students will have the opportunity to perform solo with the NNHS Orchestra.

806 String Ensemble Η 10 -11-12 full year 2 periods 2.5 credits This select ensemble is open by audition to members of Symphony Orchestra. We perform chamber orchestra and chamber music in various combinations. Recent performances included the Corelli Christmas Concerto, Bartok violin duos and string quartets by Mozart and Mendelssohn. The String Ensemble performs throughout the year in music department concerts, as well as performing outside of school. Requirement: Open to sophomore, junior and senior string players by audition. Players must be a member of Symphony Orchestra -Strings, course 805.

### 808 Symphonic Band

ACP 9-12 2 periods 2.5 credits full year Symphonic Band is the essential foundation for anyone who wants to participate in Wind Ensemble, Orchestra Winds & Percussion, the Jubilee Band, Jazz Ensemble and school musical pit orchestra. Symphonic Band members are provided a rich spectrum of opportunities to gain skill on their instrument, develop ensemble playing and perform on department concerts. The Symphonic Band explores the vast spectrum of band literature for high school level band. 9th Graders are strongly encouraged to sign up for Symphonic Band & Jazz Ensemble 2 (833) as they will have a much greater opportunity to gain skill on their instrument and develop small group and large ensemble playing in specific preparation for the honors level Wind Ensemble.

### **809** Wind Ensemble

Н 10-11-12 full year Requirements: an audition for the instrumental music director.

The Wind Ensemble is a musical organization for winds and percussion. The ensemble explores traditional and contemporary wind ensemble literature, world music, and transcriptions of classical works and film music. Additionally, once per week the rehearsal time is divided into smaller chamber ensembles of like instruments. If you are dedicated instrumentalist who wants to be challenged musically and participate in an ensemble of 'great spirit' Wind Ensemble is for you!

810 Symphony Orchestra–Winds and Percussion no level 10-11-12 full year 1.25 credits 1 period Select wind and percussion players are chosen by audition from players in the Wind Ensemble. This is an exciting performing opportunity for dedicated, accomplished instrumentalists to join with the NNHS Orchestra. Symphony Orchestra Winds & Percussion are required to attend two Tuesday evenings rehearsals prior to each performance.

811 Jazz Ensemble 1 Η 10-11-12 full year 4 periods 5 credits An audition is required for placement in Jazz Ensemble 1 (811). As a member of Jazz Ensemble 1 you will explore various forms of jazz, latin, funk, fusion and pop music. Through participation in the Jazz Ensemble you will develop an understanding of the different ensemble techniques for each style as well as have the opportunity to play improvised solos. Jazz Ensemble 1 is a busy performing group which makes appearances at department concerts, specified Jazz Nights as well as community events throughout the year such as Village Days and school fund raising events. The Jazz Ensemble is a traveling group and participates in the Berklee Jazz Festival every year. Last year the Jazz Ensemble embarked on a trip to New Orleans to perform and see the birthplace of jazz. With permission of the director 9th Graders may be allowed to join Jazz Ensemble (811) mid year.

### 833 Jazz Ensemble 2

9-10-11-12 no level full year 2 periods 2.5 credits Jazz Ensemble 2 provides students with the opportunity to explore various forms of jazz, latin, funk, fusion and pop music. The learning in this group focuses on establishing the foundations of understanding how to interpret the musical styles in these various genres. Jazz Ensemble 2 is a performance group and an essential foundation for anyone who wants to participate in Jazz Ensemble 1.9th Grade students interested in jazz are strongly encouraged to select this course as a gateway to the jazz program. It is also encouraged that serious 9th Grade students also select Symphonic Band (808) to round out their musical experience. Jazz Ensemble 2 is open to all instruments. Jazz Ensemble 2 performs on School Concerts as well as for various community events.

### 831 Jazz/Rock Workshop

9 -10 -11 - 12 ACP full year 2 periods 2.5credits Do you love music, play an instrument and want to play with other musicians? If so, this class offers you the opportunity to play in a modern band setting and learn about various styles of music. Jazz/Rock Workshop explores the musical roots of the sounds you hear in our current musical trends. Thus, the class emphasizes the blues, jazz and rock as the core styles. This class is open to all instrumentalists and especially students that play drums, bass, guitar and piano. We also welcome all wind instrumentalists (saxophone, trumpet, trombone, flute, oboe, horn, bassoon, cello, and more). Learning about song forms, styles, improvisation, theory and related history through applied performance will be the learning of the Jazz/Rock Workshop. Students may perform on concerts at North or within the community.

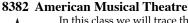


832	2 Advanced Jazz Improvisation This course is for students seeking advanced study Jazz Ensemble 2. The Advanced Jazz Improvisation cur rary musicians. Students will gain a strong understand of standard jazz tunes, students will learn to compose with an emphasis on performance-based learning. Stu from the Music Department.	of jazz improvis rriculum is aime ling of jazz theor their own music	d towards under y as well as deve c in the jazz idior	standing the har elop a jazz vocat n. Advanced Jaz	rmonic language oulary. In additic zz Improvisatior	e used by contempo- on to learning a base n is a hands-on class
	NON-P	ERFORMI	NG CLASS	SES		
812	2 Music Theory	ACP	9 -10-11-12	full year	2 periods	2.5 credits
*	Recommended for all music students. Music Theory teaches the building blocks of music. Theory teaches the building blocks of music. The explore music as pitch, rhythm, form, melody, harmon training, and understand chords and harmonic structure including opportunities for their own creativity. This content of the structure of th	y, and beyond. S ire. A strong kno	Students in Music wledge in music	c Theory will lea theory can ope	arn how to notate n up many door	e music, practice ear s for music students
813	<ul> <li>AP Music Theory         <ul> <li>Successful completion of Music Theory 1 or permiss</li> <li>AP Music Theory is the continuation of Music Theory</li> <li>This course prepares students for the Advanced Pla are expected to register for and take the Advanced Plown exam registration fees.</li> </ul> </li> </ul>	sion of the instru ry I. It includes acement examina	ictor is required. advanced harmo ation given in Ma	ony, analysis and ay by the Colleg	ge Board. All stu	
814	Music Technology If you love music and love to create, music technol including Logic Pro X, Garage Band, and Sibelius. The to realize their ideas through the use of technology. A with others. Additionally, students will learn basic recor- recommended pre-requisite for the Film Scoring course	logy is for you. rough a series of at the end of the cording techniqu	This class utilize projects, student semester student	ts will learn basi ts will have a cc	leading music te ic music compos ompleted portfol	ition skills and how io of music to share
815	Film Scoring Music Technology is recommended as the precursor Ever watched a movie without sound and realized successful film, television show, or advertisement. As music compositions (scores) for short films, scenes, and students will learn dramatic scoring concepts, how to explore the history of film music through the study of h trends. The course will culminate with a final project	r to Film Scoring how much of th the advanced m commercials by achieve a music istorically signif	e drama disappe usic technology using some of too al 'setting' or stee icant scores and c	ears? Music is o course, Film Sco lay's top music t er an emotion m composers, techi	oring students w echnology Thro nusically. Additio nological develo	rill create individual bughout this process onally, students will pments, and current

816	History	of Rock Music

Popular music is a powerful, ever-changing force that has had a profound effect on American society and social issues. Come listen and learn about the incredible musicians who have shaped our listening styles since the end of WWII. The Pop Music curriculum includes studies in Blues, Jazz, Rhythm and Blues, Punk, New Wave, Reggae, Hip Hop, Rap, Metal, Alternative, Folk, Grunge - this list is truly endless! Your listening to Pop Music in class is enhanced with documentaries and movies about the life and times of some of the greatest performing artists - from James Brown to Miles Davis, from Van Morrison to Eric Clapton, from Ella Fitzgerald to Taylor Swift, from Billie Holliday to Madonna. Student presentations are part of the second term where you will get to present the music and personalities that inspire you. This course is designed for all students of all levels and abilities. You just need to bring your passion for learning about Rock Music!

819 The Music of The Beatles The Beatles' recorded output took place over roughly 8 years. What occurred musically in that incredibly short time has forever altered the course of the music world. This course will study the musical advancements made over those years and the corresponding cultural impact of the band. Students will study the three periods of recordings, analyze songs using scores, and even rewrite some of the George Martin orchestrations. A must for all fans of The Beatles' music as well as for anyone interested in music from the last 50 years.



1.25 credits In this class we will trace the history of this American art form from its origins in vaudeville and operetta through the twentieth century to the present. We will listen to the music of great composers of Broadway and Hollywood, including Cole Porter, Richard Rodgers, Leonard Bernstein and Stephen Sondheim, and see how the genre evolves from skits with interchangeable songs to tightly knit theater pieces where the music propels the drama and develops the characters. We will look at how Broadway has remained current by incorporating contemporary trends in popular music, from the jazz of Anything Goes and West Side Story to the rock of Hair and Rent and the hip-hop of In the Heights and Hamilton.

817 Music Work Study

no level 10-11-12 full year 5 periods 2.5 credits



832 Advanced Jazz Improvisation ACP 10-11-12 full vear 2.5credits and npopase lass sion

9 -10-11-12 F or S 2 periods 1.25 credits

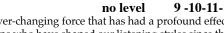
2 neriods

no level

9-10-11-12

F or S 2 periods 1.25 credits

9 -10-11-12 F or S no level 2 periods



# PHYSICAL EDUCATION AND WELLNESS

### MISSION STATEMENT

Newton North High School is committed to a quality Physical Education/ Health/Wellness program for every student. The PEHW department incorporates a multi-dimensional approach to well being that promotes individual responsibility. We emphasize an active process of becoming aware of and making choices towards a healthier, more fulfilling life by giving students the skills and knowledge needed to establish and sustain an active lifestyle.

All courses are contingent upon 2017-18 staffing and course enrollment.

All freshmen are required to take the Freshmen Core Program and Sexuality and Health.

Sophomores, juniors, and seniors will enroll in one PEHW class each year from the elective courses.

Students may only enroll in additional PEHW courses with department head approval.

All activities are designed for co-educational classes.

Three courses in one semester will not be allowed.

GRADUATION REQUIREMENT: 5 credits Each PEHW class is one credit.

GRADING: A, Pass, Fail, N (no credit), and Medical (M).

### **CORE PROGRAM** 9

### **001 Freshman Core**

no level F or S 2 periods 1 credit The freshmen core program is designed to develop a fundamental understanding of personal fitness, wellness concepts, aquatic safety, CPR awareness, individual and group problem solving, cooperative games, rules and regulations of various team and lifetime games. An important objective of the core program is to give the students the background for entering into the elective program for their sophomore, junior and senior years.

### 002 Sexuality and Health

no level F or S 2 periods 1 credit Sexuality and Health counts as one credit towards the Physical Education/ Health/ Wellness graduation requirement. This course is designed to help ninth grade students explore sexuality issues important to everyone. Friendships, romantic attractions, sexual orientation, dating, love, building healthy relationships, ending relationships, decision making, support for choosing abstinence, ways to refuse unwanted sexual encounters, ways to reduce the risk of pregnancy and sexually transmitted infections, sexual harassment, and other relevant topics will be discussed in an open and supportive environment.

### PHYSICAL EDUCATION/HEALTH/WELLNESS

Sophomores, juniors, and seniors have a varied and challenging selection of courses to choose from the elective program. You may select one course for one semester from the following activities. No course can be repeated during your three years without Department Chair approval.

### 10-11-12 2 periods **003** Personal Fitness no level F or S 1 credit The student will gain an understanding of their personal fitness levels and needs through discussion and practice of health related fitness components: cardio-respiratory endurance, muscular endurance, muscular strength, and flexibility and body composition. Activities may include weight training, jogging, basic anatomy and physiology, fitness testing, and fitness games.

### 005 Wellness Activities no level 10-11-12 F or S 2 periods 1 credit Learn how to enhance your health and sense of well being. Activities may include relaxation techniques, yoga, meditation, stress management knowledge concepts, resistance training and partner and group activities.

### **006** Personal and Group Awareness 10-11-12 2 periods no level F or S 1 credit Individual and group activities in a problem-oriented approach which requires students to address issues of leadership, decision-making, commitment, fear, risk-taking, stress, and compassion. These activities help to build self-confidence, self-esteem, group support, initiative and responsibility. This course may not be repeated and may not be added after week one of the semester this course may include a high ropes element.

007 Get Fit 10-11-12 no level F or S 2 periods 1 credit This course will include a variety of fitness activities such as step aerobics, circuit training, pilates, yoga, walking, jogging and core strengthening. Classes consist of a warm-up, cardio training, cool down and stretching, as well as muscle conditioning exercises. Nutrition and weight-control concepts may also be discussed.

### 008 Intro to Rock Climbing no level 10-11-12 F or S 2 periods 1 credit The first half of the semester, students will gain an understanding of their fitness levels and rock climbing needs through practice and discussion of muscular endurance, muscular strength, and flexibility by strength training. The second half of the semester, the class will focus on the fundamentals of rock climbing. Students will be instructed in knot tying, belaying, rappelling, and basic movement, and climbing techniques.

009	<b>Sexuality &amp; Health II</b> Sexuality & Health II is available only to junior and grade Sexuality and Health class. However, this adv dent pairs will select research topics and utilize the lil Experts on various topics will also be invited to spe If a student who didn't request this course is enroll	vanced course w brary learning co eak with the class	ill allow students ommons to prepa ss when appropria	to go more in d re and present ir ate.	epth than previous	ly possible. Stu-
014	Aqua-Fit and CPR/AED/First Aid The first half of the semester students will gain an sistance training in the pool. Activities may include sh are not required. During the second half of the semester the class wi of the practical skills and written requirements, certifi	nallow and deep ll focus on the fu	-water jogging, ad Indamentals of CI	qua aerobics and	l stretching. Strong	swimming skills
015	Aquatic Instruction This course is designed for the student who wishes individual level from beginner to advanced. Survival				<b>2 periods</b> will include swim	<b>1 credit</b> instruction at the
016	Water Games This course is designed for the student who is comf sports such as navy ball, water polo, volleyball, baske					
	Lifeguard Training Lifeguard Training Requirements: 15 years or older, Strong swimming Lifeguard candidates learn the skills and knowled rescuer First Aid and AED instruction also included. cessful completion of Red Cross requirements, ARC, I may not miss any section of the course. A full commi	lge needed to pr There is an onlin LGT & CPR-PR (	revent and respon ne component to t certification will b	d to aquatic em his course. and	ergencies. CPR for spring A fee is cha	the professional rged. Upon suc-
019	Water Safety Instructor (WSI) This course will be offered only one semester. Requirements: 16 years of age or older, demonstrate 50 yards of each of the following strokes Front crawl, position on back 1 minute in deep water (floating or se class meeting. This American Red Cross course trains instructor of Basic Water Rescue course, the six levels of Learn-to-S pre-requisite Fundamentals of Instructor Training con- requirements will ARC Fundamentals of Instructor Tra- fee is charged.	Back crawl, Bre sculling), tread v candidates to tea wim, and Parent urse will also be	aststroke, Elemen vater for 1 minute ch ARC Swimmir and Child Aquat taught. Only upo	tary backstroke, . A skills evalua ng and Water Sa ics. There is an o on successful com	Sidestroke, Butter tion will be admini fety Program cours nline component to mpletion of all Amo	fly, and maintain stered at the first es, including the this course. The erican Red Cross
022	<b>Team Sports I</b> Instruction and games for the individual who enjoy footballs, basketball, soccer, floor hockey, whiffle ball sports management and officiating.					
023	<b>Team Sports II</b> Instruction and games for the individual who enjoys Among the activities that may be offered include field					
024	<b>World Games</b> With a commitment to understanding the tremendo from around the globe, the physical education departm Fist ball, Cricket, Korfball) and activities from around	nent offers World	d Games. This cou	rse will focus or	n popular games (i.e	. Jai-Alai, Rugby,
025	<b>Lifetime Activities</b> This course provides diverse offerings to meet the activities. Improved fitness is a goal through a variety frisbee, badminton, tennis, and volleyball.					
030	<b>Dance in Action</b> This class is for beginning to advanced students - no of dance including: hip hop, ballroom, swing, ballet, l to create original choreography and perform in an inf	ine, multicultur	al folk, tap as well	as other forms.	The class will have	the opportunity

031	<b>Prevention and Care of Athletic Injuries</b> This course will be offered only one semester. This course is designed to educate students abo athletic trainer and certified physical educators on medicine and fitness. Students will be taught ana sports medicine laboratory. This course will also to fundamentals of Sports Medicine.	staff. Athletic Tr tomy and physic	aining is recogniz ology, rehabilitatio	zed as an allied l on techniques, b	nealth profession de racing and strappi	ealing with sports- ng techniques in a
032	<b>Methods and Issues in Coaching</b> This course will be offered only one semester. In the may include: qualities of an effective leader, moral a and how to design and run an effective practice. A community using the skills and tactics addressed the	nd ethical issues pplication of issu	in sport, the role ies discussed in th	of a coach, race a	nd sport, Title IX, fa	acility preparation,
033	<b>Career Fitness</b> Learn how to enhance your health and sense of w and First Aid certification will be offered. Other act wellness.					
034	<b>P. E. in Early Childhood</b> Students will focus on the social and physical de children in a wide range of early movement activitie Infant and child First Aid and CPR certification wil	es. The class will i	include coverage i	in the areas of nu	trition, games, and	<b>1 credit</b> st and teach young personal wellness.
042	<b>A.M. Swim</b> This course will be taught two times per week, 7:0 es to improve stroke technique and personal fitness This course will be offered in the fall and spring	s. Activities may	include stroke dr	ills, sprint and d	istance swimming	
048	PEHW Aide	no level	10-11-12	F	2 periods	1 credit

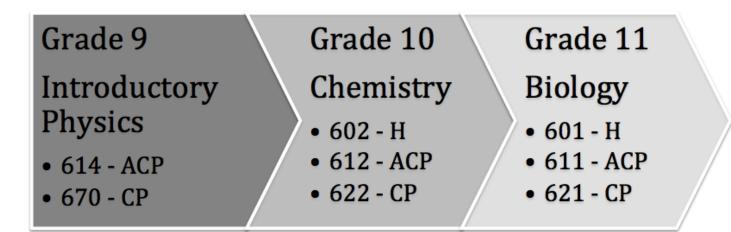
048	PEHW Aide	no level	10-11-12	F	2 periods	1 credit
049	PEHW Aide	no level	10-11-12	S	2 periods	1 credit
	This course offers an opportunity for the studer	nt who has been suc	cessful in the phy	vsical educa	ation, health and wellnes	s program to assis

This course offers an opportunity for the student who has been successful in the physical education, health and wellness program to assist in the freshmen core program. The students are required to fallout an application in the spring and return to the department head. Placement in this program is limited and requires department head approval. The credit does not count toward the required 5 credits to graduate. For more information on classroom aides please refer to the all school section of opportunities booklet.

# SCIENCE

The Science Department strives for all students to attain scientific literacy - a basic understanding of the natural sciences, mathematics, technology, and their interactions. To graduate from Newton North High School a student must successfully earn 5 credits through physical science courses and 5 credits through biological science courses. While the graduation requirement is two years, most colleges require at least three years of high school science. We recommend that all students take Introductory Physics in the 9<sup>th</sup> grade, Chemistry in the 10<sup>th</sup> grade, and Biology in the 11<sup>th</sup> grade. The department head must approve deviations from this sequence.

Students must earn a competency determination in Science and Technology/Engineering via the Massachusetts Comprehensive Assessment System (MCAS). To earn a competency determination in Science and Technology/Engineering a student must meet or exceed the Needs Improvement threshold scaled score of 220 on one discipline specific high school Science and Technology/Engineering MCAS test (Biology, Chemistry, Introductory Physics or Technology/Engineering). Most students at Newton North High School take the Introductory Physics test in June of their freshman year.



### INTRODUCTORY PHYSICS COURSES

614	Introductory Physics	ACP	9	full year	4 periods	5 credits
	Students will learn important science related s	0 1		0	0	5
	and technologies, quantitative and qualitative ob			1	01,	J ' 11
	cation of algebra to science problems, and applic					
2	<ul><li>motion, electricity, magnetism, waves, light, sour</li></ul>		y will be emp	hasized throughout the	entire course. Th	is activities based
	course will provide the foundation for all future	science courses.				

670	Introductory Physics	СР	9	full year	4 periods	5 credits
	Students will learn important science related s					
	and technologies, quantitative and qualitative	,		1	01	
	application of algebra to science problems, and					
-9-	forces, motion, electricity, magnetism, waves, lig					
	based course will provide the foundation for all			rse is designed for stud	ents who would	do well in a more
	structured setting and for students who are con	currently enrolle	d in Math 541.			

644	ELL Introductory Physics	ACP	9-10-11-12	full year	4 periods	5 credits
644	<ul> <li>Through this Introductory Physics course, desig important science related skills including experime quantitative and qualitative observations, construct to science problems, and applications of science conity, magnetism, waves, light, sound and heat. Energy provide the foundation for all future science cours emphasized. Students taking this course MUST also</li> </ul>	ned to best sup ental design, ac tion and interp neepts to the re- gy will be empl es. Study skills sign up for cou	port students with c curate measurement retation of data table al world. Laboratory nasized throughout t , reading strategies,	leveloping Eng t using a variet es and graphs, u experiments w he entire course vocabulary-bui	lish proficiency, si y of instruments unit analysis, appl ill examine forces e. This student-cer lding and scientif	tudents will learn and technologies, ication of algebra , motion, electric- ntered course will ic writing will be
	to prepare students for the Introductory Physics M	CAS exam.				

 652 Science for Beginning English Learners CP 9-10-11-12 full year 4 periods 5 credits This thematic, frameworks-based introductory laboratory science course is for students with very limited English proficiency. This course draws connections between physical and life sciences and connects to our ELL Literacy for History class through the development of science related skills and content. Course goals include development of academic skills, learning strategies, vocabulary building and scientific writing. This class must be taken in conjunction with ELL Literacy for History, course 417.

### CHEMISTRY COURSES

In all of Newton North's Chemistry courses, Students will explore atomic structure, chemical bonding and reactivity, energy in chemical reactions, and other topics. Our methods include direct observations in laboratory experiences, examination of patterns observable through published data, and interpretation of physical, theoretical, and mathematical models.

Per the guidelines on leveling at Newton North High School found on page 3 of this booklet, descriptions of CP, ACP, and Honors level versions of Chemistry are below. Students will be recommended for placement in one of the following courses based on current performance in science class and math course level. The student's demonstrated motivation, study skills, and level of interest in the subject matter will also be considered.

622	Chemistry	СР	10-11-12	full year	4 periods	5 credits
	This course covers the same topics as advanced	l college prep an	d prepares students	for college and	technical careers.	Smaller class
	size, a wide variety of approaches to instruction, a more structured environment and, in some cases, team teaching arrang					
	more individualized attention.					

612 Chemistry ACP 10-11-12 full year 4 periods 5 credits This is a challenging college preparatory class. This course requires that students have strong academic skills, technical skills and the capacity to do independent work.

### 602 Chemistry Honors 10-11-12 full year 4 periods 5 credits This course contains challenging material and is taught at an accelerated pace.

ACP full year 4 periods 5 credits 608 Advanced Chemistry 11-12

Requirement: at least a C in Chemistry ACP/H or permission of the department head. Advanced Chemistry is a second-year advanced chemistry course taught within the AP Chemistry course, but with differentiated assessments. Students attend the same classes, participate in the same labs, and complete the same classwork as the AP Chemistry students. The problem sets and exams are simplified, and the lab reports do not require the same level of detail. Students with a strong interest in chemistry but for whom AP Chemistry is too strong a commitment are encouraged to consider this alternative.

### **BIOLOGY COURSES**

### 601 Biology

11-12 5 credits Η full year 4 periods Recommendation: Completion of Honors Chemistry with a grade of B or higher or ACP Chemistry with a grade of A- or higher with strong writing, math and study skills.

Requirement: Completion of Chemistry

Honors Biology is a fast paced, conceptual and quantitative treatment of the main themes in biology today. The course covers current theories and research in the fields of ecology, biochemistry, cell biology, genetics and evolution. Students are expected to work independently and collaboratively on research and laboratory exercises that require quantitative and analytical thinking and writing skills. Successful students in this class are self-motivated and seek to expand their understanding beyond the materials presented in the class and the text.

### 611 Biology ACP 11-12 full year 4 periods 5 credits

СР

Η

Requirementment: Completion of Chemistry.

ACP Biology is an introduction to the rapidly evolving field of modern biology. The course covers five main areas in biology: ecology, biochemistry, cell biology, genetics and evolution. Students are expected to begin with adequate writing and mathematical skills that will in turn support the qualitative and quantitative analysis that is taught in the course. Students are expected to be able to work both independently and collaboratively on a variety of research and laboratory assignments. Successful students in this class have mastered good study skills and are comfortable seeking extra help and support as needed.

### 621 Biology

Recommendation: Completion of Chemistry.

Biology CP is an introductory biology class for students who do well in a highly structured classroom. Discussion, laboratory and classroom activities will focus on the scientific method, evolution and biodiversity, cellular biology, classical genetics, the relationship between structure and function in living systems, human biology, and plants.

11-12

### PHYSICS COURSES

### full year 4 periods 5 credits

4 periods

5 credits

11-12 603 Physics Requirement: Recommendation of current science teacher and successful completion of Math 513 or Math 503, concurrent enrollment in Math 503, or permission of the department head.

Physics H is a sequel to the Introductory Physics course for highly motivated students with strong scientific interest and mathematical ability. Students should be able to handle abstract ideas both conceptually and quantitatively, including their application to new scenarios. The major topics are: force and motion, vectors and projectiles, energy and momentum, electricity and magnetism, and waves and light. In addition, the students will build engineering projects such as a mousetrap-powered car and student-powered boats.

### 613 Physics

ACP 11-12 full year 4 periods 5 credits

full year

Physics ACP is a sequel to the Introductory Physics course for motivated students who enjoyed physics and would like an additional high school physics course. This course will cover many of the same topics as freshman year, but at a much deeper level. These topics include force and motion, vectors and projectiles, energy and momentum, electricity and magnetism, and waves and light. In addition, the students will build engineering projects such as a mousetrap-powered car and student-powered boats.

### INTEGRATED AND APPLIED SCIENCES

Note: For seniors who enroll in these courses after having completed CP Biology (068, 600, 621 or 641), these courses provide a "safety net" should the course expectations become too challenging. When first term grades are reported, those students may choose to take the course as an unleveled class graded "pass/fail", which will indicate either a "P" or "F" on the transcript.

**630 Anatomy and Physiology ACP 11-12 full year 4 periods 5 credits** Requirement: Having completed the NPS biological science graduation requirements or permission of the department head. This course is a laboratory course focusing on the structure and function of the human body. We will study the particular size, shape, form, or position of the anatomical structures in the body related directly to its ability to perform a unique and specialized activity. Over the course of the year we will utilize dissection, research, technology, experimentation and lecture to explore subject matter. Diseases of the human body will be topics interwoven throughout the course and students will complete projects pertaining to diseases of some system. This course is encouraged for *any* student interested in the medical field in *any* aspect. Careers in medicine will be surveyed. Note: Dissection is a core activity for the course. Students must be comfortable dissecting a mammal (typically a mink) and be willing to actively engage in dissection activities regularly.

### 632 Astronomy ACP 11-12 F 4 periods 2.5 credits In this course you will study how we understand the sky, solar system, stars, and the universe, through discussion, writing, calculation, and observation. You will also learn how to find information about recent astronomical discoveries, and research your own topics. Expect to: collaborate with others, use a telescope, apply concepts from math and physics, analyze images, learn astronomy through various media, and develop a greater understanding of the universe around you.

### 633 Modern Physics ACP 11-12 S 4 periods 2.5 credits Requirement: Students who take this course should have excellent reading comprehension skill, proficiency in writing and speaking, and

be comfortable with algebra and trigonometry. From the discovery of x-rays to finding of the Higgs Boson, modern physics goes beyond the classical topics covered in Intro Physics. The content will vary year to year, but subjects are chosen from topics such as special relativity, fractal formation, quantum mechanics, stellar astrophysics, and particle physics. Much of the work must by its nature be theoretical, but in some cases you will conduct experiments and demonstrations. Along the way, you will learn some of the history that led to modifications of the classical worldview of physics. You will also follow some current research in physics, learning about the ongoing process of science and how it leads to new discoveries, applications, and opportunities.

# 634 Sustainability & Environmental Science ACP 11-12 full year 4 periods 5 credits Requirement: Having completed the NPS physical science and biological science graduation requirements or permission of the depart

ment head. This course aims to provide students with an experience which interweaves the three main pillars of Sustainability: Environmental Science + Equity (Social Justice) + Economic Development. Students will study the economic, societal, and political ramifications of our energy use, climate change, changes in matter & cycles, and water use. Student can expect to engage in lab experiences, online research, presentations, writing, and field experiences.

### 635 Marine Biology ACP 11-12 full year 4 periods 5 credits Requirement: Having completed the NPS physical science and biological science graduation requirements or permission of the department head.

This course is a unique opportunity to integrate knowledge acquired from the three core science courses and apply it to the last frontier of exploration – the oceans. The course will emphasize marine biology and ecology, with investigation of the chemistry of seawater and the physics of oceans currents, waves and tides as they influence the distribution and adaptations of marine life. Additional background topics include plate tectonics, atmospheric structure and tides. Human impact on the marine environment will be examined through issues such as global warming, pollution, and the fishing industry. Hands on investigations and field trips will help to reinforce and illustrate key concepts covered in the course.

# 636 Engineering Technology ACP 9-10-11-12 full year 4 periods 5 credits Students will learn important technological and engineering related skills and concepts. These concepts cover Engineering Design, Construction Technologies, Communication Technologies, and Energy and Power Technologies (Fluid, Thermal and Electrical systems). Students will be designing, building and testing prototype models that cover these concepts. Students will learn product design, accurate measurement using a variety of instruments and technologies, application of algebra to engineering problems, and application of physics concepts to the real world. This course is aligned with the MA State Frameworks and will allow students to choose to take the MCAS test for Technology / Engineering if they wish. Successful completion will meet the physical science graduation requirement.

### 637 Forensics

 ACP
 11-12
 full year
 4 periods
 5 credits

 Requirement: Having completed the NPS physical science and biological science graduation requirements or permission of the department head.
 5
 6

Forensics is an integrated science course offering students an opportunity to apply core concepts from their high school physics, chemistry and biology courses in a variety of areas that fall within the arena of Forensic Science. The course will consist of lectures, case studies, labs and individual research projects in the areas of crime scene processing, trace evidence, blood chemistry and spatter patterns, fingerprints, toolmarks, forensic DNA technology, questioned documents, psychological profiling and forensic anthropology.

638	<b>Organic Chemistry</b> A few simple building blocks (namely, atoms of gasoline to aspirin to DNA. The interactions betwee they do the interesting things they do? How can we this course, students will practice their problem-sol organic molecules and reactions in all their glory. W the memorization for later. Organic chemistry has de is designed to break that roadblock down. Students their college organic chemistry courses.	en organic mole e convert one or lving and spatia Ve will focus on eveloped a repu	ecules give rise to li ganic compound in al reasoning skills v fundamental ideas tation as a roadbloc	fe itself. How a to another with vhile they deve with broad app k for students as	re these molecule completely diffe lop a framework plication and leav spiring to health o	es related? Why do erent properties? In a for understanding we the minutiae and careers. This course
668	<b>Classroom Aide in Science</b> Registration for this course occurs in the fall. Stude be considered as a candidate for the position of science science classroom aide and the supervising teacher w and that are educational for the student. The program levels. For many students the experience is similar to if they have a proposal for advanced work approved	e classroom aid will work togeth n is open to resp o a job shadow o	lete the application / e. Selected students ner closely on tasks oonsible upperclassi or internship. Stude	registration pro will be paired w that are helpful nen who have ta nts are graded A	ith a supervising to the teacher (ar aken science class A/P/F. Students	department head to science teacher. The nd/or her students) ses at all curriculum may only earn an A
959	<b>Engineering 1</b> Pre-requisite: Students must have passed or curree This course is designed to expose students to sor about Electrical Engineering and other forms of Pow be able to calculate resistance, voltage and current u test circuits that contain resistors, capacitors, diodes, test equipment such as multi-meters and oscilloscop This course, along with "Engineering 2," is ideal for	ne of the many ver Technology. sing Ohm's law transistors, and bes. Residential	forms of engineeri The students will and Kirchhoff's cu small integrated ci wiring techniques	ng. In this class design and dev rrent and voltag rcuits. The stud will also be cove	s the students wi elop working ele ge laws. The stuc ents will use and ered.	ill learn extensively ectronic circuits and lents will build and
960	Engineering 2 Pre-requisite: Students must have passed or curre This course is designed to expose students to some Structural engineering concepts in some depth. In th loads and the mechanical behavior of materials. Stu In the Structural Engineering portion of this class th will learn about the various techniques of engineerin of materials the students will be able to build and ter	of the many for he Mechanical E idents will learr he students will hg roof trusses, a	ms of engineering. ngineering portion n to use CAD softwa l learn about the ma and floor beams to l	In this class the s of this class the s are to design pa any processes o be able to carry o	students will expl students will lear rts and create me f design construc dead and live loa	lore Mechanical and n about mechanical echanical drawings. ction. The students ds. Using a variety
961	<b>Engineering 3</b> Pre-Requisite- Students must have successfully comengineering methods and skills involved in the proknowledge of Physics, Chemistry, Electrical, Mecha They will be working as members of cooperating erfactured. The students will learn engineering design safe handling of production equipment. i.e.: lather this class will also focus on the methods of project methods.	duction of cons nical and Manu ngineering team n techniques su nill, CNC equip nanagement.	umer grade goods. afacturing Engineer as to design, enginee ch as the Axiomatic oment, robotics, vac	The students w ing to design va er, and produce Design Process uum forming, ir	rill build upon an urious projects thi products that can , methods of mas njection molding.	nd increase their roughout the year. n be mass manu- ss production, and . A large portion of
	Plazes cas pages 25-2	7 for ad	ditional to	chnology	vlonaina	oring

### Please see pages 25-27 for additional technology/engineering and greengineering course offerings.

### ADVANCED PLACEMENT COURSES

Intellectual maturity and excellent performance in science and mathematics are general requirements for students selecting courses labeled advanced placement. The content and rigor are comparable in level to an introductory college course in the sciences. Summer school courses may not be used to serve as the pre-requisite for AP courses.

### 605 Advanced Placement Biology H 12 full year 4 periods 5 credits

Requirements: a full year (not a summer) course in biology with at least a B average in Biology H or Biology ACP AND science teacher recommendation OR permission of the department head.

The AP Biology curriculum, as described by the College Board, imitates a first year college biology course. Course topics include biochemistry, cell structure, genetics, evolution, human systems, botany, and ecology. Instruction includes a rigorous laboratory program. Laboratory experiments are followed by a detailed written lab paper in which students are evaluated for their technical writing, data display and numeric analysis, as well as application of scientific principles. Enrollment in this advanced program of study is open to seniors who have completed Biology H or Biology ACP.

Instruction in AP Biology presumes students' mastery of foundational topics in physics and chemistry. Students who require review or enrichment in these areas will be directed to meet with the instructor outside of class time. Successful AP biology students are independent learners who demonstrate skillful reading comprehension, skillful writing, and skillful application of mathematics, as well as motivation to complete extensive work outside of class time.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### 606 Advanced Placement Chemistry

istry H 11-12 full year 4 periods 5 credits

Requirement: a full year (not a summer) course in chemistry with at least a B average in Chemistry ACP, H AND science teacher recommendation OR permission of the department head.

This course explores the chemical world around us in great detail, delving into topics ranging from molecular structure to acid-base equilibrium, from atomic orbitals to reaction kinetics. To be successful in this course, you should be strongly motivated by interest in the subject matter. You will stretch your problem-solving skills while completing weekly problem sets. You will expand your collaborative skills while working with your classmates. You will develop your analytical and writing skills while making sense of your results after each experiment. This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### 607 Advanced Placement PhysicsH11-12full year4 periods5 credits

Requirement: Recommendation of current science teacher and concurrent enrollment in Math 504 or 508 AP Physics C: Mechanics is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own exam registration fees.

### **OTHER OFFERINGS**

**672** Introductory Physics Concepts and Skills no level 10-11-12 S 4 periods 2.5 credits This course prepares students to take the Introductory Physics MCAS (offered in June each year) in order to fulfill the STE portion of their MCAS competency requirement for graduation. Most students enrolled in this class will have already taken an Introductory Physics course at NNHS in their freshman year. Students will be recommended to this class by the department head.

- **673 Introductory Physics Portfolio Development no level 10-11-12 F or S 2 periods 1.25 credits** This course supports students as they develop an Introductory Physics portfolio to submit to the state as an alternative to the Introductory Physics MCAS written exam. Most students enrolled in this class will have already taken an Introductory Physics course at NNHS in their freshman year. Students will be recommended to this class by the department head.
- 662 Biology Concepts and Skills no level 11-12 F 4 periods 2.5 credits This course prepares students to take the Biology MCAS in order to fulfill the STE portion of their MCAS competency requirement for graduation. Students enrolled in this class will have already completed a Biology course. The course will include a focused preparation for the February Biology MCAS test and if necessary for the June Biology MCAS test. Students will be recommended to this class by the department head.

### **COMPUTER SCIENCE**

### JOINTLY OFFERED BY THE MATH AND SCIENCE DEPARTMENTS

For students planning to take all of our Computer Science courses, the most logical sequence would be Introduction to Computer Science, followed by Computer Programming, and then Computer Science Principles. However, students can take any combination of the courses, in any order, provided they meet the prerequisites.

 549
 Introduction to Computer Science
 ACP
 9-10-11-12
 full year
 2 periods
 2.5 credits

 In this 2x/week course, students will be introduced to such topics as data analysis, graphic design, robotics, computer programming, and HTML. Intro to Computer Science enables students to dip their toes into principles of computer science and prepares them to take more advanced courses in the future. No previous programming experience is needed. Prerequisite: none
 Previous programming experience is needed.

 551
 Computer Programming
 H
 10-11-12
 full year
 2 periods
 2.5 credits

 The Computer Programming elective offers students at all levels an introduction to coding. Students begin with a block-based program, and then move on to Python, the language used to drive websites ranging from Google to NASA to Instagram. At the Honors level, students will tackle more challenging problems requiring a stronger mathematics background.

Prerequisite: recommendation from current math or computer science teacher, priority will be given to juniors and seniors

**552 Computer Programming ACP 10-11-12 full year 2 periods 2.5 credits** The Computer Programming elective offers students at **all** levels an introduction to coding. Students begin with a block-based program, and then move on to Python, the language used to drive websites ranging from Google to NASA to Instagram. At the ACP level, students will work at the pace appropriate for their level of experience, whether they are new to coding or have been writing computer programs for years. *Prerequisite: recommendation from current math or computer science teacher, priority will be given to juniors and seniors* 

### 553 Computer Science Principles H 11-12 full year 4 periods 5 credits

The newest Computer Science offering is a project-based course that provides students with a comprehensive overview of contemporary computing topics, ranging from the basic functioning and parts of a computer to concepts in cyber-security to the fundamentals of programming. Students will utilize both MIT's App Inventor programming environment and the C programming language to create applications. The course is adapted from the Computer Science Principles curricula of Harvard's CS50 course and the Mobile Computer Science Principles course of the College of St. Scholastica and Trinity College.

Prerequisite: concurrently taking 503, 504, 505, 508, 513, 514, 518, 519, 583 or 584 and recommendation from current math teacher or computer science teacher

# SPECIAL EDUCATION COURSES AND PROGRAMS

In order for students to be enrolled in these courses and/or programs, they must have an Individualized Education Program (IEP), which calls for the particular course(s) or program(s). Entry into or exit from Special Education courses or programs is a Team decision. Team-taught classes are offered in English, History, Science, and Math. These classes are co-taught by a special education and a regular education teacher. The IEP Team will determine enrollment in these classes.

	COURSES								
102	English	СР	9	full year	4 periods	5 credits			
<b>114</b> ·	+ 198 English	СР	10	full year	6 periods	7.5 credits			
126	English	СР	11	full year	4 periods	5 credits			
128	English	СР	12	full year	4 periods	5 credits			
	These courses emphasize and reinforce basic skills that can prepare students for mainstream English courses. Assignments and reading selections are modified to help students broaden their vocabulary and improve their critical reading and writing skills. Texts may also be modified based on individual needs. Because of the MCAS examination, the sophomore English class meets for two extra periods each week. Students must use both numbers (114 and 198) to register for this course. The 2.5 credits from 198 English do not count toward the English graduation requirement.								
415	World History I, 300-1787	СР	9	full year	4 periods	5 credits			
	This course is part of a two-year world history seq teacher will emphasize reading skills, writing skills, s				ough the Age of	f Revolutions. The			
425	World History II, 1787-present	СР	10	full year	4 periods	5 credits			
	This course is part of a two-year world history seque World War I, World War II, and the Cold War. The teach				ie present, focusi				
435	American History	СР	11-12	full year	4 periods	5 credits			
	This course fulfills the United States History requ				t trends in Ame	rican History. The			
	teacher will emphasize reading skills, writing skills, study skills, and critical thinking skills.								
571	Mathematics 9	СР	9	full year	4 periods	5 credits			
572	Mathematics 10	СР	10	full year	4 periods	5 credits			
573	Mathematics 11	СР	11	full year	4 periods	5 credits			
574	Mathematics 12	СР	12	full year	4 periods	5 credits			
	These courses are taught in conjunction with secti special education teacher who makes necessary more within the context of pre-algebra, algebra, and geome	difications for e							
	S	upport S	bervices						
029	Physical Education	no level	9-10-11-12	F and S	as needed	1 credit			
	This adaptive physical education course provides an		l program to meet	a student's diagr	nosed needs. Ent	rance to this course			
	is determined by related evaluations and a Team deci	Is10n.							
115	<b>Reading Support</b> This course provides reading instruction to addres decision. Students are provided support in the areas styles, a variety of instructional strategies are used. Q	of decoding, v	ocabulary, and rea	nding compreher	by related evalu				
302	<b>Vision Strategies</b> This vision therapy service provides an individual mined by related evaluations and a Team decision.	<b>no level</b> lized program to	<b>9-10-11-12</b> o meet a student's	<b>full year</b> s diagnosed need	<b>1 period</b> ds. Entrance to t	<b>1.25credits</b> his course is deter-			
303	<b>Orientation Strategies</b> This orientation & mobility service provides an inc determined by related evaluations and a Team decision	-	<b>9-10-11-12</b> ogram to meet a st	<b>full year</b> udent's diagnose	1	<b>1.25 credits</b> acce to this course is			
321	Support & Strategies	no level	9-10-11-12	full year	4 period	5 credits			
	This course is for students who are included in ger work on developing strategies to improve academic, priate materials. This support service provides an ind multiple blocks of this course by Team decision.	neral education study, & organi	classes but contir zational skills usi	ue to need supp ng assignments f	oort with class w from their classe	ork. Students will s and other appro-			

62

62						
322	<b>Individualized Support</b> This course is for students whose educational plar This support service provides an individualized progr of this course by Team decision.		cialized instructior	n for academics		
324	Social Pragmatics Groups	no level	9-10-11-12	full year	1 period	1.25 credits
326	<b>Communication and Organizational Strategies</b>	no level	9-10-11-12	full year	1 period	1.25 credits
327	<b>Communication and Organizational Strategies</b> Entrance to these courses is based on the individua decision. Students with difficulties in the areas of pra or organization develop compensatory strategies and	al student's ne igmatics, recep	otive or expressive	J 1	0 0	
328	<b>Occupational Strategies</b> This occupational therapy service provides an indi determined by related evaluations and a Team decisio		<b>9-10-11-12</b> ogram to meet a st	<b>full year</b> audent's diagno	<b>1 period</b> sed needs. Entr	<b>1.25 credits</b> ance to this course is
329	<b>Physical Strategies</b> This physical therapy service provides an individua mined by related evaluations and a Team decision.	<b>no level</b> alized progran	<b>9-10-11-12</b> n to meet a student	<b>full year</b> I's diagnosed no	<b>1 period</b> eeds. Entrance t	<b>1.25 credits</b> o this course is deter-
330	<b>Music Strategies</b> This music therapy service provides an individualize by related evaluations and a Team decision.	<b>no level</b> ed program to	<b>9-10-11-12</b> meet a student's di	<b>full year</b> agnosed needs.	<b>1 period</b> Entrance to this	<b>1.25 credits</b> course is determined

### **COMMUNITY LIVING**

- 4 periods 859 Community Living: Mathematics no level 9-10-11-12 full year 5 credits This course emphasizes the importance of Math in our daily lives. Students review previously learned Math concepts, learn new concepts, and apply them to daily living skills. An emphasis is placed on strengthening student's number sense, calculation skills, and problem solving. Entrance to this course is based on the student's needs and a Team decision
- 305 Community Living: English 9-10-11-12 no level full year 4 periods 5 credits The Community Living English course emphases reading and writing skills that students can apply to their daily lives, with an overarching theme throughout the year on developing self-advocacy skills. Entrance to this course is based on individual needs, as determined by related evaluations and a Team decision.
- 679 Community Living: Physics no level 9-10-11-12 full year 2 periods 2.5 credits The Community Living Physics course emphasizes fundamental physics concepts such as forces, momentum, and energy. Students expand their fund of science knowledge with an overall emphasis on developing critical thinking skills. Entrance to this course is based on the student's needs and a Team decision.
- 349 Exploring Healthy Relationships no level 9-10-11-12 full year 1 period 1 credit This course addresses health and sexuality topics, as well as pragmatics skills that are necessary for students to develop healthy relationships with others. Entrance to this course is based on the individual student's needs, as determined by related evaluations and a Team decision.

### PROGRAMS

The following Special Education Programs are designed to meet the educational needs of students who require a more structured, closely monitored program with a high degree of staff/student involvement.

# **Pilot Program**

053	Pilot Group	no level	9-10-11-12	full year	1 period	.5 credits
054	Pilot Men's Group	no level	9-10-11-12	full year	1 period	1.25 credits
055	Pilot Women's Group	no level	9-10-11-12	full year	1 period	1.25 credits
060	Pilot Academic Study	no level	9-10-11-12	full year	2 periods	2.5 credits
062	Math Review	no level	9-10-11-12	full year	2 periods	2.5 credits
063	Math 1	СР	9-10-11-12	full year	5 periods	5 credits
064	Math 2	СР	9-10-11-12	full year	5 periods	5 credits
065	Math 3	СР	9-10-11-12	full year	5 periods	5 credits
066	Math 4	СР	9-10-11-12	full year	5 periods	5 credits
067	Introductory Physics	СР	9-10-11-12	full year	5 periods	5 credits
068	Biology	СР	9-10-11-12	full year	5 periods	5 credits
070	Study	no level	9-10-11-12	full year	5 periods	
071	Occupational Skills	no level	9-10-11-12	full year	1 period	1.25 credits
073	Physical Education	no level	9-10-11-12	full year	2 periods	2 credits
075	Humanities	СР	10-11-12	full year	5 periods	5 credits
076	Elective: Art/Fitness	no level	9-10-11-12	full year	2 periods	2.5 credits
079	English Review	no level	9-10-11-12	full year	2 period	2.5 credits
116	English 1	СР	9-10	full year	5 periods	5 credits
117	English 2	СР	10-11	full year	5 periods	5 credits
118	English 3	СР	11-12	full year	5 periods	5 credits
119	English 4	СР	11-12	full year	5 periods	5 credits
057	World History I, 300-1815	СР	9-10	full year	5 periods	5 credits
058	World History II, 1815-present	СР	10-11-12	full year	5 periods	5 credits
059	U.S. History	СР	11-12	full year	5 periods	5 credit
056	Work Study	no level	9-10-11-12	full year	10 periods	5 credits
771	Individual Meeting	no level	9-10-11-12	full year	1 period	1 credit

### **Links Courses**

197	English	СР	11-12	full year	4 periods	5 credits
388	History Module	no level	11-12	full year	4 periods	5 credits
496	US History	СР	11-12	full year	4 periods	5 credits
600	Biology	СР	11-12	full year	4 periods	5 credits
390	Science Module	no level	11-12	full year	4 periods	5 credits
338	Community Meeting	no level	11-12	full year	1 period	1 credit
993	Work Study	no level	11-12	full year	varying	5 credits
994	Possible Selves	no level	11-12	half year	1 period	0.5 credit
387	English Module	no level	11-12	full year	4 periods	5 credits
596	Math	СР	11-12	full year	4 periods	5 credits
389	Math Module	no level	11-12	full year	4 periods	5 credits
339	Academic Study	no level	11-12	full year	2 periods	2.5 credits
027	Physical Education	no level	11-12	half year	2 periods	1 credit
028	Physical Education	no level	11-12	half year	2 periods	1 credit
337	Choices	no level	11-12	full year	1 period	1 credit
340	Individual Meeting	no level	11-12	full year	1 period	1 credit
341	Junior/Senior Group	no level	11-12	full year	1 period	1 credit
343	Men's/Women's Group	no level	11-12	full year	1 period	1 credit

# THEATRE

Theatre is simply what cannot be expressed by any other means; a complexity of words, movements,

gestures that convey a vision of the world inexpressible in any other way.

- Eugene Ionesco

Theatre Arts courses and involvement in Theatre Ink, Newton North High School's Teaching and Working Theatre, are student-centered learning experiences that emphasize the process of artistic collaboration that instills a disciplined work ethic through the study and practice of theatre. By emphasizing ensemble building and individual development, we seek to prepare students to be lifelong learners, critical and creative thinkers, and problem solvers committed to open and honest communication. We believe that these are universal skills that can be applied productively to any chosen endeavor. We want students to leave our classes and program well prepared to navigate their way toward success in a challenging, complex, and exciting world. The courses and program offerings are for all students regardless of their future interests in or outside the world of theatre. Theatre is the study and practice of the human experience that transcends to all areas.

Theatre Ink offers a wide variety of opportunities for students to have a complete hands-on learning experience in all aspects of theatre arts, both on and off stage. We strongly encourage students to participate in all areas of production and reap the lifelong benefits that the program has to offer. The best way to get involved is to take a theatre course and make connections with your theatre teacher and fellow peers. From there you will have direct access and be connected to the rest of the program. All Students are highly encouraged to get involved by auditioning or signing up to work on one of our 12-13 productions each year. The program offers hands on training in technical direction, set design, light design, sound design, student directing, acting, stage crew, stage management, props, costumes, make-up, publicity, dramaturgy, student producing, improvisation, playwriting, house management, musical orchestra, musical theatre, project management, arts management, marketing and more. Being involved automatically connects you to a community of people who like to work together and develop skills through producing theatre. "You don't have to be in a show to be in a show" and besides, it's fun! Get connected, be involved and enjoy the experience of meeting new people who love working in the theatre. For more information go to our website at Theatreink net and join us for our Open House in September and find out how you can be a part of Newton North's Teaching and Working Theatre. Whether you are an incoming freshman or a senior, it is never too late or too early to be involved!

Students enrolled in Theatre classes have the opportunity to participate in the Fine & Performing Arts Department Exchange Program with Haileybury College, Melbourne, Australia. See the department website for more details on this opportunity.

820 Theatre Arts 1

no level 4 periods 2.5 credits Theatre Arts I is an introductory course that could change your life. Theatre is about the human experience and will give you the opportunity to develop skills in communication, creativity, critical thinking and build self-confidence through the explorations of improvisation, monologue and scene study work while being a part of an ensemble of learning. The class will create a fun and safe place to learn and perform through trust and teambuilding activities and develop a sense of self-awareness while building confidence. Theatre Arts I is also a fun and immersive exploration of the craft of acting, as it applies to everything from public speaking, telling a good joke, to putting on a full-scale production. All students, from beginners to experienced actors, use theatre games, exercises, theatre history, improvisation and the study of monologues and scenes to build fundamental performance skills and to access the emotional core from which they will draw inspiration for in-class performances. The skills learned in this class will translate to all other areas of a student's life both personally and academically. Students will learn through the development of trust, communication, presentation and group cooperation skills, in a fully inclusive environment that is safe, fun and engaging. Students will also learn how to make bold artistic choices while taking risks outside of their comfort zone. All you need to take this course is a little bit of interest, an open mind and the willingness to try new and exciting activities. Theatre I also provides direct access to participating in Theatre Ink, Newton North High School's teaching and working theatre that produces 12-13 productions each year. Take theatre I and make new friends while gaining skills that will prepare you for anything!

9-10-11-12

F or S

2.5 credits

### 821 Theatre Arts 2 no level 10-11-12 S 4 periods

Prerequisite: Theatre Arts 1 or the approval of the teacher.

Theatre Arts II takes the experiences from Theatre Arts I to the next level, incorporating directing, organizational, and advanced acting skills into students' repertoire. Students explore the creation and development of characters through monologue and scene work, while continuing their work on acting fundamentals started in Theatre Arts I. There is also a greater focus on fine-tuning voice, body and movement and how it makes the actor more complete on and off stage. Students will also explore different methods of craft such as those from Sanford Meisner, Constantin Stanislavski and others. This class culminates with a final project that incorporates all of the skills the students have been working on into a final performance, directed, designed, and performed by the class. This class is for intermediate to advanced students who may decide to pursue their study of theatre at Newton North and beyond. It is also for all students who want to gain these universal skills for future success in any endeavor of their choice. If you liked Theatre I then Theatre II will take you to a higher level!

829	Introduction to Technical Theatre	no level	9-10-11-12	full year	2 blocks	2.5 credits	
822		no level	9-10-11-12	F or S	2 blocks	1.25 credits	
	Power tools anyone? Introduction to Technical the	heatre is a fun ha	nds on experience	in the behind th	ne scenes techno	ology of theatre. The	
-9	course will cover the basics of shop safety and tool usage while exploring set, light and sound design. Students will apply course knowl-						
	edge, by building sets, hanging, focusing and cablin	ng lights and lear	rn how to set-up a	nd run sound fo	r current produ	ctions. Students will	
	also have the opportunity to learn about design and	l participate in T	heatre Ink. Studen	ts who take this	class will also l	nave the opportunity	
	to design for Theatre Ink productions if they participate in Stage Techniques which is offered after school. Don't miss this opportunity to						
	work with state of the art equipment in our theatres	s while being a p	art of every produ	ction! Students	have the optior	to sign up for either	
	the full year course or for a semester.						

837 I	Introduction to Costume Design	no level	9-10-11-12	full year	2 blocks	2.5 credits
836		no level	9-10-11-12	F or S	2 blocks	1.25 credits
	This introductory costume course focuses on de	eveloping and com	bining the ideas o	of character and	clothing in con	nection to the text of

cuses on developing and combining the ideas of character and clothing in c each play (and musical) performed at Theater Ink. We will review the basics of costume design and implementation by using fabric, texture, shape and color to support and inform the storytelling process for the audience. Students will learn how to work and develop a process in how to make the director's vision come-to-life through a collaborative process. Our costume design course provides students with the opportunity to explore and expand their artistic and visual expression while providing practical experience in costume management, design and maintenance. The course allows students to visualize the world of theatre using fabric and clothing while working closely with directors, stage managers and technicians. Although previous sewing experience is not necessary, a desire to learn basic sewing and crafting is essential. This course will provide numerous opportunities for students to work on the design teams of individual shows. Students will also have the opportunity to design their own shows by joining the Stage Techniques Class after school.

### 8382 American Musical Theatre

### 9 -10-11-12 F or S no level 2 periods 1.25 credits

In this class we will trace the history of this American art form from its origins in vaudeville and operetta through the twentieth century to the present. We will listen to the music of great composers of Broadway and Hollywood, including Cole Porter, Richard Rodgers, Leonard Bernstein and Stephen Sondheim, and see how the genre evolves from skits with interchangeable songs to tightly knit theater pieces, where the music propels the drama and develops the characters. We will look at how Broadway has remained current by incorporating contemporary trends in popular music, from the jazz of Anything Goes and West Side Story to the rock of Hair and Rent and the hip-hop of In the Heights and Hamilton.

### 823 Stage Techniques

9-10-11-12 full year 4 periods no level 5 credits Stage Techniques is a course that covers a wide variety of back stage jobs in Theatre Ink. Taking this class is open to member of the Stage Crew, stage managers, costume coordinators, props coordinators, and producers. Students will learn technical theatre organization, design and implementation. Students will be a member of a team working on lighting, sound, set design, and the theatrical production process. For each production in the Performing Arts Center and Little Theater, the Stage Crew is responsible for designing, constructing, and striking the set, lights, sound and making sure the theatre space is clean after every production. Students will learn costuming, basic carpentry, electrical, sound, lighting, drafting, and construction techniques. This course may meet every day after school depending on each student's schedule. Each student has the opportunity to create their schedule in conjunction with the needs of the program. The Theatre Director and Technical Director will supervise this course.

### 824 Stage Production Work Study no level 11-12 full year 10 periods/wk 5 credits

Prerequisite: Stage Techniques

Students who work on the Stage Crew master many specialized technical skills such as set design and construction, stage lighting and special effects, as well as how to set up and run sound, lights and projection equipment. They learn scheduling, organization, project management and problem solving as well as provide microphones, lights, and other equipment, and appropriate furnishings for a wide variety of productions, programs, speakers, meetings, and special events. Equally important, they serve as student leaders and role models as they learn to take responsibility for the security, care, maintenance, and correct use of equipment and theatre facilities. These particular students will serve as student leaders for the Stage Crew. They will help teach, guide and support less experienced students in developing knowledge and practical skill in the area of technical theatre. They will also serve as role models that support a positive and collaborative program. Students must be currently enrolled in and passing a related course from one of the following departments: Fine and Performing Arts, Business Technology and Education, Career and Technology Education, Family and Consumer Sciences. This course also includes stage managers, costume coordinators, props coordinators, and producers. The Theatre Director and Technical Director will supervise this course. This course meets every day depending on the student's schedule after school. See Work-Study Coordinator for paper work.

### 825 Introduction to Directing/Practicum no level S H Block 11 1 credit

Junior students have the opportunity to apply to direct a full-length play in their senior year. Introduction to Directing requires students to read and research a number of plays and write up a thesis style proposal to direct, based on the play of their choice. Students will be required to submit a written research thesis/application, participate in two interviews and make an oral presentation as well as direct a piece from their proposal for a panel of staff and student directors. The process runs from late January through May of the academic year. Students not selected to direct will receive 1 credit and be offered opportunities to student direct one acts or assistant direct with a faculty member in the upcoming season.

### 826 Advanced Theatrical Directing/Practicum no level 11-12 full year H Block 2.5 credits

Prerequisite: Students in this course must have taken Introduction to Directing and been selected to direct a full-length play as part of the Theatre Ink student director application process. They have the full resources of our theatre department to produce the play they selected within the production season. The course continues through the production dates of their play and the time needed to fulfill the writing requirements. The 1 credit for Introduction to Directing is incorporated into the 2.5 credits for this course, and these credits cannot be used to meet the graduation requirement in English.

Advanced Directing is a "hands on" course where student directors participate in intensive classes in June that cover basic principles of directing, production management, organization, audition processes and teambuilding. Over the summer students will complete reading and writing assignments from The Play Director's Survival Kit and Theatre: Art in Action textbooks. They will also complete assigned readings from various books on directing. They are also required to see two theatrical productions and write about these experiences in their journal. In September the student directors participate in two more intensive classes that prepare them for the directing experience. They develop audition packets, hire production staff members and put together a production calendar for their play process. Student directors run an 8-10 week rehearsal process that includes meeting daily with cast and crew during the school week from 3:00 to 6:30 p.m. The final product is the performance of the play for the Newton community. Students keep an extensive journal on their planning and their directing process. Directing students will complete a final written project / portfolio of their work and submit it before the end of the production season.

### 827 Teaching Assistant

Students will also have the opportunity to explore theatre through Independent Study and by serving as a Teacher's assistant for any theatre arts class. See your guidance counselor, the Theatre Director or Technical Director for details.

### 828 Independent Study Theatre Design

- **Theatre Classroom Aide** 829
- 830 **Theatre Arts Work Study**

# WORLD LANGUAGE

The World Language Department offers full sequential programs in Chinese, French, Italian, Latin and Spanish. We strongly recommend that students consider their high school study of languages as part of a long-term commitment to becoming proficient in at least one world language other than English.

**Proficiency**: Many colleges define their graduation requirements in world language in terms of proficiency. Colleges measure proficiency in a number of ways, ranging from a set achievement test score to the equivalent of four semesters of college-level language training (four years of high school). At Newton North, we measure proficiency according to the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, which ranges from Novice to Distinguished. The proficiency target for a student who completes four years of high school study at the ACP level in addition to the middle school program is Intermediate High.

The two-year college entrance requirement: To fulfill this requirement, students should continue their language study through sophomore year regardless of whether they began in grade 6 or grade 9. Students should also be aware that many colleges require three years of study of the same language at the high school level.

A second language: If a student wishes to study two world languages, the study of that second language can begin at any time. Students find that knowledge of their first language facilitates and accelerates the learning of the second. In fact, juniors and seniors who have successfully completed their third year of French, Spanish, or Italian, and who wish to begin a second Romance language, are allowed to study the first year on an independent basis during the summer and begin their formal study of that language in level 2. This arrangement requires the approval of the World Language Department Chair.

Honors Sequence: The honors/Advanced Placement sequence is designed for extremely motivated, independent learners who desire a highly challenging course of study in World Language. Advanced Placement courses are approved by the College Board, and hold demands and expectations equivalent to those of a university course.

French, Italian and Spanish: The honors sequence in the Romance languages begins in the third year of the language (typically sophomore year for students who have studied language in middle school). Admission to the program is through teacher recommendation. Guidelines for honors placement can be found on the WL Department website.

Chinese: Students who successfully complete the first two years of Chinese are eligible to continue their study at the honors level in Chinese 3 and beyond. Admission to the honors program is through teacher recommendation.

Latin: Students who successfully complete Latin 3 are eligible to continue their study at the honors level beginning in Latin 4.

### FRENCH ADVANCED COLLEGE PREP SEQUENCE

211 French 1 ACP 9-10-11-12 full year 4 periods 5 credits This course is designed for those students who have not studied foreign language or who want to begin the study of a second language. Students will develop the fundamentals of the four linguistic skills of listening, speaking, reading, and writing. They will also be introduced to the geography as well as explore the Francophone world.

### 212 French 2 ACP 9-10-11-12 full year 4 periods 5 credits

Prerequisite: French 211 or Middle School French In this course, students will explore every day themes such as meals and shopping, house and home, weekend hobbies and entertainment, sports and health, clothing and fashion, and travel and vacation. Students will also engage in cultural comparisons as they explore the city of Paris. Conducted primarily in French, this course will provide students with an immersion environment. Opportunities for conversation, discussion and the creation of skits will strengthen students' speaking skills. Students will also broaden their interpretive skills and reinforce cultural knowledge through the reading of short texts, while guided compositions will help students develop skills of coherent written expression in French.

213 French 3 ACP 10-11-12 4 periods full year 5 credits In this intermediate French course, students will continue to develop the four linguistic skills through a thematic approach. Listening comprehension will improve through the classroom's immersion atmosphere and through exposure to Francophone music and film, and speaking skills will be strengthened through frequent opportunities for guided conversation and oral exposés. By reading articles and short stories, students will expand reading comprehension; writing skills will be further developed as well.

214 French 4 ACP 11-12 full year 4 periods 5 credits In French 4, students will continue to advance their proficiency by building their vocabulary and refining their communicative skills within the contexts of universally compelling issues. Through literature, music, art, and film as well as other culturally relevant resources, students will explore the beliefs and relationships that define the experience of living within a French-speaking culture. Students will read fiction and poetry, write essays, create skits, and work on oral communication, all of which will help them improve their linguistic skills and reflect on their own culture as they expand their knowledge of the French-speaking world.

215 French 5 ACP 12 full year 4 periods 5 credits In this culminating senior course, students will immerse themselves in the Francophone culture & the French language through a multimedia study of topics drawn from French artistic traditions, history, geography, food and institutions. We will use film as a primary resource to explore various aspects of life in contemporary France and Europe. Students are encouraged to bring their passion for French language and culture as they advance their linguistic proficiency and expand and deepen their global awareness. The course is taught entirely in French, and students will be expected to participate actively as they delve more deeply into cultural practices and perspectives.



### **COLLEGE PREP SEQUENCE**



ench 1 CP 9-10-11-12 full year 4 periods 5 credits This course is designed for those students who have not studied foreign language. Students will develop the fundamentals of the four linguistic skills of listening, speaking, reading, and writing. They will also be introduced to the geography as well as various cultural aspects of the Francophone world.

222 French 2	СР	9-10-11-12	full year	4 periods	5 credits
223 French 3	СР	10-11-12	full year	4 periods	5 credits

Prerequisite: French 221 or Middle School French

In this course, students will build on their foundation in French through the acquisition of new vocabulary, and oral and written practice of language structures. A particular emphasis on oral communication skills will enable students to better express themselves in everyday situations while building their confidence in speaking the language. Students will also continue to amplify their knowledge of Francophone cultures.

224 French 4	СР	11-12	full year	4 periods	5 credits
225 French 5	СР	12	full year	4 periods	5 credits

This course, with alternating year curricula, utilizes a communicative approach to encourage the advancement of students' listening, speaking and reading skills in French. Through the medium of film and short texts, students will broaden their receptive and communicative skills in the language. At the same time, students will relate themes to the broader, universal culture of humankind and make connections to their own lives. This course may be taken one year only for French 4 credit, *or* in two consecutive years for French 4 and French 5 credit respectively. Students who register for this course should indicate French 224 or 225.

### HONORS SEQUENCE

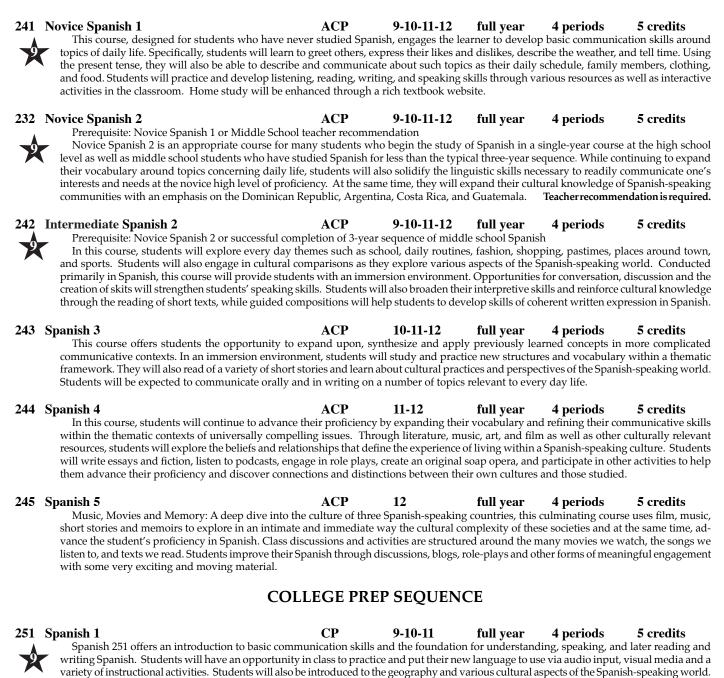
### 203 French 3 Η 10-11-12 full year 4 periods 5 credits Prerequisite: French 212 and teacher recommendation This course provides a fast-paced, rigorous curriculum for highly motivated students who want a challenging course of study. Vocabulary building through reading, and a comprehensive study of grammar structures to advance oral and written communication are hallmarks of this entry course in the honors sequence. Reading selections in the original language will provide students with an opportunity to study full-length novels such as Camus' L'Étranger and Schmitt's Oscar de la dame rose as well as plays such as Sartre's Les Jeux Sont Faits. Students will be encouraged to discuss their ideas and opinions relative to the reading and will also learn to express themselves in more complex ways through written composition. 204 French 4 Η 11-12 full year 4 periods 5 credits Prerequisite: French 203

In this course, students will explore in depth various universal themes such as personal relationships, differences between generations, nature and the environment, and media and technology. Students will read and analyze several texts in their original form from various time periods in French and Francophone literature. Using a variety of authentic and culturally relevant materials such as on-line news, short films, and documentaries, students will advance their linguistic skills through discussion and written analysis while simultaneously discovering the connections and distinctions between their own cultures and those of the French speaking world.

205 Advanced Placement French H 11-12 full year 4 periods 5 credits This advanced course is designed for students who want to pursue a rigorous and comprehensive program of study that emphasizes use of the French language as a tool for reading, discussing, and thinking critically about a variety of cultural topics, literary works, and current events. Students will work with a variety of authentic audio, video and print materials to advance their oral and written proficiency within the context of broad universal themes that will provide them opportunities for linguistic and cultural comparisons as well as interdisciplinary connections.

This course prepares students for the Advanced Placement Language & Culture examination given in May by the College Board. All students in the course are expected to register for and take the examination. Financial aid is available for students who cannot pay exam registration fees.

### SPANISH ADVANCED COLLEGE PREP SEQUENCE



### 252 Spanish 2

Prerequisite: Spanish 251 or Middle School Spanish Investigate the life-long secret of the aging don Fernando and watch the drama unfold as we travel from Spain to Latin America and back again. With the aide of the video series Destinos and Fernando's personal detective Raquel, students will work to improve reading, writing, listening and speaking skills. Each episode presents thematic vocabulary topics and related grammar, as well as visits to Spain, Mexico, Argentina, and Puerto Rico.

9-10-11-12

full year

4 periods

5 credits

СР

253 Spanish 3

anish 3CP10-11-12full year4 periods5 creditsIn this course, students will continue to develop and improve their listening, writing, reading and speaking skills in Spanish. They will also<br/>familiarize themselves with aspects of Mexican culture as they follow the adventures of two high school students who spend their summer<br/>in Querétaro. Vocabulary and grammar will be contextualized in the authentic setting of the episodic video series, La Catrina, where the<br/>actors are people who actually live in the lovely colonial city!

	Spanish 4 Spanish 5 This course, with alternating year curricula, utilizer reading and writing skills in Spanish. Through the use their knowledge of Spanish culture and literature. Stu make connections to their own lives. This course may 4 and Spanish 5 credit respectively. Students who reg	of film, short sto udents will like y be taken one y	ories and other aut wise relate themes year only for Span	hentic Spanish/ to the broader, ish 4 credit, or i	Hispanic texts, stu universal culture n two consecutive	dents will enhance of humankind and			
	HONORS SEQUENCE								
246	<b>Spanish 3</b> Prerequisite: Spanish 242 and teacher recommenda This course marks the beginning of the honors sequ desire a challenging course of study. Intensive vocab express meaning within a thematic context characteri an opportunity to broaden their knowledge of Hispar ions exclusively in Spanish, and guided to express the	ence. It provide pulary building ze this course. I nic literature and	and the study an Literary selections d culture. Students	d application of in the original l s will be encoura	advanced gramm anguage will pro- aged to discuss the	natical concepts to vide students with eir ideas and opin-			
247	<b>Spanish 4</b> Prerequisite: Spanish 246 In this course, students will read, analyze, discuss, a in the Golden Age to Lorca and the Generation of 192 develop their understanding of Spanish culture and I themes to be studied are the role of heroes, concepts construct of family. This course requires nightly readi	27. Through the history while re of beauty and <i>a</i>	use of on-line new fining their oral ar aesthetics, honor i	vspapers, film, a nd written expre n Spanish societ	and music, studer essions in the lang	ts will continue to guage. Among the			
248	248Advanced Placement SpanishH11-12full year4 periods5 creditsThis advanced course is designed for students who want to pursue a rigorous and comprehensive program of study that emphasizes use of the Spanish language as a tool for reading, discussing, and thinking critically about a variety of cultural topics, current events, and literary works by various authors from different Spanish-speaking countries. Students will work with a variety of authentic audio, video and print materials to advance their oral and written proficiency within the context of broad universal themes that will provide them opportunities for linguistic and cultural comparisons as well as interdisciplinary connections. This course prepares students for the Advanced Placement Language & Culture examination given in May by the College Board. All students in the course are expected to register for and take the examination. Financial aid is available for students who cannot pay exam registration fees.								
	ADVANCED	ITALI COLLEG		QUENCE					
271	<ul> <li>Italian 1 This course is designed for those students who have </li> <li>Students will develop basic communication skills arout the diverse themes of the text. They will also be intra-readings and songs.</li> </ul>	und topics of dai	ily life through a v	ariety of audio a	nd visual resource	es that complement			
272	Italian 2 Prerequisite: Italian 271 or Middle School Italian In this course, students will explore every day the health, travel and vacation. Students will also engage Italy. Conducted primarily in Italian, this course will discussion and the creation of skits will strengthen stu- broaden their interpretive skills and reinforce cultural students to develop skills of coherent written express	e in cultural con l provide stude udents' speakin l knowledge th	nparisons as they nts with an imme g skills with an en	explore the maj rsion environmo nphasis on corre	or cities and the c ent. Opportunities ect pronunciation.	lifferent regions of s for conversation, Students will also			
273	Italian 3 In Italian 3, students will continue on the road to complete immersion in the target language. Delving challenged to improve their linguistic proficiency by topics. They will also read short stories, stay on top of music videos, and expand their ability to write.	into exciting st interacting with	tories and films of n peers through w	adventure, ron eekly sessions ir	nance and myster n the language lab	y, students will be about a variety of			
274	<b>Italian 4</b> This course offers students the opportunity to adva Through the use of film, song, and literature, students their knowledge of Italian culture. Students will read and Dino Buzzati. To advance their proficiency in It regular visits to the language lab to engage in listenin	will expand the short stories fro alian, they will	ir vocabulary base om authors such as also make videos,	, their understar s Dacia Maraini, write short sto	nding of grammat Gianni Rodari, G	ical structures, and iovanni Boccaccio,			

70						
275	Italian 5 Buon viaggio! Take a deep dive into the many fac a selection of Italian literature, online articles, songs variety of historical and contemporary aspects of Ita dents to refine their oral and written communication	and advertise lian culture. I skills while e	ements. Students wi Frequent discussion xpanding their unde	ll discover, discu and a lively cla erstanding of the	iss, and make cor ssroom environm	nnections between a ent will enable stu-
	COLI	LEGE PR	EP SEQUEN	CE		
276	Italian 1 This course offers an introduction in Italian. Stude a variety of audio and visual resources that complemen- of study and practice. Students will also be introduce and songs.	ent the divers	e themes of the text.	The language la	boratory will be a	weekly component
277	Italian 2 Prerequisite: Italian 276 or Middle School Italian In this course, students will continue to develop b structured appropriately, the course will also engage experience.					
278	Italian 3 This intermediate course is designed for students ticular focus on oral communicative skills. Vocabular students to express themselves in everyday situation	ry enrichmen	t coupled with the s	tudy of languag	e concepts and st	ructures will enable
279	Italian 4	СР	11-12	full year	4 periods	5 credits
	<b>Italian 5</b> This course, with alternating year curricula, utiliz speaking and reading skills in Italian. Through the knowledge of Italian culture and literature. Students connections to their own lives. This course may be ta 5 credit respectively. Students who register for this c	<b>CP</b> zes a commu use of film, si s will likewise ken one year o	12 nicative approach to hort stories and othe e relate themes to th only for Italian 4 cred	<b>full year</b> o encourage the er authentic Ital: e broader, unive dit, <i>or</i> in two con	<b>4 periods</b> advancement of ian texts, students rsal culture of hu	<b>5 credits</b> students' listening, s will enhance their mankind and make
		HOI	NORS			
263	Italian 3 Prerequisite: 272 & teacher recommendation This course marks the beginning of the honors sequences a challenging course of study. Intensive voca express meaning within a thematic context character an opportunity to broaden their knowledge of Italian exclusively in Italian, and guided to express themsel	bulary buildi ize this cours literature and	ng and the study ar se. Literary selection d culture. Students v	nd application o is in the original vill be encourage	f advanced gram language will pro ed to discuss their	matical concepts to ovide students with ideas and opinions
264	<b>Italian 4</b> In this course, students will explore in depth vario generations, nature and the environment, and medi from various time periods in Italian literature. Using students will advance their linguistic skills through o distinctions between their own cultures and that of I	a and techno g a variety of a discussion and	logy. Students will a authentic and cultur	read and analyz ally relevant ma	e several texts in terials such as on	their original form line news and film,
265	Advanced Placement Italian This advanced course is designed for students who of the Italian language as a tool for reading, discussir events. During the year, students will experience the contemporary authors such as Ginsburg, Fallaci Calv materials to advance their oral and written proficien for linguistic and cultural comparisons as well as int <i>This course prepares students for the Advanced Placem</i> <i>course are expected to register for and take the examination</i>	ng, and thinki e great master ino, and Mara cy within the erdisciplinary tent Language	ng critically about a rs of Italian literature aini. Students will w context of broad ur connections. & Culture examination	variety of culture e including Bocco ork with a varien niversal themes on given in May b	ral topics, literary accio, Dante, Petr ty of authentic au that will provide <i>ny the College Board</i>	works, and current rarca, Leopardi, and dio, video and print them opportunities <i>d. All students in the</i>
		LA	TIN			
001	T / 1			e 11	4 • 1	<b>F</b> 1''

ACP 9-10-11-12 281 Latin 1 5 credits full year 4 periods 2812 Latin 1 СР 9-10-11-12 full year 4 periods 5 credits Designed for a range of students who have not yet studied a world language or who wish to start studying a second world language, students will begin to learn Latin vocabulary and the fundamentals of Latin grammar. With this base, students will also learn English derivatives from Latin words and more about English grammar. Emphasis will be placed on translating basic sentences from Latin to English and English to Latin. We will also devote our minds to studying the Romans and the Mediterranean world in which they lived. Topics will include history, culture, and mythology. Simultaneously, students will begin to develop close reading skills along with essential study and organizational strategies. This course can be taken at the College Prep or Advanced College Prep level.

r	Latin 2	ACI	9	Tun year	4 perious	5 creans	
	Prerequisite: Grades 7 & 8 middle school Latin	/high school Lat	in 1	-	_		
	<ul> <li>Designed for students who have successfully con</li> </ul>	mpleted Latin in	middle school or L	atin 1 at the high.	school level, this c	course will continue	
	to build on Latin vocabulary and grammar through	the study of mor	e complex construe	ctions. Emphasis v	will be placed on tr	ranslating sentences	
	from Latin to English and English to Latin. We wi	ill begin reading	stories and longer	passages in Latin	n. We will also co	ntinue our study of	
	English derivatives and grammar as well as the A	ncient Romans a	nd the Mediterran	ean. Students wil	ll engage in close :	reading, which will	
	develop their attention to detail; they will also deve	elop essential stu	dy and organizati	onal skills. By the	end of the course	, students will have	
	a solid base of Latin vocabulary and grammar suc	h that they will b	be able to read aut	hentic Latin, sligł	ntly adapted.		
	Latin 3	ACP	10-11-12	full vear	4 periods	5 credits	

ACP

0

full voor

A pariade

Prerequisite: Latin 282 or teacher recommendation The goal of this course is the ability to read more complex Latin sentences that contain main and subordinating clauses and more advanced grammatical structures including the subjunctive mood verbs. Students will apply prior knowledge as well as reading strategies as they transition to reading longer passages of authentic Latin texts. Additionally, students will demonstrate greater understanding of the Roman world, achieved through readings that address cultural topics in Roman history, private life and society, and ancient literature. Selections from a variety of authors such as Caesar, Augustus, and Livy will be included during the second semester.

### HONORS SEQUENCE

284 Latin 4		Н	11-12	full year	4 periods	5 credits
288 Latin 4	1	ACP	11-12	full year	4 periods	5 credits

Prerequisite: Latin 3 or teacher recommendation

This course will focus on a number of important authors of the Roman Republic and early Empire. Students will read and translate poetry by Rome's brilliant poets Ovid and Catullus, and elegant prose by Cicero. Latin composition will also be a component of this course. Students will likewise extend their historical and cultural understanding of the ancient Romans. For interested students this course may also be taken at the ACP level.

N.B. Advanced Placement Latin will not be offered during 2017-18.

### **CHINESE**

China has risen to be one of the strongest economies in the world, and one in every six people in the world speaks Chinese. Therefore, being able to communicate in Chinese will provide our students numerous job opportunities in government, business, and non-governmental humanitarian organizations. The Chinese program at Newton North enables students to become proficient in Mandarin Chinese while developing an in-depth understanding of the cultural and historical perspectives of 1.4 billion of the world's people.

291 Chinese 1 ACP 9-10-11-12 full year 4 periods 5 credits This course lays the foundation for the development of proficiency of the four linguistic skills in Mandarin. At this level, students will be able to greet each other, ask and answer simple questions to communicate basic information about oneself and people they know. Students will also be able to express likes and dislikes, talk about their daily activities such as classes, weekend plans, extra curricular activities. They will develop their vocabulary, work on pronunciation and tones, and start to build beginning literacy. An introduction to Chinese history and culture will also be an integral part of the course through a variety of activities such as calligraphy, films, and special presentations.

292 Chinese 2 9-10-11-12 ACP full vear 4 periods 5 credits In this course, students will continue to advance their proficiency in the language, and will be able to speak and ask questions about themselves as well as activities, events, and people in their lives. They will also be able to express their needs and wants, makes simple plans, and give and follow directions. At the same time, students will expand their ability to read and write simplified Chinese characters and broaden their knowledge and understanding of Chinese cultural practices related to the curriculum's themes of study.

- 297 Chinese 3 10-11-12 ACP full year 4 periods 5 credits In this course, students will increase their vocabulary and ability to express themselves both orally and in writing around themes related to their school and community. Emphasis on advancing their speaking skills will be integral to the course as students discuss and present on their favorite athlete, celebrity or historical figure as well as events and activities. They will also be guided to use structures that enable them to produce more complex speech and writing. Likewise, they will develop their presentational skills such as writing outlines for projects, notes for speeches, and research questions. Cultural topics will be well integrated into the theme-based curriculum.
- 298 Chinese 4 ACP 10-11-12 5 credits full year 4 periods 299 Chinese 5 ACP 10-11-12 full year 4 periods 5 credits

Traditional and Modern China: With alternating year curricula, this course will take students on an exciting ride through Chinese culture, ancient, modern and contemporary. Movies, multimedia, music, books, art, and hands-on activities enable students to immerse themselves in the rich and intriguing Chinese culture. While interesting and exciting activities such as calligraphy and Tai Chi deepen students' understanding and appreciation of Chinese culture, engaging in discussions, role-plays, reading and writing will help students advance their proficiency in the language. This course may be taken one year only for credit, or in two consecutive years for Chinese 4 and Chinese 5 credit respectively.

283

5 crodite





### HONORS SEQUENCE

### as they continue to expand their vocabulary. Cultural topics will be well integrated into the theme-based curriculum. 294 Chinese 4 Η 10-11-12 full year 4 periods 5 credits reading proficiency through the use of Internet articles, short texts, and other types of authentic printed material. Η 11-12 full year 4 periods 5 credits This pre-AP course integrates a thematic approach with authentic resources to engage students in discussion and written analysis of issues in the global community. Students will study contemporary issues along with their historical roots, which will serve as a context for advancing their oral and written proficiency in Chinese. Students will independently listen to and read news reports from Chinese sources on a weekly basis and lead discussions in class based on what they learn. These discussions will continue outside of class through the use of blogs and other Internet applications. During each quarter, students will select one area of interest to research in-depth in order to present their findings to the class. 296 Advanced Placement Chinese AP 11-12 full year 4 periods 5 credits This advanced course is designed for students to reach a high level proficiency linguistically and culturally. It provides ongoing and diverse opportunities to enrich the learning experience through promotion of collaboration, critical thinking skills and creativity. The course prepares students to demonstrate their three communicative skills (interpersonal, presentation and interpretive) through listening, speaking, reading and writing within and beyond the school setting. The course also engages students in an exploration of Chinese history and culture through authentic audiovisual materials that reflect multiple aspects and richness of Chinese language and society.

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in the course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay exam registration fees.

### SIGN LANGUAGE

### 236 Sign Language 1 9-10-11-12 F 4 periods 2.5 credits no level Requirement: pre-registration in EDCO Program office, room M1 Introduction to a variety of sign language systems, with primary emphasis on signing as a visual language. Course content includes a basic vocabulary of sign, finger spelling, selected idioms, facial expressions, and body language. This course is intended for hearing students who wish to acquire basic sign language skills. 238 Sign Language 2 9-10-11-12 no level S 4 periods 2.5 credits Prerequisite: Sign Language 1 and permission of the instructor You will expand your knowledge of signed vocabulary and improve your style and fluency. In this second semester course, you will have a substantial opportunity to use your sign language skills. 239 Sign Language for the Deaf & Hard of Hearing no level 9-10-11-12 full year 1 period 1.25 credits Open only to EDCO Program students In Sign Language students will acquire a working knowledge of a variety of sign language systems. Emphasis will be on building sign language vocabulary, knowledge of finger spelling, idioms, facial expression, and body language. Students work towards fluent use of Total Communication.

## **CLASSROOM AIDE**

285 Classroom Aide in World Language 11-12 no level Students assist a teacher in a World Language classroom. Arrangements must be made between the teacher and student in the fall once both students and teachers know their schedules. Number of times per week and credits will also be determined in the fall. Please see guidelines for applying to be a classroom aide in the "All School" section of this publication.

# 293 Chinese 3

### Η 9-10-11-12 full year 4 periods 5 credits Prerequisite: Chinese 292 and teacher recommendation

This first course in the honors sequence has a fast-paced, rigorous curriculum for highly motivated students who want a challenging course of study. Students will advance their proficiency to the intermediate level in all linguistic areas in the Chinese language as they expand their vocabulary, and use the language in more sophisticated dialogues and presentations. Students will be expected to communicate in the target language as much as possible with support as necessary. They will also be expected to read and write exclusively with Chinese characters

In this course, students will engage with an increased number of authentic Chinese resources created by native speakers to develop a higher level of proficiency in oral and written communication skills. The course will also provide students with a comprehensive study of grammatical structures of the Chinese language so that they may learn to express themselves orally and in writing with ever-increasing sophistication including written compositions of multi-paragraph length with Chinese characters. Likewise, students will improve their

### 295 Chinese 5

time & credits to be determined



# Newton North Travel and Study Abroad Opportunities

Travel and study abroad are invaluable components of a student's education, especially in today's increasingly global world. Therefore, NNHS offers a rich array of subject-specific travel opportunities in World Languages, Science, History, and Fine & Performing Arts. The opportunities listed below represent usual offerings. The list is not exhaustive and is subject to change based on availability and enrollment. For up-to-date information, please visit http://www.newton.k12.ma.us/Page/2030.

Scholarships are available for students with demonstrated financial need through the Jennifer Price Global Education Fund (GELF). For more information on GELF or to download a scholarship application, please visit http://www.newton.k12.ma.us/Domain/1055.

For more information on scholarships or any of the global travel opportunities below, please email Newton's Global Education Programs Manager Samantha Mandel at <u>Samantha Mandel@newton.k12.ma.us</u>.

### WORLD LANGUAGE TRAVEL PROGRAMS

**Chinese Exchange** (Beijing, China) - Language & culture-focused homestay. Newton students host Chinese students for four months in the fall, then live with host families and attend school abroad for four months in the spring. Applicants do not have to have previously studied Chinese, but must do so in the fall before they travel. Candidates apply in the spring of the year prior to travel through the World Language Department.

Frequency: Annual

Dates of Chinese student visit to Newton: Sept. 2017-Jan. 2018 / Dates of travel to China: Jan.-May 2018

**French Exchange** (Paris, France) - Language & culture-focused homestay. Newton students live with host families and attend school abroad for three weeks, then host French students in return for two weeks. Applicants must be enrolled in French. Applications become available in the fall through the World Language Department.

Frequency: Annual

Dates of travel to France: 3 weeks including February break / French student visit: 2 weeks in April

**Italian Exchange** (Florence, Italy) - Language & culture-focused homestay. Newton students live with host families and attend school abroad for four weeks and host Italian students for three weeks in the fall prior to travel. Applicants must be enrolled in Italian. Applications become available in September through the World Language Department.

Frequency: Annual

Dates of travel to Italy: 4 weeks including February break / Italian student visit: 2 weeks in September

**Spanish Exchange** (Burgos, Spain or Guanajuato, Mexico) - Language & culture-focused homestay. Travel destinations rotate between Burgos, Spain in even years, and Guanajuato, Mexico in odd years. The travel destination in 2017-18 will be Spain. Newton students live with host families and attend school abroad for three weeks, and host Mexican or Spanish students in return. Applicants must be enrolled in Spanish. Applications become available in the fall through the World Language Department.

Frequency: Annual

Dates of travel to Spain or Mexico: 3 weeks including February break / Mexican student visit (odd years): 3 weeks in April / Spanish student visit (even years): 2 weeks in October

Latin Crossroads of History Trip (Rome, Italy) – Exploratory travel program with hotel stays focused on the significance of Latin through history. Students explore cultural sites relevant to the art, architecture, history, and literature of the ancient, Medieval, Renaissance, and Baroque worlds. Applicants must be enrolled in Latin. Applications become available in the fall through the World Language Department.

Frequency: Every other year, will be offered in 2019-20

Dates of travel to Italy: 1 week including February break

### FINE & PERFORMING ARTS TRAVEL PROGRAMS

**Fine & Performing Arts Exchange (Melbourne, Australia)** – Music, theatre, & art-focused homestay. Newton students live with host families and attend school abroad for ten days and host for ten days in return. Applicants must have taken or be taking an FPA class. Applications become available in the fall through the FPA department.

Frequency: Every 3-4 years

Dates of travel to Australia: 10 weeks including April break / Australian student visit: 10 days @ TBD

### London Theatre Trip (London, England & environs) -

Experiential travel program with hotel stays. Students attend London shows, visit museums with renowned costume collections, and participate in master classes through the UK National Theatre for actors, student directors, stage managers, and student designers. Students also visit historic sites around London. Applicants must have taken or be currently taking a Theatre class or have participated in Theatre Ink. Applications become available in the fall through the Theatre Department.

Frequency: Annual

Dates of travel: 1 week over the summer

### HISTORY TRAVEL PROGRAMS

**Prague Summer (Krakow, Poland; Prague, Czech Republic; Dresden & Berlin, Germany)** - History-focused enrichment program with hotel stays. Students earn credits for their work through the Newton summer school, take on-site history lessons from Newton teachers, and explore historical sites relevant to medieval times, World War II, and more. Applicants must have a strong interest in history. Applications become available in the fall through the History Department.

Frequency: Annual

Dates of travel: 2.5 weeks over the summer

### SCIENCE TRAVEL PROGRAMS

### Nicaragua Ecology Trip (various locales in Nicaragua) -

Ecology and sustainability focused research & service program with *hospedaje* stays. Students will assist with ongoing ecology research projects and will design and conduct scientific investigations of their own. Students will also have the opportunity to learn about the local Nicaraguan culture & economy and how these impact the Nicaraguan ecosystem. Applicants must have taken or be currently taking biology. Applications become available in the fall through the Science Department.

Frequency: Annual

Dates of Travel: 1 week over the February break

### ADMISSION APPLICATION FORM

### Newton Public Schools Career & Vocational Technical Education

*100 Walnut Street, Newtonville, MA 02460* Telephone (617) 559-6250 Facsimile (617) 559-6256

Newton Public Schools Career & Vocational Technical Education admits students and makes available to them opportunities to take advantage of courses of study without regard to race, color, sex, religion, national origin, sexual orientation, gender identity, disability, homelessness status, and any other class as protected by law.

Newton Public Schools has a published admission policy that is made available to all applicants and parent(s)/guardian(s) as part of the admission process. The policy gives the admission criteria, as well as a description of the entire admission process. This information may also be found on the Newton Public Schools website at www.newton.k12.ma.us

This application form must be completed and submitted to the Newton North High School or the Newton South High School Guidance Department or the Director of Career & Vocational Technical Education prior to admission.

Program Major: _	
C •	

Year of Graduation:

APP	PLICANT SECTION	
Applicant Name: Last:	First:	Middle:
Home Address: Street and Number:		
City/Town:	State:	Zip Code:
Home Phone #:		
Current School:	Current Guidance Counselo	r's Name:
SIC	GNATURE SECTION	
The statements and information furnished by the under	rsigned in this application for	orm are true and complete.
The undersigned applicant's parent(s)/guardian(s) give applicant's records including grades, attendance, and c <i>Our signatures certify that we have read and agree we</i>	conduct/discipline records.	ives of the sending school to release the
Signature of Student		Date:
Signature of Parent/Guardian		Date:

### **VOLUNTARY INFORMATION SECTION**

The information requested in this section is not required for admission. Submission of the information is entirely voluntary. Information submitted voluntarily by the applicant will not affect the applicant's admission to the school. The information, if supplied, will be used for monitoring equal educational opportunity in the school district. In addition, note that applicants with disabilities may voluntarily self-identify for the purpose of requesting reasonable accommodations during the entire application and admission process. Applicants who are English language learners or limited English proficient may voluntarily self-identify for the purpose of receiving interpretive services during the entire application and admission process.

### Gender: Gen

Race: American Indian or Alaskan Native Asian or Pacific Islander Black Hispanic Combination of Two or More Races (if checked, supply the code on the attached list) Code:

Person with a disability: [] Yes If yes, do you need accommodations during the application for admission process? [] Yes If yes, please describe the accommodations needed.

Person who is an English language learner or limited English proficient: Yes If yes, do you need language assistance during the application for admission process? Yes If yes, please describe the assistance needed.

	Not Hispanic or Latino	Hispanic or Latino
Dne race		
White	01	33
Black or African American	02	34
Asian	03	35
American Indian or Alaska Native	04	36
Native Hawaiian or Other Pacific Islander	05	37
Combination of Two Races		
White & Black or African American	06	38
White & Asian	07	39
White & American Indian or Alaska Native	08	40
White & Native Hawaiian or Other Pacific Islander	09	41
Black or African American & Asian	10	42
Black or African American & American Indian or Alaska Native	11	43
Black or African American & Native Hawaiian or Other Pacific Islander	12	44
Asian & American Indian or Alaska Native	13	45
Asian & Native Hawaiian or Other Pacific Islander	14	46
American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	15	47
Combination of Three Races		
White & Black or African American & Asian	16	48
White & Black or African American & American Indian or Alaska Native	17	49
White & Black or African American & Native Hawaiian or Other Pacific Islander	18	50
White & Asian & American Indian or Alaska Native	19	51

Career and Technical Education Admission Application

White & Asian & Native Hawaiian or Other Pacific Islander	20	52
White & American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	21	53
Black or African American & Asian & Native Hawaiian or Other Pacific Islander	22	54
Black or African American & Asian & American Indian or Alaska Native	23	55
Black or African American & Native Hawaiian or Other Pacific Islander & American Indian or Alaska Native	24	56
Asian & Native Hawaiian or Other Pacific Islander & American Indian or Alaska Native	25	57
Combination of Four Races		
White & Black or African American & Asian & American Indian or Alaska Native	26	58
White & Black or African American & American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	27	59
White & Asian & American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	28	60
White & Black or African American & Asian & Native Hawaiian or Other Pacific Islander	29	61
Black or African American & Asian & American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	30	62
Combination of Five Races		
White & Black or African American & Asian & American Indian or Alaska Native & Native Hawaiian or Other Pacific Islander	31	63

Revised for DESE review September 23, 2009 Approved by the DESE on November 17, 2009

Revised March 25, 2013 to include legal language: "gender identity and any other class as protected by law."