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21-22

NEWTON SOUTH HIGH SCHOOL

140 Brandeis Road

Newton, MA 02459

Tel. 617-559-6700 Fax: 617-559-6701

<https://www.newton.k12.ma.us/nshs>

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617-559-6700

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Vice Principal: Chris Hardiman (Interim)
Executive Secretary: Tracy Connolly
Director of Guidance: Daniel Rubin

House Offices

Departments/Programs

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Dean:	Josepha Blocker	CORE Program:	Ted Dalicandro	559-6582
Secretary:	Lucia Curran	Business:	Kevin Lenane	559-6533
Counselors:	Sarah DeMello	English:	Brian Baron	559-6527
	James Medeiros	Eng. Lang. Learners:	Victoria Parker	559-6566
	Donna Segal	Family & Consumer Sci:	Kevin Lenane	559-6533
Goldrick House	559-6552	History & Social Science:	Jennifer Morrill	559-6546
Dean:	Marc Banks	Library:	Jennifer Dimmick,	
Secretary:	Diane Trieger		Margaret Schoen,	559-6561
Counselors:	Sue Butler		Katherine Steiger	
	Christina Brown	Mathematics:	Alex Kraus	559-6566
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	Nicole Mottley	Fine & Performing Arts:	Megan Leary-Crist	559-6594
	Daniel Rubin	Nurse:	Gail Kramer, Karleen Kiritsy	559-6575
Goodwin House	559-6555	Prevention Counselor:	Brian Deleskey	559-6577
Dean:	Charles Myette	Science:	Gerard Gagnon	559-6581
Secretary:	Beth Astone	Special Education:	Melissa Gamble	559-6600
Counselors:	Sarah DeMello	Student Life Coordinator	Victoria Parker	559-6566
	David Kershaw	Technical Education:	Matt Briggs	559-6593
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	Sarah Style	WISE:	Tonya Londino, Jessica Engel	559-6604
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Dean:	Meaghan Martin	Records Office:	Annemarie Bushey,	
Secretary:	Barbara Murphy		Lisa Mix	559-6500
Counselors:	Amani Allen	Registrar:	Marguerite Monahan	559-6511
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Newton Public Schools
NEWTON SOUTH HIGH SCHOOL
140 Brandeis Road
Newton Centre, MA 02459

Dear Newton South Student,

It is with great pride and anticipation that we present you with the 2021-22 Newton South *Program of Studies*. Of course, the most important element in a successful academic program is you, the student.

Each year brings a new opportunity to design a selection of courses that speaks directly to both who you are, and who you would like to become. As you peruse these offerings, we encourage you to keep two concepts in mind: challenge and balance. Our school is working on building course structures that support the mental health of our students and that promote equity in our educational offerings as an actively anti-racist school. This year we continue the examination of our teaching and learning practices at NSHS. We are doing this work through an active anti-racist lens with a focus on the social emotional needs of our students.

Among the items we continue to examine are: grading practices, curriculum, homework, and the leveling of courses. We have committed to increasing access and equity for all students by dismantling course structures where implicit bias results in inadvertently sorting students by race, gender and/or socio economic status. It is our hope that by examining the above we will provide more students access to a challenging and enriching curriculum of their choice. We do not want to be gatekeepers. Instead, we aim to open doors to ensure students are not limited by any of our choices as an educational institution.

Plenty in here will feed your mind, but you should also take the opportunity to find classes that will fill your heart. You are welcome to consult with your teachers, school counselors, deans, advisors, and of course, family members, who can guide you through the process as well.

We are looking forward to welcoming you in the Fall!

Best regards,

Mark Aronson, on behalf of the Newton South Faculty and Staff

GENERAL INFORMATION

PROGRAMS

Newton South's Smaller Learning Community Interdisciplinary Studies Programs (ID)

Problem solver, creator, and innovator - this is the type of student that will thrive in ID programs. Interdisciplinary Studies is built on collaboration, respect, and innovation.

Collaboration is key to developing 21st century skills. Whether online or in person, a collaborative spirit is a basic foundation of interdisciplinary work. Collaborative and creative individuals seek to encourage deep thinking and relevant learning. Respect for diverse groups and learning styles is also a building block for collaboration. The basic foundation is that everyone can learn and contribute to the community. Thus, ID classes are taught at multiple curriculum levels (Honors, ACP, CP) in a differentiated environment.

ID classes strive for innovation, which comes from deep thinking about major challenges to the human existence. From sub-atomic particles to climate change - innovation is going to be required to solve the most pressing problems for human society. From sustainable agriculture to aquatic biodiversity, humans must make choices that matter.

ID programs also offer a smaller learning community experience. Diverse instruction requires smaller class sizes. Small learning communities support each other and encourage growth through a challenging curriculum.

The da Vinci Program-A three-year STEAM program (Science, Technology, Engineering, Arts and Math) beginning in Grade 10

- daVinci is a differentiated program: Students may enroll at the Honors, ACP, or CP level and need not be at the same level in all daVinci classes.
- daVinci is a multi-year cohort program*:
 - 10th grade: da Vinci chemistry, math, and art
 - 11th grade da Vinci biology, math, and engineering
 - 12th grade da Vinci capstone

The daVinci program will provide students with the opportunity to build skills in experimentation, analytical problem solving, collaboration, communication, and engineering, technology, and artistic representation through student-driven learning and real-world applications.

*Details are found within each department listing.

A written application is required to join the da Vinci Program. See your mathematics/science teacher or counselor for more information.

The Global Communities Program - A three-year program beginning in Grade 10. Curious about what happens when cultures come together? Find out how global culture, economics, politics and the environment intersect in relevant ways to develop more respectful citizens and a sustainable planet.

The New Media Communities Program - A two-year program beginning in Grade 10. *How do you know what you know? Where do your beliefs come from? What really matters to you and why? The key to answering all of these questions is the media: movies, television, social networks, the Internet. We live in a media-saturated world, so how are we to make sense of it all?* New Media Communities is a new linked, interdisciplinary English and history course that seeks to explore how we arrived at this age of visual media and how to navigate it responsibly and critically. Like all sophomore classes, we will study World Literature and History, but with an intensive focus on media history, media analysis and media production. Through an innovative project-based curriculum, students will gain an understanding of the history of media and how the media have shaped history; they will also gain skills in filmmaking, audio production, graphic design, web design, social networking, and more. Our goal is to develop the next generation of leaders in the media arts, and to encourage active participation in our democracy through collaborative and creative work. If you love making movies, listening to podcasts, designing websites, and curating your social media persona, this is the course for you. NMC Arts Menu: Over the course of their two years in the program, students in New Media grades 10 and 11 are encouraged to take at least one of the following courses from the Fine and Performing Arts Department:

270 Acting Foundations	020 Art Foundations: 2-D meets 3-D
2730/1 Acting and Directing	090 Art Foundations: Media Art
274 Actors' Studio	081 Photography Explorations
275/2750 Screen Acting and Prod.	082 Photography Studio
277 Costume Studio	097/0970 Video Studio
	092/0920 Media Arts Studio

Look for • symbol in the course listings indicating that the course is one of the Interdisciplinary Studies courses offered as part of Newton South's Smaller Learning Communities.

Newton South International Travel Programs

Travel and study abroad are invaluable components of a student's education, especially in today's increasingly global world. Therefore, NSHS offers a rich array of subject-specific international travel opportunities. 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). To apply for financial aid, simply complete the financial aid supplement included with your child's international program application. For more information on GELF, 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 mandels@newton.k12.ma.us.

The decision to run any and all travel programs will be made during the 2021-2022 school year based on the status of the pandemic, recommendations from the CDC, and safety regulations from NPS administration.

Cultural & 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.-Jan. / Dates of travel to China: Jan.-May*

French Exchange (Paris, France) - Language & culture-focused homestay. Newton students live with host families and attend school abroad for two weeks and also host French students for two weeks. Applicants must be enrolled in French. Applications become available either in the spring or the fall preceding the trip through the World Language Department. *Frequency: Annual - Dates of travel to France: 2 weeks including February or April break / French student visit: 2 weeks in February or April*

Spanish Exchange (San Rafael, Mendoza, Argentina) - Language & culture focused homestay. Newton students live with host families and attend school abroad for two weeks and also host Argentinian students for two weeks. Applicants must be enrolled in Spanish. Applications become available in the fall preceding the trip through the World Language Department. *Frequency: Annual - Dates of travel to Argentina: 2 weeks including April break or 2 weeks in June after the end of school / Argentinian student visit: 2 weeks in October*

Ghana Exchange (Tema, Ghana) - Culture-focused dormitory/hotel stay. Newton students will live in school housing and attend classes at the Tema International School (TIS) and participate in cultural excursions. Newton students will also host Ghanaian students for 10 days. Applicants must be juniors or seniors in good standing. Applications become available in May the year preceding the trip from METCO Counselor & English Teacher Katani Sumner. *Frequency: Biennial – Dates of Travel to Ghana: 2 weeks including April break / Ghanaian student visit: 10 days 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- Dates of travel to Italy: 1 week including February break*

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 at Newton North. *Frequency: Annual - Dates of travel: 2.5 weeks directly after classes end in June*

CLOSE UP - American civics-focused enrichment program with flight and hotel stay. Students room with students from around the country, explore cultural sites in the nation's capital, learn about the workings of US government, debate current issues, meet with our members of Congress, and learn how to be informed, active, involved US citizens. Applicants should have a strong interest in US government and politics. Registration for the trip starts in the late spring through the History Department. *Frequency: Annual - Dates of travel: 1 week in early March*

Community Service Programs

NNHS Greece Service Trip (Kamena Vourla, Greece) - Service-focused program with stays in volunteer housing. Students volunteer with Happy Caravan, a Greek NGO service organization which provides structured teaching & safe spaces for refugee children from Syria, Iraq, and Afghanistan. Newton students lead activities in arts and crafts, English, reading, math, yoga, and more. Students may engage in cultural excursions on weekends. Applicants must be NNHS or NSHS seniors. Applications become available from the Fine & Performing Arts department in the fall prior to travel. *Frequency: Annual - Dates of travel: 2 weeks in April or May*

Puerto Rico Summer Service (San Juan & environs, Puerto Rico) - Community service program with dormitory stays and cultural enrichment opportunities. Service projects may include sorting, packing, and distributing food for local food banks; assisting with trash clean-up and ecological restoration projects; helping to build homes/rebuild homes in low-income communities that have been impacted by the hurricane; and providing social interaction for seniors not living with their families. Applicants must be NSHS freshmen, sophomores, or juniors. Applications become available in the fall prior to travel. *Frequency: Every 1-3 years – Dates of travel: 1 week directly after classes end in June*

Fine & Performing Arts Travel Programs

London Theatre (London, England & environs) - Experiential travel program with hotel stays. This program is offered through Newton North but is frequently open to Newton South students. Students attend London shows, visit museums and historic sites, and participate in master classes through the UK National Theatre. Applicants cannot be seniors, and must have taken or be currently taking a Theatre class or have participated in Southstage. Applications become available in the fall through the Newton North Theatre Department. *Frequency: Annual - Dates of travel: 1 week directly after classes end in June*

Unaffiliated Travel Programs

Portugal UNESCO Trip (Lisbon, Portugal & environs) - Cultural program with hotel stays centered around the 3-day International Meeting of Young Scientists of the UNESCO Associated Schools. Students present projects at the UNESCO Meeting and tour historical sites and landmarks in and around Lisbon, Portugal. Applicants must have a strong interest in the conference topic for that year. Applications become available in the spring prior to travel from Ms. Pavao at pavaos@newton.k12.ma.us. *Frequency: Annual - Dates of Travel: 1 week in January*

Global Communities Travel Programs

Periodically, the Global Communities program offers annual senior capstone travel experiences. Destinations are chosen collaboratively by students and teachers and have included Sweden, Cuba, Morocco, and more. Students perform research while abroad for their particular senior capstone project. Trips are sometimes opened to students not enrolled in Global Communities. The program also occasionally offers trips specifically for sophomores and juniors, depending on student interest.

Newton Public Schools Chapter 74 Career & Technical Education (CTE) Programs

Newton Public Schools affords its students the opportunity to experience a variety of Career & Technical Education (CTE) programs. Students who pursue a Chapter 74 CTE Program of Study may earn a Certificate of Program Completion in the career area studied in addition to a high school diploma. If one of the Chapter 74 Programs is a career area of serious interest for a student (whether after college or right out of high school) and the student is willing to commit to commuting to and from South and North, the student should pursue a Chapter 74 exploratory course that is offered at North. This avenue will allow for a smoother transition into a major for a CTE program, all of which are housed at North. For students who are not sure about their future endeavors but would like to sample a variety of career interests and would prefer to not commute back and forth between the two high schools, they should register for the career area electives offered at South. If after taking career area electives at South a student believes he/she would like to continue studying a career area that is one of our CTE programs and will commit commuting to and from South and North, the student's counselor and the director of CTE will work to ensure the student is enrolled in the CTE program of interest at North. Transportation, although provided, does require a little extra effort, but it is so small in comparison to the benefits! More detailed information about the Chapter 74 CTE programs is located in the back of this book, as well as online in the Opportunities Book for Newton North High School.

Work-Study Program

Newton South offers opportunities to a limited number of students to supplement their academic experiences by incorporating employment into the learning process. Programs are available in art, photography, offset printing, stage, maintenance, business, and childcare. For more detailed information, students should refer to the specific subject areas, and the appropriate department chairperson.

STUDENT SUPPORTS AT NEWTON SOUTH

There are a number of supports, both academic, and social and emotional, that are available to all students:

Communities are a cohort of students that meet several times a week to get to know one another and a teacher in a non-academic setting. These cohorts, which stay together for all four years of high school, provide support for one another through the transitions that are part of high school, work on improving the school climate through community service projects, do activities that foster respect for human differences, and last, but not least, have fun together by playing games and relaxing.

9th grade Clusters aim to ease the transition to high school and to promote connections between and among students and teachers. Clusters are made up of teachers in the History, English, and Science departments who collectively share students and are designed to foster consistent communication among teachers, students, parents, and counselors. The goal of the collaboration during weekly meetings is to help students meet the ninth grade expectations in History, English, and Science classes.

Flex Block is at the end of the academic day on Tuesdays and Fridays and in the middle of the day on Wednesdays. It is a time when students can meet with their teachers for extra help or to make-up work. Full-time teachers are required to be available to assist students during two of the three Flex Blocks. Many clubs also meet during Flex Blocks; however, meeting with teachers during Flex Block takes precedence over all other activities.

Department Help Centers are located around the school and offer students the opportunity for assistance during the school day. Currently, help centers are available in English (Writing Center), Mathematics (Math Center), and Science (Science Help Center). For more information, talk to your subject area teacher or the appropriate department head.

The **After School Program (ASP) and Homework Club** meet twice a week after school hours. Ninth and tenth grade students are formally invited to attend ASP when they earn a D or an F in a major academic course the term prior. The program offers support in English, math, physics, chemistry, Spanish, and history. Students who are not formally invited to attend the program are also able to access the same supports on a “drop-in” basis by attending the Homework Club, which meets concurrently with ASP and is open to students at all grade levels.

Note: Neither ASP nor Homework Club met during the 2020-2021 school year due to COVID safety protocols. The programs hope to resume for the 2021-2022 school year, provided safety protocols allow.

The **Student Support Center** is a classroom that is open for Small Studies. Rather than being in Directed Studies which have 20+ students, students are referred to Small Studies based on a recommendation from a teacher in a subject where they are either struggling to keep up or simply need an opportunity to re-learn specific material in order to understand the concepts. During Small Studies, students either work on assignments sent by their teachers in a small focused study group (5-7 students with one teacher) or they work one-on-one with a peer tutor (if one is available). Students have access to textbooks, computers, and a printer. The students’ progress is re-evaluated every eight to ten weeks.

SERVICES

Counseling

Before entering the ninth grade, each student is assigned a guidance counselor for the entire four-year period. Counselors support students' academic and social-emotional development with an emphasis on wellness and balance. They also help students learn about themselves - their interests, aptitudes, and talents. The department's goal is to assist every student with the normal developmental tasks that all adolescents undertake. Planning for the future is an important aspect of counseling. This is done in a variety of ways and includes examining available options and helping students on their way to becoming independent, self-confident adults. Career and college planning constitutes a major focus of the department. Detailed information is available on the Newton South website under "Counseling".

College and Career Center

The College & Career Center is located within the Student Center/Cafeteria and is staffed by a full time professional school/college counselor. The College & Career Counselor works closely with school counselors, students, parents & caregivers providing comprehensive career and college planning assistance to students in grades 9-12. Students are encouraged to drop in and ask questions and explore the many resources. Families & caregivers, along with students, may schedule appointments for individual conferences. Whether a student is interested in finding a job, internship or volunteer opportunity, seeking scholarships or needs advice in applying to college, a wide variety of resources are available including Chromebooks, career-related publications, armed forces materials, gap year and standardized testing (SAT/ACT) information. Each spring and fall the Center hosts group meetings with juniors and seniors, respectively with college representatives. Annual volunteer and trade fairs are held during lunches in December and March. Students are encouraged to actively engage in the Center's programming and activities to explore how their interests and skills align with their personal and educational goals.

Athletics, Clubs, and other Activities

In addition to the regular program of studies, students are encouraged to participate in the rich program of athletics, clubs, and other activities offered at Newton South. It is important for students to consider their co-curricular interests and commitments in planning their program.

Newton Summer School

Students may take courses on a full-credit basis at Newton Summer School, which is part of Newton Community Education. Information is available online and includes details on offerings, fees, and start dates for summer courses. Visit: <http://www2.newtoncommunityed.org/>. You may also call 617-559-6999 or email staff@newtoncommunityed.org. Most courses taken in summer school count for academic credit and appear on the student's transcript, ***however grades from summer school are not included in GPA calculations***. See your counselor for specific details.

The summer school provides a wide selection of courses designed to provide enrichment and to help students improve academic foundations or to retake a course previously failed.

Library

The Newton South High School Library is an innovative learning center designed to support the academic goals of the school and to foster a culture of reading among our students. The physical space has resources for students to use as they explore, learn, and create while at school. The virtual space allows students to access high quality, reliable information resources (e.g. databases) and pleasure reading (ebooks and audiobooks) on a 24/7 basis. Under the guidance of professional librarians, NSHS students become effective and responsible users of a wide variety of information with the goal of becoming independent learners and critical evaluators of information. To achieve this, the library staff partners with classroom teachers to provide research-related instruction using library resources. Each fall, the library welcomes ninth grade students through library orientations. During these orientations, students learn about the resources available in the library and how to access them. Throughout the year, teachers from all grade levels and subject areas bring their classes to the library for academic research, information literacy instruction, and book selection for independent reading. All resources, including the online catalog and current research projects, are available on the library website: <http://nshslibrary.newton.k12.ma.us>

REQUIREMENTS FOR GRADUATION

The Newton School Committee sets requirements for graduation at Newton North and Newton South High Schools. Currently, to receive a diploma, students must earn a minimum of 100 credits. Credits are assigned to courses depending on the frequency of meeting and preparation required. The norm for major courses, courses that meet for a full school year, is five credits. Classes meeting all year are considered majors and those meeting for one semester or for one term are considered minors.

Students are required to take a minimum of 29.75 credits (29.5 credits for ninth grade), although juniors and seniors who are committed to extra curricular activities are allowed to enroll in a minimum of 27.25 credits with dean approval. These activities must be supervised by faculty/staff, be connected to the curriculum, and have a definite product or concluding performance. Examples of such activities include interscholastic school sports, school publications, theater (directing, acting or tech crew), science/math teams, Model UN, Mock Trial, speech team, school supervised community service, school supervised tutoring, and summer school. Students should see their guidance counselor for more information about taking 27.25 credits along with extra curricular activities.

Subjects Required For Graduation

Following are subjects required for graduation. In addition to the subjects listed below, students, especially those planning to continue their formal education after high school, are strongly advised to study world languages.

- English, 20 credits
- Science, 10 credits (5 in biological science and 5 in physical science)
- History and Social Science, 15 credits (including United States history)
- Mathematics, 10 credits
- Fine, Performing and Technical Arts (Art, Business, Family and Consumer Science, Media Arts, Music, Drama, Speech, Computer Programming, Journalism, and Technical Education), 5 credits (* symbol on classes)
- Wellness, 5 credits

MCAS Graduation Requirement

In addition to the requirements set by the Newton School Committee, the Commonwealth of Massachusetts requires that students receive passing grades in the English Language Arts, Mathematics, and Science portions of the MCAS tests in order to receive a high school diploma. Students who do not pass the tests have several opportunities to retake the tests. Students earning below Proficient on the English Language Arts and/or Mathematics exams are subject to the regulations of an Educational Proficiency Plan. Please see <http://www.doe.mass.edu/ccr/epp/qa.html> for further information on this state requirement.

Due to COVID-19 the Massachusetts Department of Elementary & Secondary Education has adjusted competency determination (CD) requirements for the graduating classes of 2022 and 2023. Detailed information is available at <https://www.doe.mass.edu/covid19/mcas.html>.

COURSE DETAILS

Course Levels

During the 2021-2022 school year, departments are making some changes to how we structure class levels. These changes will manifest themselves differently in different departments, as we pilot various approaches. Our school is committed to building course structures that support the mental health of our students and that promote equity in our educational offerings as an actively anti-racist school. We are engaging in a long-term discussion about the future of leveling and course structures at South.

College Preparatory (CP)

Students working at the college preparatory level are progressing towards greater independence as they tackle content through inquiry, problem solving, critical thinking and reading and writing. In some courses, co-teaching might allow for more individualized attention as students develop these skills.

Advanced College Preparatory (ACP)

Students working at the Advanced College Preparatory level generally approach content with a solid degree of independence through inquiry, problem solving and critical thinking skills.

The SAM option in ACP courses enables students who are still developing the skills necessary to succeed in an ACP class the opportunity to take an ACP class. The goal of this program is to allow students to Stretch intellectually, Aim for excellence and Make progress (SAM).

Honors (H)

At the Honors level, students not only approach course content independently, but use their inquiry, problem-solving, and critical thinking skills to explore associated topics and themes beyond the scope of the Advanced College Preparatory curriculum.

Multi-Level Courses

A multi-level course is a single classroom with the same teacher(s) in which students are enrolled in more than one level of the course (College Prep, Advanced College Prep, Honors).

While there are some classes that have run as multi-level courses for many years and are well known to students, Newton South may make the decision to run other multi-level courses after registration occurs in order to meet our student requests and address equity concerns.

We believe in the power of multi-level courses because they:

- Provide a rich experience for students within a diverse learning community.
- Increase access and equity for all students by dismantling structures where implicit bias results in inadvertently sorting students by race, gender, and/or socioeconomic status based on the subject area and level.
- Provide students with access to support and opportunity for challenge in the same learning community.
- Allow Newton South to offer classes that may not have enough enrollment to run as single-level classes.

Students should sign up for courses and levels that meet their need for support and challenge. If a student has specific concerns about multi-level courses, they may speak to the department chair. No Level

Courses designated as “No Level” will receive standard letter grades. Other than those taken in the ninth grade, grades in “No Level” classes will be included in a student's GPA.

Pass-Fail (P-F)

Classes designated as “Pass-Fail” will receive a grade of a P, F, or, in some cases, A. Pass-Fail courses are not included in a student's GPA calculation.

Grading Scale

Grades are given quarterly. In addition to term grades, a student will receive a year-end summative grade and, for those courses giving final exams, a final exam grade at the end of the course.

During the spring and summer of 2021 a district committee will evaluate grading practices used in Newton's two high schools and four middle schools and will make a recommendation for our grading system for the coming school year and beyond. Details of the recommended system will be shared as they are available.

2020-2021 School Year

A: (Advanced) Student engages fully with the material and with the classroom community, uses feedback to improve performance, reflects on growth, and is able to independently and consistently demonstrate knowledge and mastery of skills.

B: (Proficient) Student engages significantly with the material and with the classroom community, uses feedback to improve performance, reflects on growth, and is able to independently demonstrate knowledge and mastery of skills. Student may demonstrate some inconsistency in different skill or content areas.

P: (Emerging) Student demonstrates proficiency in learning with teacher and or peer guidance and feedback. Student needs to show more consistency and independence in foundational knowledge and skill use. Student may also engage partially with the material and the class community, sometimes using feedback to improve performance and reflect on growth.

NG: (Beginning) Student shows limited to no engagement with the material and class community. There is not enough work to elicit meaningful feedback from the teacher, providing little to no opportunity for growth, and there is minimal evidence of development of targeted skills.

2019-2020 and prior

100-93 = A	82-80 = B-	69-67 = D+
92-90 = A-	79-77 = C+	66-63 = D
89-87 = B+	76-73 = C	62-60 = D-
86-83 = B	72-70 = C-	59-0 = F

GPAs

Beginning in the 2020-2021 school year, Newton South High School calculates only an unweighted grade point average. GPA is computed three times: after the second term of junior year (includes grades from the end of sophomore year and the first two quarters of junior year), at the beginning of senior year, and after the first two terms of senior year. The system is based on an A, 4.0; A-, 3.7; B+, 3.3; B, 3.0; B-, 2.7; C+, 2.3; C, 2.0; C-, 1.7; D+, 1.3; D, 1.0; D-, .7; and F, 0. GPA does not include the ninth grade year, any course taken pass-fail*, Wellness, independent study, classes taken during summer school, or classes taken at other institutions.

	A	4.0
	A-	3.7
	B+	3.3
	B	3.0
	B-	2.7
	C+	2.3
	C	2.0
	C-	1.7
	D+	1.3
	D	1.0
	D-	0.7
**	N	0.0
***	WF	0.0

In the course listings of the *Program of Studies*, the level for each course is indicated.

* Courses designated as pass-fail are indicated in the level descriptor as “P-F.”

** The grade of N indicates failure due to a pattern of attendance inadequate to meet the requirements of the course. See the *Orange Lion* and the *Student’s Rights and Responsibilities Handbook* for more information.

*** The grade of WF indicates failure due to withdrawal from course after date set by school policy.

COLLEGE ADMISSION PROCESS

Reports To Colleges

With the signed request of students or parents, Newton South High School sends the following information, either electronically or by mail, to colleges: courses taken at NSHS, final grades, course credits, GPA, the school profile, and the counselor's statement (an expansion and interpretation of the transcript in terms of personal dimensions). All of the information supplied to colleges except for the counselor's statement is available to students for their review. In response to the general college requirement for a report of mid-year status, copies of the second term report card and updated GPA are forwarded *automatically* to those colleges to which application for admission has been made.

SELECTING A PROGRAM

We recommend that students plan their program for the four years of high school. A good program is one that provides appropriate challenge and balance. While each course may be individually appropriate, the whole program may be too demanding or not challenging enough. It is important to have balance among courses in different subjects and to select courses in areas of established interest and in new areas that broaden students' horizons. It is best to start with a basic program which includes subjects/courses required for graduation and which prepare for students' plans after graduation. However, please pay careful attention in planning for electives.

Course Changes

The pages that follow include a diverse array of course offerings from which students can choose. In order to ensure that the school's master schedule is built in a way to accommodate the preferences of as many students as possible, it is imperative that students take time and care in making their initial course requests. Student-initiated requests to add or drop classes are subject to the following deadlines:

Add Deadline	
FULL YEAR COURSES: September 30th SEMESTER COURSES: three weeks after the start of the course	
Drop Deadline	Final Grade if Dropped Post-Deadline
FULL YEAR COURSES: mid-point of the first term SEMESTER COURSES: mid-point of the first term of the course QUARTER COURSES: 3 weeks (of class meetings) after the course begins	W
FULL YEAR COURSES: 1 week before the end of term 2 SEMESTER COURSES: end of the first term of the course QUARTER COURSES: Mid-point of the course	WF

Students may initiate drops up to and including the first deadline above without having a final grade recorded on report card or transcript. Students are reminded that all final grades are included on the students' report cards and transcripts. A grade of WF is defined as "Failure due to withdrawal from course after deadline set by school." For GPA computation, a WF counts as a 0 and a W carries no weight.

All course drops and adds must be approved by the appropriate department head. Deans and department heads may also make exceptions to this deadline in extenuating circumstances.

Course Offerings

The course offerings described in this *Program of Studies* specify the course number, the meeting times per week, the number of credits to be earned, and the level of the course. There is also a brief description of the course content and expectations. Unless otherwise specified, where courses are described as being offered both the first and second half of the year, students may elect the course for one semester, but not both.

Courses for ninth graders(symbol on classes) are offered at different levels, but grades earned in courses taken during ninth grade are not included in grade point average. Courses for tenth, eleventh and twelfth grades are offered as either Honors, Advanced College Preparatory, College Preparatory, or No level. When more than one level of a course is offered, whether in the same or separate sections, the expectations differ for those students within those different levels. A student's level in a course is determined by the recommendation of the subject teacher from the previous year. If, after conferring with the teacher, the student and parent disagree with a teacher's recommendation, they may appeal to the appropriate department head.

Not all courses listed in this Program of Studies will be taught during the 2021-2022 academic year. Registration requests must be sufficient to justify scheduling a course. Students should select alternate choices for each course other than the core courses. In scheduling elective courses, preference is given to upperclassmen who may need to fulfill graduation requirements. Due to scheduling constraints, students may have to choose between courses that are offered at the same time. In cases where conflicts exist, students need to prioritize their course selections by working closely with their guidance counselor.

9th GRADE COURSE OFFERINGS

9th grade students are able to enroll in the courses listed below. The symbol **Ⓢ** is also located next to the course descriptions.

Business

111	Introduction to Business	ACP
112	Personal Finance	ACP

ELL: English Language Learners

All courses should be chosen in consultation with ELL staff

English

211	Ninth-Grade English	ACP
2111	Ninth-Grade English SAM	ACP
212	Ninth-Grade English	CP
213	Literature and World History	ACP
2131	Literature and World History SAM	ACP
261	Introduction to Publications	ACP
2760/1	Public Speaking and Presentation	H/ACP

Family and Consumer Sciences

501	Healthy Cooking and Baking	ACP
502	Sports Nutrition	ACP
503	International Cuisine AAEE	ACP
504	International Cuisine EA	ACP
506	Sustainable Agriculture & Food Sys	ACP
507	Culinary Arts Exploratory	ACP
511	Fashion, Clothing, Design & Const. 1	ACP
512	Fashion, Clothing, Design & Const. 2	ACP
521	Child Development	ACP
524	Career Exploration & Development	ACP

Fine & Performing Arts: Art

020	Art Foundations: 2-D meets 3-D	ACP
090	Foundations: Media Arts *Explorations classes can be taken concurrently with 020 & 090	ACP

Fine & Performing Arts: Music

711	Music Technology & Composition	ACP
718	Ukulele	ACP
722/7220	Symphonic Band	ACP/H
724/7240	String Orchestra	ACP/H
726	Chamber Ensemble	ACP
727	Sonata Duo	ACP
731	Jazz Improvisation Beginner	ACP
736	Lab Jazz Ensemble	ACP
743	Vocal Ensemble	ACP ³⁶²

Fine & Performing Arts: Theatre

270	Acting Foundations	ACP
2710	Musical Theatre	ACP
275	Technical Theatre Studio	ACP
276	Public Speaking & Presentation	ACP
277	Costume Studio	ACP

History and Social Sciences

411	World History I	ACP
4111	World History I SAM	ACP
4112/414	World History I	CP
412	World History I	CP
413	World History and Literature	ACP
4131	World History and Literature SAM	ACP

Mathematics

630	Foundations of Math	CP
620	Algebra 1	CP
601	Math 1 Honors	H
611	Math 1 Acc	ACP
621	Math 1	ACP
631	Math 1	CP

Computer Programming

650	Intro to Object Oriented Programming	No level
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Science

811	Physics I	ACP
812	Physics I	CP
813	Physics & Engineering Projects	ACP
8132	Physics & Engineering Projects	CP
890	Introductory Physics Study	ACP

Technical Education and Engineering

551	Architecture I	ACP
552	Architecture II	ACP
553	CAD and 3D Modeling	ACP
561	Freshman Engineering	ACP
565	Robotics I	ACP
566	Robotics II	ACP
572	SolidWorks	ACP
574	Industrial Design	ACP
575	Electronics	ACP
578	Graphic Design I	ACP
581	Woodworking I	ACP
582	Woodworking II	ACP

Wellness

771	Ninth-Grade Wellness	P-F
772	Ninth-Grade Health	P-F

World Language

341	Chinese 1	ACP
342	Chinese 2	ACP
311A	Novice French 1	ACP
311B	Novice French 2	ACP
312	Intermediate French 2	ACP
351	Latin 1	ACP
361	Russian 1	ACP
381A	Novice Spanish 1	ACP
381B	Novice Spanish 2	ACP
382	Intermediate Spanish 2	ACP
331	American Sign Language 1	ACP

All School

906	METCO Advisory	P-F
911	Connections/STRIDE Program Peer Tutor	P-F
915	Office Assistant	P-F

Career and Technical Education Exploratory Programs

(at Newton North) - Please see chart on page 72

161 **ELL World History**
 Full year Credits: 5 Level: ACP
 ⑨ **ELL World History** is designed for students at WIDA levels 1-3. The course follows the mainstream world history curriculum and is a survey of world history from the golden ages of empires in Europe, Asia, Africa, and the Americas to the dawning of the industrial age. This course focuses on developing academic literacy skills through world history texts and materials that are chosen based on the students' reading levels and background knowledge. The course pays particular attention to developing students' reading skills and expanding their academic vocabulary. Students have an opportunity to learn how to do research, take notes, and present historical information in class. In addition, students participate in a variety of group and individual projects focused on particular historical themes.

162 **ELL United States History**
 Full year Credits: 5 Level: ACP
 ⑨ **ELL United States History** is an intensive U. S. History course for students at WIDA levels 4 and above. 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 early American History. The course will also explore political, economic and social history of the U.S. through the 20th 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 seminar-like classes.

Other Offerings

167 **Applying to College for English Language Learners (Grade 12)**
 Semester Credits: 5/8 No level
Applying to College is designed to support ELL students through the college application process from finding the right school to what to do after acceptance. Teachers will assist students in choosing and applying to colleges. Class activities will include writing the college essay, filling out applications, applying for scholarships/financial aid, signing up for appropriate tests (e.g. TOEFL, SAT), and navigating web-based college services (Naviance and Common App). The class will include guest speakers and an opportunity to visit a college campus.

Academic Study

ELL Academic Study

165 Semester Credits: 1¼ Level: P-F
 166 Semester Credits: 1¼ Level: P-F
 ⑨ **ELL Academic Study** is a class providing supports to students in their ELL and mainstream courses and provides additional English language instruction. Individual or group work in a small group setting is available for students who can study independently.

169 **ELL Independent Study**
 Periods per week: + Semester Credits: 1¼ Level: P-F
 Under special circumstances, a student may be placed in an independent study to achieve specifically designated goals, under the supervision of a teacher. Enrollment only after consultation with ELL staff.
 + = To be arranged

Bilingual Peer Education

917 **Bilingual Academic Peer Education (Grades 11 - 12)**
 Semester Credits: 1¼ Level: P-F
Bilingual Academic Peer Education is for fluently bilingual juniors and seniors who are in good academic standing. Students learn basic tutoring techniques and apply them in a bilingual classroom setting. Sections meet twice a week concurrently with an ELL Academic Study class and are limited to 2 students per section. Students will need the signature of their counselor and an ELL teacher to be eligible. The ELL Program coordinator makes the final decision based on recommendations as well as the language and academic needs of currently enrolled students.

ENGLISH

All full-time students are required to take an English course each semester of attendance and must earn at least 20 credits in English before graduation. All students complete the summer reading requirements before entering in the fall. Seniors may elect an additional yearlong course if space is available. The English Department curriculum consists of yearlong courses. Honors students may take year-long courses in their sophomore, junior, and senior years. In the ninth, tenth, and eleventh grades, there are options that link the study of English with the study of history. These courses **must** be taken along with their history equivalents. Not all students who request these courses will necessarily be placed in them, as sections are limited. Students who enter the courses must make a serious commitment to remain in these courses, since if either the English or the history is later changed, the linked class must also be changed.

Ninth-Grade English

Students entering grade nine take one of the following courses according to placement suggested in grade eight. Students study literature, writing skills, grammar, and vocabulary in each course. During the summer preceding ninth grade, students will fulfill the outside reading requirements from our summer reading list.

Ninth-Grade English

211	Full year	Credits: 5	Level: ACP
2111	Full year	Credits: 5	Level: ACP (SAM)
212	Full year	Credits: 5	Level: CP

- ⑨ In **Ninth-Grade English**, students will learn to read thoughtfully and accurately and to write fluently with well-structured paragraphs, complete sentences, varied sentence patterns, and correct grammar and mechanics. Readings in the course may include *Romeo and Juliet*, *The Hate U Give*, *The Catcher in the Rye*, *When the Emperor Was Divine*, *The House on Mango Street*, *Of Mice and Men*, *I Know Why The Caged Bird Sings*, short stories, poetry, and essay that expose students to multiple voice and perspectives. Students study analytical and creative writing, sentence composing, vocabulary, mechanics and usage, speaking, listening, and study skills. All students will complete multiple formative and summative writing assignments, including a larger analytical paper. If you are considering signing up for CP English and think you would benefit from the challenge of an ACP class, please speak to your English teacher about signing up for the SAM (2111 or 2131) option. (For a description of SAM, see page 8.)

Literature and World History (this course **must** be taken with **History 413** or **4131**)

	Full year	Credits: 5	Level: ACP
2131	Full year	Credits: 5	Level: ACP (SAM)

- ⑨ **Literature and World History** covers all of the elements of English 211, but makes an attempt to connect literary themes with history where possible. The course relates *Romeo and Juliet* to the Renaissance and other issues in history units to more modern works of literature such as *The Catcher in the Rye*, *The Hate U Give*, or *Of Mice and Men*. Throughout the year, students will work on interdisciplinary projects that combine historical analysis with usage and composition skills. Intended for students with good reading and writing skills, the course utilizes works of literature, textbooks, and supplementary sources. Students will write at least two major papers, a research paper for World History and a literary analysis for Literature, following similar research, writing, and revision procedures.

Sophomore English

Students entering grade ten take one of the following yearlong recommended courses according to the placement suggested in grade nine. This placement is based on a student's writing and reading ability, a disciplined work ethic, and their response to an essay prompt. All sophomores complete units on Shakespeare and public speaking, during which they prepare and deliver a 4-6-minute speech. All students will be prepared to take the MCAS.

Sophomore English

220	Full year	Credits: 5	Level: H
221	Full year	Credits: 5	Level: ACP
222	Full year	Credits: 5	Level: CP

In **Sophomore English**, students will increase their fundamental skills in reading and writing. Students do considerable work in sentence composing, grammar, usage, vocabulary, and analytic writing. They read from a variety of genres, study important background sources, and complete outside reading requirements. Representative texts include *A Midsummer Night's Dream*, *Antigone*, *Things Fall Apart*, *Homegoing*, *Exit West*, *Persepolis*, *In The Time of the Butterflies*, selected poetic works, and short stories. All students in this course will prepare and present to their class a 4-6-minute persuasive speech.

Global Communities English: Co-existence and Conflict (must be taken with **History 4240/1/2**)

2240	Full year	Credits: 5	Level: H
2241	Full year	Credits: 5	Level: ACP
2242	Full year	Credits: 5	Level: CP

What happens when cultures come together? From ancient empires, to European colonialism, to modern globalization, such cultural interactions have presented both promise and peril for the peoples involved. This smaller learning community seeks to help students examine this interaction through the study of world history, literature, ecology, and a world language. Students who join the smaller learning community should expect to learn the skills and content common in the subject area classes, but they will also be asked to connect the history, literature, ecology, and world languages to better understand the global community. All students in this course will prepare and present to their class a persuasive speech. All levels of Global classes meet together in one classroom.

New Media Communities: English (must be taken with **History 4250/1/2**)

2250	Full year	Credits: 5	Level: H
2251	Full year	Credits: 5	Level: ACP
2252	Full year	Credits: 5	Level: CP

How does the media affect our understanding of the world around us? And how can making media allow us to shape that world into the place we want it to be? New Media Communities is an interdisciplinary, project-based course that combines the traditional reading and writing of 10th grade English with media analysis and media production. In 10th grade, students will focus on media literacy skills and audio production, learning how to write, perform, and edit podcasts, audiobooks, and sound collages (in addition to miscellaneous smaller media-related projects). Best of all, NMC10 students will produce a 3-8 minute podcast for submission to the annual NPR Student Podcast Challenge, a national competition. Students will also use an anti-racist lens to study the literature of colonization and revolution, reading *Homegoing*, *Things Fall Apart*, *Exit West*, and *In The Time Of The Butterflies* to better understand the world we're living in today. If you are creative, collaborative, and want a uniquely participatory English/History experience, NMC is for you!

(This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.

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 11. Students will complete a major creative writing piece.

Junior English

230	Full year	Credits: 5	Level: H
231	Full year	Credits: 5	Level: ACP
232	Full year	Credits: 5	Level: CP

The core of **Junior English** is an exploration of American literature and the nature of the American experience. Texts may include works by Gene Luen Yang, Celeste Ng, F. Scott Fitzgerald, Zora Neale Hurston, Arthur Miller, Frederick Douglass, Sherman Alexie, and Tim O'Brien. Junior English builds upon principles of sentence composing, grammar, mechanics, and usage introduced in the sophomore year and introduces more sophisticated stylistic principles. Students acquire increased skill in longer analytic and comparative essays and the thematic treatment of literature. Students study vocabulary from specific vocabulary texts or from literature covered in class.

Global Communities: American Literature (must be taken with **History 4340/1/2**)

2340	Full year	Credits: 5	Level: H
2341	Full year	Credits: 5	Level: ACP
2342	Full year	Credits: 5	Level: CP

This course is one of the Interdisciplinary Studies courses and is a continuation of **Global Communities: Co-existence and Conflict** the tenth grade Global Communities course. It is open to other students on a space available basis.

New Media Communities: English (must be taken with **History 4350/1/2**)

2350	Full year	Credits: 5	Level: H
2351	Full year	Credits: 5	Level: ACP
2352	Full year	Credits: 5	Level: CP

How does American society "see" itself through the lens of its media? And how can creating images help us to shape America into a more just, equitable place? New Media Communities 11 is an interdisciplinary, project-based course that combines the traditional reading and writing of 11th grade English with media analysis and media production. In 11th grade, students will

focus on anti-racist media criticism and documentary filmmaking, learning how to write scripts, film and edit images, interview subjects, and collaborate efficiently with peers and adults. In addition to smaller media-production projects, all 11th grade NMC students will produce a final 8-12 minute documentary that will be submitted to local student film festivals. Students will celebrate the richness of the American voice in books like *Everything I Never Told You* and *Song of Solomon*, and judge the truth or fiction of the American Dream in documentary films like *Minding The Gap* and *The Queen of Versailles*. NMC11 is the culmination of work in the New Media program and will challenge its students to live up to the demands of citizenship in the 21st century.

Senior English

All students will select a year-long English course. The focus of each course is different (see listings below), but all contain four common elements: 1) Instruction in personal essay writing, generally toward the start of the year; 2) a multi-page essay synthesizing several texts, in third and fourth terms; 3) a creative piece for the Heintzelman creative writing contest, typically due in mid-March; and 4) a reflective essay, in mid-to-late May.

Senior Honors Courses

250 AP English Literature and Composition

Full year Credits: 5 Level: H

AP English Literature and Composition is a course for seniors who have been recommended to continue studying English at the honors level. The course encompasses the recommendations of the Advanced Placement program of the College Board. Classes discuss problems in mechanics and usage as they arise. The copious and detailed readings may include independent reading projects in the work of a single author and a major project in poetry. Representative titles include *Dubliners*, *Pride and Prejudice*, *Selected Stories of Franz Kafka*, *To the Lighthouse*, *Heart of Darkness*, *King Lear*, and selected essays by a variety of authors. Students will be expected to read an outside reading book each month.

260 AP English Language and Composition

Full year Credits: 5 Level: H

AP English Language and Composition is a course for students recommended to study English at the honors level. Students study advanced composition and analysis of language at a level equivalent to an introductory college course, with a focus on non-fiction and journalism. In the process of refining their awareness of language and the writer's craft, students will write publishable works and read established writers from a variety of eras and fields, from Jonathan Swift to John Hersey to Susan Orlean. The rigor of the course is designed to prepare students for the Advanced Placement examination in English Language and Composition; all enrolled students are encouraged to take that exam.

Senior Mixed-Level, ACP, and CP Courses

Contemporary Literature

241 Full year Credits: 5 Level: ACP
242 Full year Credits: 5 Level: CP

Senior English examines our complex modern world through the lens of various genres, including the graphic novel, non-fiction, the realistic novel, and fantasy. Readings will include high-interest texts from the 20th and 21st centuries, with possible texts including *Different Seasons* by Stephen King, *Slaughterhouse Five* by Kurt Vonnegut, *The Kite Runner* by Khaled Hosseini, or *Wench* by Dolan Perkins Valdes, as well as the traditional study of *Hamlet*. Students will continue their work on textual analysis as well as persuasive, personal, and creative writing. Critical thinking, effective rhetoric, and writing strategies also are important components of this course.

Shakespeare

2430 Full year Credits: 5 Level: H
242 Full year Credits: 5 Level: ACP

Shakespeare is a survey course that includes the study of William Shakespeare's life and times, his sonnets, and his plays. The year will include the reading and study of the tragedies *Hamlet* and *Othello*, in addition to at least one of his comedies and one of his history plays. The course will include both video performances of the plays and student performances, as well as close-reading discussions and analytical writing. There is no requirement for you to be an experienced and confident reader of Shakespeare already, only that you are willing to earnestly explore the sometimes challenging language of Shakespeare's poems and plays. Students taking the class for honors credit should expect to both read an additional play each term and listen to or read related scholarly criticism related to course reading.

Global Communities English: Words that Change the World

2440	Full year	Credits: 5	Level: H
2441	Full year	Credits: 5	Level: ACP
2442	Full year	Credits: 5	Level: CP

What is the most important word to you? What is the most important word in your community? In the world? In this class we will tackle words and ideas that have changed--and will continue to change--the world. We will examine these key ideas through novels, plays, poems, essays, films, speeches, and primary documents from people such as Nadine Gordimer, Shakespeare, Martin Luther King Jr., Gloria Naylor, and Ken Kesey. The ultimate purpose of the course will be to put these words into action through individual and group projects. The fourth quarter project will involve each student or small group of students picking their own key word, reading and reflecting on it, and then designing a series of activities around the word.

Horror and Science Fiction

2450	Full year	Credits: 5	Level: H
245	Full year	Credits: 5	Level: ACP

Horror challenges our basic assumptions about what we can count on; it subverts our complaisance and sense of safety. Science fiction brings us worlds far away or in the future that can tell us something about our own time and place-or warn us about self-destruction. Often, the two genres overlap. We will be reading about ancient monsters and H.P. Lovecraft; Shelley's *Frankenstein* and Ray Bradbury's *Fahrenheit 451*; Stephen King and Philip Dick; and many short stories including classics by Edgar Allen Poe, Nathaniel Hawthorne, Ambrose Bierce, Shirley Jackson, Clive Barker, and others. Students will write their own horror or sci-fi story.

Women in Literature

2460	Full year	Credits: 5	Level: H
2461	Full year	Credits: 5	Level: ACP

Women in Literature seeks to expand students' experience and engagement with literary works by and about women. Students learn to use an intersectional feminist and critical race theory lens through which to read works by Audre Lorde, Toni Morrison, Margaret Atwood, Charlotte Perkins Gilman, Weike Wang, Alison Bechdel and other women writers to examine self-identity, constructions of gender, and the nuances of language, voice and power. Students will write critical analyses of a variety of texts as well as explore their own lived experiences through class discussions and reflective writing. Critical and creative writing, reading, and thinking are central to the goals of this course.

Multicultural Literature

251	Full year	Credits: 5	Level: ACP
2512	Full year	Credits: 5	Level: CP

Multicultural Literature explores literature that represents a range of cultural experiences. The sharing of diverse perspectives and the honest exploration of race relations enrich classroom discussions of readings, which may include *The Mothers* by Britt Bennet, *Hotel on the Corner of Bitter and Sweet* by Jamie Ford, *Beloved* by Toni Morrison, *Wide Sargasso Sea* by Jean Rhys, and various essays by people of color. Similar to **Race, Class and Gender**, the goal of the course is for students to openly explore and to gain new perspectives and understanding of others and themselves.

African-American Literature

2520	Full year	Credits: 5	Level: H
2521	Full year	Credits: 5	Level: ACP
2522	Full year	Credits: 5	Level: CP

African-American Literature offers an intensive exploration and celebration of black artists and culture from the 19th century to today. Our focus is on reading, writing, and analysis of novels, memoirs, drama and poetry, but students will also be asked to complete various performance and creative projects along the way, in addition to a longer Senior Synthesis Essay in term four. This course will empower all students to think critically and take action in their local communities, using the lessons about race, history, and identity provided by the literature we read.

253 **Asian and Asian-American Literature**

Full year

Credits: 5

Level: ACP

What does it mean to be Asian or Asian American in America? What happens when East meets West? How does a person deal with and reconcile the crises of cultural and personal identities and the desire to pursue happiness in a world that is, despite becoming more diverse every day, intent on maintaining Asian Invisibility? **Asian and Asian-American Literature** will explore the origin myths that have shaped the identity of several Asian cultures and take students on a journey of self-discovery. Students will start with one of the world's most read and adapted stories (One of China's Four Classics of Literature - *Monkey - A Journey West*) and then move on to stories that tackle the Asian experience in America (*The Leavers*, *Interior Chinatown*, *No No Boy*, *Interpreter of Maladies*). Identity, Agency, and Immigration are just a few of the themes that will be tackled in lively discussions. Students will answer the question "who am I?" and ultimately gain the understanding that there is more that binds us than divides us.

Film Studies

2550

Full year

Credits: 5

Level: H

255

Full year

Credits: 5

Level: ACP

Film Studies a full-year course focused on analyzing and creating movies. Most of us view films as a form of entertainment, something to do on a Friday night. The study of film, however, provides an alternative history of the last century, as well as a challenging investigation of the ways in which we make sense of our own world and our own identities. During the course, we will examine the elements of film production, learn the basics of film "language," and explore the development of film style over the last 100 years. In addition, students will engage in extended analytical units on Alfred Hitchcock (*Vertigo*), Orson Welles (*Citizen Kane*) and Jean-Luc Godard (*Breathless*). The spiritual core of the course, however, is creative: over the year, we will produce *Hamlet* on film, we will learn how to write original screenplays, and we will work in small groups to produce 10-minute narrative shorts that will receive a public screening at the Newton South Film Festival. (Red carpet not included.)

English Electives

The English Department offers the following electives, which do not fulfill the English graduation requirement and can be taken only in addition to a regular English course.

261 **Introduction to Publications**
 * Semester Credits: 2½ Level: ACP
 ⑨ **Intro to Publications** will provide students with the basic writing, reporting, editing, and design skills they will need to work on the school newspapers, the yearbook, and the literary magazine. Students will learn the basics of journalism ethics, the First Amendment, and will write features, news, sports, and opinions pieces. The course introduces principles of design, photojournalism, and online reporting.

263 **Publications In Practice**
 * Semester Credits: 2½ Level: ACP
Publications In Practice is designed for editors of Regulus, Denebola, Leo, and The Lion's Roar to work on writing, editing, and creating their respective publications. Students with leadership roles on any South publication are strongly encouraged to enroll. One goal of the course is to increase collaboration among editors on all South publications in order to foster sharing of content, photos, graphics, and design ideas.

Creative Writing Workshop (Grades 10-12)
 264 Semester Credits: 2½ Level: ACP
 264Q Quarter Credits: 1¼ Level: ACP
 Do you ever wonder what it takes to tell a compelling story, or craft a powerful poem? If you read and write poetry, songs, plays, or fiction on your own— or you would like to try— then this course is for you. Emphasis will be on the ‘workshop model’ where students write, edit, share, and revise their work in a supportive, collaborative and joyful environment. Students will practice ‘reading like writers’, as well as writing for their readers.

Public Speaking and Presentation (Grades 9-12) (co-listed with Theatre)
 2760 Semester Credits: 2½ Level: H
 276 Semester Credits: 2½ Level: ACP
 * ⑨★ For a description, see Theatre.

Other Offerings

Writing Center
 295 Full year Credits: 2½ Level: P-F
 2951 Full year Credits: 1¼ Level: P-F
 Students in the **Writing Center** will meet once or twice a week with the Writing Center teacher or peer tutor to improve their writing skills. This class requires department head approval.

Writing Center Peer Tutor (Grades 11 - 12)
 296 Full year Credits: 2½ Level: P-F
 296F/S Semester Credits: 1¼ Level: P-F
Writing Center Peer Tutors, under the supervision of the Writing Center teacher, will work with students who come to the Writing Center for help with any writing problem from brainstorming a topic, to organizing an essay, to revising and proof-reading a creative piece. Students will receive training before each semester and are expected, above all, to maintain student confidentiality. **Teacher recommendation is required.**

English Teaching Assistant (Grades 11 - 12)
 298 Full year Credits: 1¼ Level: P-F
 298F/S Semester Credits: 5/8 Level: P-F
English Teaching Assistant offers juniors and seniors an opportunity to lead small group discussions and assist teachers in selected English courses, or to work with foreign language-speaking students on an individual basis. Students may also work as tutors twice a week in the Writing Center. **Teacher recommendation is required.** See page 69 for details on the role and expectations of teaching assistants.

Independent Study in English (Grades 11 - 12)
 299 Full year Credits: 5 Level: P-F
 299F/S Semester Credits: 2½ Level: P-F
Independent Study in English enables a limited number of students to create projects with specific teachers, with the approval of the department head. Examples are a reading or writing tutorial or an interdepartmental project. **Students and the teacher must submit their proposal to the department head.**

FAMILY AND CONSUMER SCIENCES

The Family and Consumer Sciences Department offers a variety of courses that meet the Arts requirement for graduation and are rooted in the Sciences, Arts, and Humanities. These integrative courses teach a variety of strategies to help students develop the knowledge and skills needed to maximize their potential in personal and work life. Courses are open to all students unless specifically stated otherwise.

Culinary Adventures

501 **Healthy Cooking and Baking**

* Quarters 1-4 Credits: 1¼ Level: ACP

Ⓞ This course provides students with the opportunity to cook a variety of healthy recipes while exploring the relationship between nutrition and health. Students learn by actively participating in cooking labs with an emphasis on nutritious ingredients. The course has been updated to include a focus on healthy baking. Topics covered include reading and understanding food labels and ingredient lists, modifying recipes to make them more nutrient-dense, and connecting diet to disease prevention.

502 **Sports Nutrition**

* Quarters 1-4 Credits: 1¼ Level: ACP

Ⓞ **Sports Nutrition** explores nutrition and its link to physical fitness, sports performance, and health promotion. Emphasis is on examining how much foods and fluids active people require, what types of food to eat and when. Students learn through class discussion, projects and interpretation of current nutrition information. Laboratory experience focuses on the preparation of nutritious meals and snacks that are specific to meeting the nutritional needs of active people. This course is offered jointly through the Family & Consumer Science and Wellness departments. It is open to students in all grades but may be taken for Wellness credit in Grades 11 and 12.

503 **International Cuisine of Asia, Africa, Australia & Europe**

* Quarters 1 & 2 Credits: 1¼ Level: ACP

Ⓞ Students study and cook with ingredients grown in specific regions to learn how they determine the basis for foods consumed by the people in these areas. Eating rituals and holiday feasts are also explored. Cultures and cuisines from the countries of Israel, India, Morocco, China, Japan, Korea, Indonesia, Australia, New Zealand, Hungary, and Russia are covered. Discussion of local Boston area specialty markets and food demonstrations by the Newton South community native to the countries studied are part of this course.

504 **International Cuisine of Europe & the Americas**

* Quarters 3 & 4 Credits: 1¼ Level: ACP

Ⓞ **International Cuisine** students learn about the cuisines of several cultures in **North America, Central America, South America, and Europe**. Students study and cook with the ingredients grown in specific regions to learn how they determine the basis for foods consumed by the people in these areas. Eating rituals and holiday feasts are also explored. Cultures and cuisines from the countries of Canada, Caribbean countries, Colombia, Peru, United Kingdom, France, Scandinavian Countries, Spain, Italy, Greece, Germany and Hungary are covered. Discussion of local Boston area specialty markets and food demonstrations by the Newton South community native to the countries studied are part of this course.

505 **Intermediate International Cuisine (Prerequisite: 503 or 504)**

* Quarters 1-4 Credits: 1¼ Level: ACP

Intermediate International Cuisine students will learn about culinary traditions from around the world while learning intermediate culinary techniques. This course will focus on a narrow selection of geographic regions to allow for in-depth study of each country's culinary history, its food rituals and the role that religion, geography and trade all play in its food ways. Recipes will emphasize intermediate cooking techniques, building on the skills students have acquired in their prior coursework in the department.

Ⓞ = course is open to ninth graders.

* = counts toward Fine, Performing, and Technical Arts credit.

Sustainable Agriculture & Food Systems

506 Semester Credits: 2½ Level: ACP

506Q Quarter 1 & 4 Credits: 1¼ Level: ACP

- * **Sustainable Agriculture & Food Systems** will address the environmental, ecological, social and economic aspects of food and agriculture, from farm to table and beyond. Acting as the stewards of the NSHS Organic Garden, students will manage all aspects of its operation, gaining hands-on farming experience outside of the classroom and exploring their personal connection to food and the land while developing a solid foundation in the agricultural sciences and organic farming practices. In the classroom, students will critically analyze the state of local and global food systems and their connections to issues of public policy, health, social justice and waste management. Students will apply their learning to projects designed to help the school develop more sustainable practices such as incorporating school-grown produce in school lunches, expanding the building's recycling and composting program, reintroducing native plants to school grounds, assisting in the implementation of the "Green Trail", or collecting and analyzing data from the school's solar panels. **This is a hands-on course that includes outdoor activities.**

Culinary Arts Exploratory

507 Semester Credits: 2½ Level: ACP

- * **Culinary Arts Exploratory** This course is designed for students who want to acquire the fundamental food preparation techniques central to all areas of the food service business. Students are introduced to quantity food preparation in the areas of baking, pastry and cold and hot meals. Students will rotate through food preparation stations and actively participate in the business of food service. Emphasis is on learning basic culinary skills, and kitchen sanitation and safety practices that align with the food service industry. Students will gain practical experience while preparing and serving meals in the "Lion's Den Bistro," Newton South's student run restaurant.

Culinary Arts & Foodservice Management (Prerequisite: Culinary Arts Exploratory)

508 Semester Credits: 2½ Level: ACP

* Students will build on skills gained in Culinary Arts Exploratory while working alongside first year students in support of the Lions' Den Bistro. Emphasis is on acquiring intermediate and advanced culinary skills and developing a foundational understanding of foodservice management best practices including food procurement, food cost projections, seasonal menu-planning and restaurant marketing. Enrollment requires teacher and department head approval.

Sustainable Agriculture & Food Systems Independent Study (Prerequisite: Sustainable Agriculture & Food Systems)

509 Semester Credits: 2½ Level: ACP

509Q Quarters 1-4 Credits: 1¼ Level: ACP

Students continue to manage the activities of the Newton South Farm and pursue projects relevant to sustainable agriculture 2 times per week. Students are required to complete a capstone research paper or project. Enrollment requires teacher and department head approval.

Fashion, Clothing, Design and Construction

Fashion, Clothing, Design and Construction 1

511 Semester Credits: 2½ Level: ACP

- * **Fashion, Clothing, Design and Construction 1** Students will learn the skills necessary for hand stitching as well machine sewing, gain knowledge of different types of fabric, sketching, pattern design and reading, altering and mending clothing. We will look at the garment industry and fashion trends. Students will create personalized clothing and craft projects, one of which will be an up-cycling project. This class is an opportunity for students to allow their creativity to flourish! Students will progress at their own level of challenge and expertise.

Fashion, Clothing, Design and Construction 2 (Prerequisite: Fashion, Clothing, Design and Construction 1)

512 Semester Credits: 2½ Level: ACP

- * **Fashion, Clothing, Design and Construction 2** is a second level design course that focuses on creating and constructing more detailed and intricate fashion designs. Students will have the opportunity to sketch and construct original designs or use more advanced commercial patterns. Students will begin to master the application of advanced design and sewing techniques.

Fashion, Clothing, Design and Construction 3 (Prerequisite: Fashion, Clothing, Design and Construction 2)

513 Semester Credits: 2½ Level: ACP

* **Fashion, Clothing, Design and Construction 3** is a third level design course extending and building upon the concepts taught in Fashion, Clothing, Design and Construction 1 and 2.

Advanced Fashion Projects/Teaching Assistant			
519	Full year	Credits: 1¼	Level: P-F
519F/S	Semester	Credits: 5/8	Level: P-F
Enrollment requires department head approval. See page 69 for details on the role and expectations of teaching assistants Human Development			
521 Child Development			
*	Semester	Credits: 2½	Level: ACP
Ⓞ	Child Development focuses on the conditions that influence human growth and development from before birth to age five. Visits to class by parents with infants and toddlers help students to analyze the social, emotional, physical and cognitive development of the young child. Current issues affecting children in American society are presented, and students will learn about career opportunities in child-related fields. Students will write, create, and perform their own original puppet shows for preschool-aged children in the community. Students do not work regularly in the preschool classroom. Students interested in Early Childhood Education are encouraged to take this class as a pre-requisite.		
524 Career Exploration and Development			
	Quarters 1-4	Credits: 1¼	Level: ACP
Ⓞ	Career Exploration and Development is designed to provide students with a foundation for learning about various career opportunities and explore future paths. To assist students in making career choices, career assessment and decision-making tools will be used in the classroom. Students will learn professional skills such as resume writing, interviewing techniques, and how to apply for jobs. Additionally, students will discuss their strengths and purpose. Guest speakers from education, social work, business, medicine, law, sciences and the arts will be invited into the classroom to discuss career options and paths.		
532 Early Childhood Education Exploratory 1 (Grades 10 - 12)			
	Semester	Credits: 2½	Level: ACP
*	Early Childhood Education Exploratory is a semester-based elective designed for students who would like to explore the principles of early childhood education and how young children learn. Students have the opportunity to work with preschool children in a classroom lab school setting. This course includes the reading and discussion of theories of human development along with practical work experience with preschool children in the Newton South Preschool Program. These students will act as interns in the preschool as well as meet additional course requirements.		
533 Early Childhood Education Exploratory 2 (Prerequisite: Early Childhood Education Exploratory 1)			
	Semester	Credits: 2½-5	Level: ACP
	Early Childhood Education Exploratory 2 is by approval of department head. Students continue to act as interns in the Newton South Preschool. Students participate in an online Schoology course and complete all assignments including discussion boards, child observations, and preschool portfolios. Occasional Flex block meetings required.		
540 Early Childhood Independent Study (Prerequisite: Early Childhood Education Exploratory)			
	Full year	Credits: 2½-5	Level: ACP
	Early Childhood Advanced Independent Study is by approval of department head. Students continue to act as interns 2 to 4 times per week in the Newton South Preschool. Students research topics relevant to early childhood education and complete a term research paper. This class is only open to seniors unless given approval by the department head.		
541 Early Childhood Education Minor (Prerequisites: Child Development and Early Childhood Education Exploratory)			
*	Full year	Credits: 10	Level: ACP
	Early Childhood Education Minor is by approval of the department head. Students continue their study of early childhood education and increase their time as student interns in the Newton South Preschool Program. Students will take on more responsibility in the preschool classroom and commit to work after school in the preschool program.		
542 Early Childhood Education Major (Prerequisites: Child Development and Early Childhood Education Exploratory)			
*	Grade 12 Only, must meet all graduation requirements)		
	Full year	Credits: 15	Level: ACP
	The Early Childhood Education Major combines academic and practical work experience in the Newton South Preschool Program to provide a step-by-step approach to the everyday care and teaching of young children. Students apply the knowledge of child development to evaluate early childhood programs, better understand and guide young children, create safe and healthy environments, and plan developmentally appropriate curriculum. The Department of Early Education and Care Teacher License (formerly OCCS) is available to students achieving a grade of B or better.		

FINE & PERFORMING ARTS (Art, Music & Theatre courses)

Fine & Performing Arts Certificate

Newton South offers the opportunity for students to earn a Fine & Performing Arts Certificate demonstrating a commitment to an in-depth and diverse study of the Arts. Students who wish to commit to this program will enroll in a sequence of art, music, and/or theatre classes starting in 9th grade that specialize in a discipline: visual art, music, or theatre. This certificate also has an expectation of exploration outside of your chosen discipline and a commitment to community service. Applications for the certificate will be reviewed and awarded in the fall of senior year.

<p><i>Visual Art Certificate Electives –15 Visual Arts Credits, 5 additional credits in any F&PA class & a demonstrated commitment to community.</i></p> <p>Courses 020 through 099. Community: TA, Work-Study, Club Leader, Community Service Coordinator (ex. Make Art Day, Empty Bowls, Media PR).</p>	<p><i>Music Certificate – 20 Music Credits, 7 1/2 additional credits in any F&PA class & a demonstrated commitment to community.</i></p> <p>Courses 701 through 758 Community: TA, Work-Study, Club Leader, Community Service Coordinator (ex. Festies, Concert Coordinator).</p>	<p><i>Theatre Certificate - 10 Credits, 5 additional credits in any F&PA class & a demonstrated commitment to community.</i></p> <p>Courses 270 through 279 Community: TA, Work-Study, South Stage All-Access, Children of the Candy Corn, participation in South Stage.</p>
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Fine & Performing Arts: ART

Classes in the Art Department endeavor to make the lives of students ever more fascinating by inspiring a determination to develop the skills, curiosity and courage to give voice to their artistic vision. Our Curriculum enables kids to develop the technical and imaginative skills to become active participants in our creative community and beyond. All classes with * count towards Fine, Performing, and Technical Arts credit.

Art Foundations

For students who are new to art (9-12 grade)

Your journey in the art department starts with our foundation courses. Students can choose from 2D & 3D Art Foundations and the Media Lab Foundations, or both. Foundations Courses can also be taken concurrently with Exploration classes and all Media Lab classes. Foundation courses are designed to give students a sampling of our core disciplines while learning the essentials of visual communication. All grades are welcome. Foundation courses are prerequisites for all other art courses. **daVinci** - 10th grade students who have not previously taken Foundations should enroll in either 020 or 090. **daVinci** students who have completed Foundations in 9th grade should enroll in an “Explorations” course that interests them.

Foundation Courses

020 Art Foundations: 2-D meets 3-D

* Semester Credits: 2½ Level: ACP

Ⓢ **Art Foundations** is an ideal starting point for any student interested in 2-D (Photo, Drawing) or 3-D Art (Sculpture, Ceramics). The semester is split in half: one half of the semester is spent exploring 3-D Art and the other half is spent exploring 2-D Art. The course focuses on the fundamentals of any art-making and equips students with tools necessary to advance to any next level art class. You can register for this course by itself or pair it with Foundations: Media Arts.

090 Foundations: Media Arts

* Semester Credits: 2½ Level: ACP

J Foundations: Media Arts Foundations gives students who are new to the Media Lab the opportunity to explore a wide range of media arts. The course will focus on the fundamentals of art and design through the lens of digital media. Students will learn the basics of vector drawing, digital imaging, and 3D modeling. This course will prepare students for further Media Lab coursework.

Studio Art Courses are open to 10-12th grade, or can be taken concurrently with an enrollment in Foundations.

Studio Art

Studio Art Courses give students the opportunity to explore their observed and imagined worlds through the media of drawing, painting, printmaking and assemblage. Studio Art courses layer technical and conceptual skills at each level; these courses are appropriate for those seeking a creative community as well as those who wish to develop a portfolio of work for college or personal use.

- ❖ **2D Explorations** (Prerequisite: **Art Foundations** or **concurrent enrollment in Art Foundations**)
- | | | | |
|-----|----------|-------------|------------|
| 021 | Semester | Credits: 2½ | Level: ACP |
|-----|----------|-------------|------------|
- * In this class, students learn fundamental drawing techniques and discover the expressive use of drawing and painting materials. Color theory, composition, perspective, self-portraiture and mixed media are some of the concepts that will be explored in a fun and creative atmosphere. 2D mediums covered in this course include but are not limited to graphite, collage, and painting.
- 2D Studio** (Prerequisite: Foundations Course, or **2D Explorations**)
- | | | | |
|--------|-----------|-------------|------------|
| 022 | Full year | Credits: 5 | Level: ACP |
| 022F/S | Semester | Credits: 2½ | Level: ACP |
- * **2D Studio** is designed to give students a structured environment to explore topics of personal interest while using materials and methods learned in 2D Explorations. Projects are structured yet open ended for students to find unique solutions to various visual problems. The student can choose to do an in-depth study on a material, or to try a vast range of material (e.g. charcoal, oil pastel, watercolor, colored pencils, ink, printmaking, etc.).
Students are able to enroll in this course twice - as there is a rotating curriculum.
- * 025 **2D Honors Art** (Prerequisite: **2D Studio**)
- | | | | |
|--|-----------|------------|----------|
| | Full year | Credits: 5 | Level: H |
|--|-----------|------------|----------|
- 2D Honors Art** is a fun and structured full time course for dedicated art students who are interested in refining their drawing and painting skills, while focusing on the figure, and learning abstraction. In-depth material investigations and a supportive environment enable students to express emotions, opinions and complex ideas using visual language. The use of arts terminology and critiques are also employed by students to discuss and improve their work. At the conclusion of this course students will have a collection of work that explores their own opinions and ideas, which will serve as a great launching pad for a possible supplementary portfolio.
- 026 **AP Studio Art: Drawing** (Prerequisite: **Honors Art** or Department Head approval)
- | | | | |
|--|-----------|------------|----------|
| | Full year | Credits: 5 | Level: H |
|--|-----------|------------|----------|
- AP Studio Art: Drawing** is a challenging course intended for serious art students who wish to prepare a portfolio of artwork to submit with college applications, and for students with an ongoing interest in art. The focus of this course is on the creation of a portfolio that reflects excellence in three parts: breadth of media usage, idea investigation, and overall quality. The creation of this portfolio is majorly student driven and explores topics of personal interest respective to each student. While working in a supportive studio atmosphere on their portfolios, students hear presentations from leading college art programs, learn how to professionally photograph their work, and learn how to organize and hang an exhibition of artwork.
- 2-D Art Teaching Assistant** (Prerequisite: **Honors Art** or **2D Studio**)
- | | | | |
|--------|-----------|--------------|------------|
| 028 | Full year | Credits: 1¼ | Level: P-F |
| 028F/S | Semester | Credits: 5/8 | Level: P-F |
- 2-D Art Teaching Assistant** election is subject to the approval of instructor and department head. See page 69 for details on the role and expectations of teaching assistants.
- Work-Study in 2-D Art**
- | | | | |
|--------|-----------|------------|------------|
| 030 | Full year | Credits: + | Level: P-F |
| 030F/S | Semester | Credits: + | Level: P-F |
- Work-Study in 2-D Art** provides students with the opportunity to gain experience in maintaining a studio space, assisting students when needed, such as photographing artwork and other related jobs like creating graphics for the F&PA. Students must have taken or be taking a 2-D art course. Enrollment is only with the approval of the department head.

Ⓣ = course is open to ninth graders.

* = counts toward Fine, Performing, and Technical Arts credit.

Sculpture

3D Art Courses give students the opportunity to explore and use a variety of materials and sculptural methods to express unique Ideas. In 3D courses students will build a technical footing and explore a wide variety of sculptural concepts, while also connecting their work to the work of artists from different eras and cultures. These courses are great for those wishing to experience expressive freedom through making, and for those who want to better understand why and how humans make the art that we make.

❖ **3D Explorations** (Prerequisite: **Art Foundations** or **concurrent enrollment in Art Foundations**)
 041 Semester Credits: 2½ Level: ACP

In 3D Explorations, students will learn to express concepts and narratives through three dimensional sculptural media. This course is designed to broaden students' technical ability with diverse mediums such as paper mache, wire, assemblage, found objects and glass. We will emphasize the design process through planning and ideation, while introducing students to the expressive freedom of building with physical objects and materials.

❖ **3D Studio** (Prerequisite: **3D Explorations**)
 042 Full year Credits: 5 Level: ACP
 042S/F Semester Credits: 2½ Level: ACP

* **3D Studio** Builds on skills introduced in 3D Explorations. In this class, students will develop and refine their individual artistic voices through three dimensional sculptural media. Working with paper mache, wire, assemblage, found objects and glass, students will be challenged to create sculpture which expresses concepts, narratives and individual perspectives. They will research the works of sculptors from different eras and cultures, and create art which responds to what they observe.

056 **3D Honors** (Prerequisite: **3D Studio**)
 * Full year Credit: 5 Level: H

In this course students will focus on expressing unique sculptural ideas and concepts, employing tools and techniques mastered in previous courses. Materials used in 3D Honors will range from found materials to metals/enamel and glass. Projects will also vary in scale from personal objects to community installations. Through research and making we will build connections between our own work and sculptors from different eras and cultures.

057 **AP 3-D Design** (Prerequisite: **Honors 3-D Art**)
 Full year Credit: 5 Level: H

AP 3-D Design is the exploration of three-dimensional forms through a variety of media that emphasizes individual expression, deepening artistic practice and development of mastery in specific areas of art-making, including concept, composition, drawing and design. Students enrolled in this course will build on existing art-making skills (students enrolling in AP Studio Art come from both Honors 3D and Honors Ceramics) as they further develop their personal artistic voice, problem solving skills and understanding of the elements of art and principles of design. Students will engage in individual and peer critiques and write reflectively about their art-making experiences in order to expand their visual thinking, develop skills and participate in critical analysis. This course culminates with an extensive portfolio and the ability to self select into the AP Exam.

3D Teaching Assistant (Prerequisite: **Mixed Media 1**)
 058 Full year Credits: 1¼ Level: P-F
 058F/S Semester Credits: 5/8 Level: P-F

Mixed Media Teaching Assistant is for seniors only and election is subject to the approval of instructor and department head. See page 69 for details on the role and expectations of teaching assistants.

Ceramics

Ceramics begins with hand-building techniques, making simple forms using pinch, coil, and slab methods. New tools, equipment, and techniques are introduced each term. Each student has the space to discover his or her connection and ability with clay, working on craftsmanship and developing aesthetic awareness of three-dimensional work through the medium of clay. Students are graded individually on attendance, commitment, completed projects, craftsmanship, and participation.

❖ **Ceramics Explorations** (Prerequisite: **Art Foundations** or **concurrent enrollment in Art Foundations**)
 061 Semester Credits: 2½ Level: ACP

Ceramics Explorations focuses on developing strong construction skills in clay through hand building techniques and builds an awareness of three-dimensional design. Demonstrations and assigned projects will also explore various high and low fire glazing possibilities as we look at why people create.

Ceramics Studio (Prerequisite: Ceramics Explorations)

065	Full year	Credits:5	Level: ACP
065F/S	Semester	Credits: 2½	Level: ACP

Ceramics Studio can be taken for multiple years' credit, and is designed to allow students to explore their own personal areas of interest while also working through guided assignments. The curriculum will focus on additional training in all hand building and wheel throwing techniques. This class will require more independent thought, creativity and a willingness to explore how people use art to make meaning of their world.

067 Honors Ceramics (Prerequisite: Ceramics Studio)

Full year	Credit: 5	Level: H
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Honors Ceramics is an in-depth exploration of 3-D forms for advanced potters and hand-builders. Classwork will explore the historical evolution of 3-D forms and teach students how to manipulate clay to take on a personality of its own. By the end of the year, students will have produced a portfolio of advanced building and glazing techniques that explore: advanced 3-D forms, narrative work, and conceptual work. One major homework project will be assigned each term.

057 AP 3-D Design (Prerequisite: Honors Ceramics)

Full year	Credit: 5	Level: H
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AP 3-D Design is the exploration of three-dimensional forms through a variety of media that emphasizes individual expression, deepening artistic practice and development of mastery in specific areas of art-making, including concept, composition, drawing and design. Students enrolled in this course will build on existing art-making skills (students enrolling in AP Studio Art come from both Honors 3D and Honors Ceramics) as they further develop their personal artistic voice, problem solving skills and understanding of the elements of art and principles of design. Students will engage in individual and peer critiques and write reflectively about their art-making experiences in order to expand their visual thinking, develop skills and participate in critical analysis. This course culminates with an extensive portfolio and the ability to self select into the AP Exam.

Ceramics Teaching Assistant

068	Full year	Credits: 1¼	Level: P-F
068F/S	Semester	Credits: 5/8	Level: P-F

Ceramics Teaching Assistant is for seniors only and enrollment is subject to the approval of the instructor and department head. See page 69 for details on the role and expectations of teaching assistants.

Work-Study in Ceramics

070	Full Year	Credits: +	Level: P-F
070F/S	Semester	Credits: +	Level: P-F

Work-Study in Ceramics provides students with on-the-job supervision in the ceramics studio. Enrollment is only with the approval of the department head. Each student must submit a copy of his/her social security card to be hired.
+ = To be arranged by the department.

Photography

In a world saturated with images, students in the photography program learn the difference between looking and seeing by experiencing the world through a viewfinder. Student photographers work in a community studio space where they develop the skills to frame, edit, interpret, print, and display their images. Starting in **Art Foundations**, students experience an introduction to making photos and seeing through a viewfinder. In **Photography Exploration**, students are exposed to different types of photography through various projects, and experience an introduction to editing software. In **Photo Studio**, students build off of previous courses and expand on editing skills. **Honors Photography** is focused on portfolio building, explores alternative processes, and focuses on student voice. Students are able to enroll in this course twice - as there is a rotating curriculum.

Photography Exploration

081	Semester	Credits: 2½	Level: ACP
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* Building on previous knowledge from the Art Foundations program, students continue building on their skills in photography. Students will begin to use photography to explore the world in personal and expressive ways in each project. Students will be photographing both at home and in class. Projects will emphasize composition, camera techniques, and personal interests. Students will view and discuss the work of contemporary photographers and other artists.

Photography Studio (Prerequisite: Photography Explorations)

082	Full year	Credits:5	Level: ACP
082F/S	Semester	Credits: 2½	Level: ACP

In Photography Studio, students focus on developing their personal voice in each project. Students will advance their knowledge of editing software to enhance their photography. This course will introduce students to DSLR cameras. The class will consist of photo projects, technical demonstrations, viewing the work of contemporary artists, critiques, and discussions. Students will be required to photograph in class and at home. This course has a rotating curriculum, so students can enroll more than once.

Honors Photography (Grades 11-12, Prerequisite: Photography Studio)

084	Full year	Credits: 5	Level: H
084F/S	Semester	Credits: 2½	Level: H

Students taking Honors Photography will be working in a faster-paced creative photography environment, allowing them to develop a more advanced knowledge of conceptual and aesthetic components of photography. Students will continue building on their editing skills, as well as be introduced to alternative photography practices used in contemporary application. Students have the opportunity to exhibit their work in the school. Most of the projects will consist of both homework and in-class assignments. The course has a rotating curriculum, so students can enroll more than once.

Work-Study in Photography

087	Full year	Credits: +	Level: P-F
087F/S	Semester	Credits: +	Level: P-F

Work-Study in Photography provides students with the opportunity to gain experience in maintaining a studio space, assisting students when needed in the Photography studio and Darkroom. Students must be current Photography students. Enrollment is only with the approval of the teacher and the department head.

+ = To be arranged by the department

Photography Teaching Assistant

088	Full year	Credits: 1¼	Level: P-F
088F/S	Semester	Credits: 5/8	Level: P-F

Photography Teaching Assistant is subject to the approval of the instructor and the department head. See page 69 for details on the role and expectations of teaching assistants.

Media Arts in the Media Lab

The Media Lab is a digital art studio where students work individually and collaboratively to explore digital media. Students will express their creativity and strengthen their software knowledge while developing observational and analytical skills. The Media Arts Foundations course provides students with a general introduction to digital imaging, vector drawing, and 3D modeling. Courses in the Explorations and Studio levels are designed to build on Foundation level skills, offering additional opportunities and challenges to advance their digital media skills. The Media Studio courses are offered at ACP and Honors levels, with mentoring opportunities for advanced students. Studio level courses require Foundations plus one other Media Lab course as prerequisites.

090	Foundations: Media Arts		
*	Semester	Credits: 2½	Level: ACP

- ☉ **Media Arts Foundations** gives students who are new to the Media Lab the opportunity to explore a wide range of media arts. The course will focus on the fundamentals of art and design through the lens of digital media. Students will learn the basics of vector drawing, digital imaging, and 3D modeling. This course will prepare students for further Media Lab coursework.

091	Media Arts Exploration (Pre-requisite: Foundations: Media Arts)		
	Semester	Credits: 2½	Level: ACP

- ☉ **Media Arts Explorations** is a studio course for students who want to further develop their digital art skills. The elements and principles of art and design will be explored using both 2D and 3D digital art media to create imaging, animation, and 3D modeling. Students will use a variety of programs including the Adobe Creative Cloud and Cinema4D to explore new methods of artistic expression and visual communication. Projects may include digital imaging, motion graphics, character animation, and stop motion animation.

Media Arts Studio (Prerequisite: Foundations: Media Arts)

0920	Semester	Credits: 2½	Level: H
092	Semester	Credits: 2½	Level: ACP

Media Arts Studio ACP enables students with Media Lab experience (Foundations + Explorations) to continue to build their creative repertoire using a range of offerings in the Media Lab. Students can build on their existing software skills, or explore new programs to acquire new skills. This course emphasizes creative problem solving, visual communication, and artistic expression. **Media Arts Studio Honors** focuses on developing expertise in one or more media and in learning how to integrate various media for the purpose of visual communication and expression. Projects can be individual or group-based in this student-driven curriculum. Students need to complete Media Lab Studio ACP in order to take an Honors level course.

Video Studio

0970	Semester	Credits: 2½	Level: H	Returning students only
097	Semester	Credits: 2½	Level: ACP	

*

In **Video Studio**, students learn how to communicate with an audience using recorded images and sound. Students develop techniques for use in pre-production, shooting, on-screen and voice-over performance, and post-production. Projects include music videos, short films, documentaries, news segments, and promotional videos. Returning students may work independently on individual or group video projects for honors credit with instructor approval. Note: this is the prerequisite course for CTE Television and Video at NNHS. *Consider requesting this course with Musical Theatre or Screen Acting & Production.*

Media Teaching Assistant

099	Full Year	Credits 1 ¼	Level: P-F
099F/S	Semester	Credits: 5/8	Level: P-F

Media Teaching Assistant offers students the opportunity to assist in media classes and work at an advanced level in digital media. Permission of the instructor is required. See page 69 for details on the role and expectations of teaching assistants

Fine & Performing Arts: MUSIC

The Music Department offers a wide variety of courses. No specific sequence is required, but students planning serious study should attempt to include at least one core performance class each year: Chorus, Band or Orchestra. In our new school year format of semesters, there is a new opportunity to pair two courses together to both build breadth of musical experience and in-depth study. Choose courses that you feel would pair well to meet your goals as a musician. Don't play an instrument yet? Check out courses like Blues to Hip Hop and Music Technology, really great ways to get involved. Entry into Honors sections requires the signature of the instructor and approval of the Department Head. Honors sections of performance ensembles will include completion of two projects per semester as specified by the instructor as well as an additional meeting once per week.

Music Theory

AP Music Theory is one course, split into two years. Students will need both years to be ready to sit for the exam. Theory I and Theory II will run in alternating years as semester courses.

701 AP Music Theory I (next offered in 2022-2023)

*	Semester	Credits: 2½	Level: H
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Ⓣ AP Music Theory I is designed for students with a strong musical background who would like to better understand how music is constructed. The course reviews the fundamentals of music (clefs, meter, and notation) and proceeds through the study of intervals, all scales, chord identification, and ear training through the use of computers and textbooks. This course is the first sequence of material in the AP Music Theory curriculum. This class is offered every other year.

702 AP Music Theory II (offered in 2021-2022. Prerequisite: AP Music Theory I or equivalent)

*	Semester	Credits: 2½	Level: H
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AP Music Theory II is designed for advanced musicians. The course continues the preparation of students for the College Board Advanced Placement examination. Requires successful completion of AP Music Theory I or permission of the Department Head. This class is offered every other year.

703 **Jazz Theory**

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Semester Credits: 2½ Level: ACP

In **Jazz Theory** students will study jazz harmony as it relates to improvisation as well as composition and arranging. The course will begin by exploring theory on paper while putting some of the scales into practice with hands on work. Later in the semester, arranging for small group and big bands will be covered and performed.

Music Technology and Production

711 **Music Technology and Composition**

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Semester Credits: 2½ Level: ACP

Ⓢ **Music Technology and Composition** is for the person who appreciates music and is curious about how to make their own beats. This course teaches students to use music sequencing software (Logic Pro) to create original music in many different styles including contemporary commercial music, blues, and world music. Students will learn basic music production techniques including effects, sampling, audio tracks and remixing. Students will learn to create their own MP3s while discovering the core concepts of music: Rhythm, Harmony, Melody, Improvisation, Form, and Composition. The course includes use of computer sequencing software, mixers, effects processors, and current and vintage recording equipment. Taking this course as a semester option? Consider pairing this request with Blues to Hip Hop, Vocal Ensemble, or Musical Theatre.

Music Production (Prerequisite: Music Technology and Composition)

7130 Semester Credits: 2½ Level: H
713 Semester Credits: 2½ Level: ACP

Music Production deals specifically with advanced composition and recording techniques. Emphasis is placed on the creation of original songs and instrumental compositions as well as the correct use of sound gear such as amplifiers, microphones, studio effects, mixers and recorders. Music production techniques from past decades as well as current trends will be studied. Students will also use on-line resources create and share their own MP3s, and collaborate with other Newton South musicians. Prerequisite: **Music Technology and Composition** and permission of the instructor. Enrollment is limited. This course may be repeated with permission of instructor.

* **Advanced Music Production and Songwriting (Prerequisite: Music Production or AP Music Theory I)**

715 Full Year Credits: 5 Level: H
715F/S Semester Credits: 2 1/2 Level: H

Advanced Music Production and Songwriting explores to process of creating, performing, and recording a song. Students will explore song structure, lyric writing, and recording techniques to create an original album/playlist in collaboration with other musicians. This course can be taken again for credit with permission of the instructor.

Instrumental Music

718 **Ukulele**

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Quarter Credits: 1¼ Level: ACP

Ⓢ **Ukulele** is a one-quarter course for beginning ukulele. This class will teach you the basics of music reading, chord symbols and simple song forms. NO prior music experience necessary, just an open mind and a willingness to have some fun! This is a great course to request with your wellness requirement.

719 **Ukulele 2 (Prerequisite: Ukulele)**

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Semester Credits: 2 ½ Level: ACP

Ⓢ **Ukulele 2** will focus on expanding chordal knowledge, finger picking, scales and melodic (single note) playing. Repertoire will include material selected by the instructor and pieces chosen by students. Classes will occasionally include informal performances designed to build the school community and the capacity of the student for casual performance.

Symphonic Band (Grades 9 - 12)

7220	Full year	Credits: 5	Level: H
722	Full year	Credits: 5	Level: ACP

- * **Symphonic Band** is a large performing group for winds, brass, and percussion. A widerange of music literature is performed from the Renaissance to twentieth century music in community, exchange, and tour concerts. All woodwind, brass, and percussion players are encouraged to elect Symphonic Band, as it is the core music group for these instrumentalists. Students electing the Honors course are expected to attend all rehearsals and concerts during and outside regular school hours. Additionally, students electing this course for Honors credit are expected to attend an additional rehearsal once per week.

String Orchestra (Grades 9 - 12)

7240	Full year	Credits: 5	Level: H
724	Full year	Credits: 5	Level: ACP

- * **String Orchestra** features the preparation of traditional, classical, and contemporary music for concerts, school and combines with selected members of the Symphonic Band two times per week to form the Newton South High School Orchestra. Students electing this Honors course are expected to attend all rehearsals and concerts during and outside regular school hours.

Chamber Ensemble (Grades 9 - 12)

726	Semester	Credits: 2½	Level: ACP
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For instrumentalists enrolled in Symphonic Band. Students will be placed into groups of two, three or four depending on course enrollment. Instrumentalists will also have the opportunity to join with pianists to perform solo works such as sonatas or concertos. Ensembles will rehearse music of various style periods and perform at concerts throughout the year. Enrollment in Symphonic Band is mandatory.

Sonata Duo (Grades 9-12)

	Semester	Credits: 2½	Level: ACP
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- * For pianists! Join students in the chamber ensemble class and perform duos such as sonatas, or concertos. Depending on enrollment there may be opportunities for trios and more. Music options will range from the Renaissance to the present. The small ensembles may perform in school or at various concert and community opportunities. We will have a beautiful baby grand piano to rehearse with and other various upright pianos for practice.

Select Wind Ensemble*

728	Full year	Credits: 2½	Level: H
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* **Select Wind Ensemble** is for Symphonic Band members who want musical and technical challenge along with a chance to study additional repertoire at grade levels 5 and 6. This group is for winds, brass, and percussion players who are currently enrolled in Symphonic Band. *The course will meet Wednesday mornings before school and Monday evening for one hour. Students electing this Honors course are expected to attend all rehearsals and concerts during and outside regular school hours. Enrollment is by audition/permission of the instructor.

Jazz Improvisation

Jazz Improvisation courses are for students who have developed an advanced technique on their instruments and are prepared for solo performance.

Jazz Improvisation Beginner

731	Full year	Credits: 5	Level: ACP
731F/S	Semester	Credits: 2½	Level: ACP

- * **Jazz Improvisation Beginner** is an introduction to all Jazz Improvisation classes. This course will familiarize students with chords and chord scales in all keys through written study, ear training, and playing. Students perform and compose jazz standards and contemporary music styles in the small group ensemble with an emphasis on solo improvisation. Students are immersed in a comprehensive study of the rhythmic language of jazz. Harmonically, students begin with a study of the blues form as it relates to jazz, and continue work on chord/scale theory to include an understanding of ii-V progressions. All instrumentalists (including strings and non-traditional jazz instruments) are welcome. Prerequisite: students should be able to execute all 12 major scales from memory. Taking this course as a semester option? *Consider requesting this course with Lab Jazz, Blues to Hip Hop, or Musical Theatre.*

Jazz Improvisation Advanced (Prerequisite: permission of instructor)

734 Full year Credits: 5 Level: ACP
734F/S Semester Credits: 2½ Level: ACP

Students continue study of the blues and ii-V progressions, with introduction more advanced chord changes. In addition to continuing to develop techniques and understanding jazz theory, there will be an emphasis in playing in all 12 keys. Students continue to develop compositional skills. Permission of instructor is required. Taking this course as a semester option? Consider pairing this request with Lab Jazz, Blues to Hip Hop, or Musical Theatre.

735 **Honors Jazz Combo*** (Prerequisite: **Jazz Improvisation Advanced** or permission of instructor)

Full year Credits: 3¾ Level: H

Honors Jazz Combo is for select students who are seeking advanced study of Jazz improvisation. Enrollment is limited and by audition only; students must also be a member of the jazz ensemble. Auditions will take place in the fourth quarter. Jazz Ensemble instrumentation will be filled before Jazz Combo instrumentation. *This group rehearses outside the school day. Students in this course are expected to attend all rehearsals and concerts during and outside regular school hours.

Jazz Ensembles

Jazz Ensembles are for students interested in the studying the language of Jazz. No improvisation is required.

736 **Lab Jazz Ensemble** (Grades 9 - 12)

Semester Credits: 2½ Level: ACP

Ⓢ **Lab Jazz Ensemble** is the main jazz group open to all instrumentalists who wish to perform music of the big band tradition. We welcome flute, oboe, f horn, bassoon, cello, and more! Any instrumentalist may enroll! Lab Jazz Ensemble serves to introduce these students to the jazz big band vocabulary. Students perform traditional and contemporary big band music at concerts and in the community. Consider pairing this semester course with Jazz Improv., Vocal Ensemble, or Blues to Hip Hop.

737 **Honors Jazz Ensemble*** (Prerequisite: **Lab Jazz Ensemble** or permission of instructor)

* Full year Credits: 5 Level: H

Jazz Ensemble is a select group that features the performance of traditional and contemporary big band music. Jazz Ensemble uses a specific instrumentation of 5 trumpets, 4 trombones, 5 saxophones (2 alto, 2 tenor, and bari), piano, guitar, bass, and drums. Membership is by audition and the permission of the instructor. Auditions take place in March. *The group rehearses twice per week during school and for an additional two hours each Monday night. Students in this course are expected to attend all rehearsals and concerts during and outside regular school hours.

Vocal Music

- 741 **Blues to Hip Hop: The American Musical Journey** (open to grades 10-12)
 * Semester Credits: 2½ Level: ACP
 Have you ever wondered why some songs get stuck in your head and others don't? Have you always wanted to learn how to sing, but don't want to be on stage? American Music, American Culture explores the history of American popular culture through vocal technique in a welcoming group setting. We will sing our way through the history of the Blues, Rock, Gospel, R&B, Hip-Hop, & Pop. This class does not perform on stage. **Consider requesting this course with Music Technology, Vocal Ensemble, or Musical Theatre.**

Vocal Performance Classes

- 743 **Vocal Ensemble**
 Semester Credits: 2½ Level: ACP
 ⑨ **Vocal Ensemble** is the foundational singing course at Newton South. It is open to all students. Through this diverse community of musicians, students will learn to sing in multiple musical styles, including, pop, jazz, gospel, musical theater, and classical. Singers will learn group vocal technique, musicianship, and music reading in a nurturing environment while singing a wide variety of music for school and community performances. Vocal Ensemble is the pre-requisite for all vocal performance classes at South. Can be repeated with permission of instructor. **Consider requesting this course with Newton South Chorale, Blues to Hip Hop, or Musical Theatre.**

- 747 **Madrigals** (Grades 10 - 12 pre-requisite: **Vocal Ensemble 743 and audition**)
 Full year Credits: 5 Level: H
 * **Madrigals** is the most advanced vocal group at Newton South. Three to eight part music from the classical, jazz, gospel, folk and pop traditions will be performed in concerts both within the school and throughout the community, including tours (domestic and/or international). Students electing this course for Honors credit are expected to attend an additional J-Block per week as part of a community service requirement. All students are expected to attend all rehearsals and concerts during and outside regular school hours.

- Newton South A Cappella** (Grades 11 - 12, Auditions required)
 748 Semester Credits: 2½ Level: H
 748Q Quarter Credits: 1¼ Level: H
 * **Newton South A Cappella** is a select singing group for students in grades 11-12. Entrance is audition based and preference will be given to those also enrolled in Madrigals. Students will learn advanced vocal, ensemble, and composing/arranging techniques to produce and perform a cappella music from primarily American styles such as vocal jazz, gospel, musical theater, and contemporary popular music.

Other Offerings in Music

- Work-Study in Music**
 757 Full Year Credits: + Level: P-F
 757F/S First or Second half Credits: + Level: P-F
Work-Study in Music provides students with the opportunity to assist music teachers in the maintenance of the music program. Students must be enrolled in at least one other music course. Selection is only with the approval of department head

- 7571 **Work-Study in Music - Concert Manager**
 Periods per week: + Full year Credits: + Level: P-F
 Duties for this position will include coordinating logistics of concert flow and assessing stage set-up requirements for different ensembles, creating set-up layouts for each group in consultation with music faculty, enlisting stage crew help to execute stage changes and arranging schedules to facilitate smooth transitions, and serving as liaison between Fine & Performing Arts faculty to assess and communicate needs for performance events. This position will have varying hours with more time being concentrated closer to when performance events are taking place.

- Music Teaching Assistant**
 758 Full year Credits: 1¼ Level: P-F
 758F/S Semester Credits: 5/8 Level: P-F
 Permission to enroll in Music Teaching Assistant must be obtained from the department head. Students should also get prior approval from the teacher they wish to assist. See page 69 for details on the role and expectations of teaching assistants.
 + = To be arranged by department.

Fine & Performing Arts: THEATRE

Theatre Arts classes have something for everyone and can be accessed at any grade level. Acting Foundations is the gateway to most of the upper level acting classes and a great place for freshmen and sophomores to start. Older students can find various entry points in the curriculum and can make quick progress with differentiated instruction. Studio classes may be repeated in order to deepen and strengthen students' theatre artistry.

* **Acting Foundations**

270	Full year	Credits: 5	Level: ACP
270F/S	Semester	Credits: 2½	Level: ACP

Ⓢ **Acting Foundations** builds basic stage acting skills including scripted scene work and improv. Students develop their creativity, critical thinking, collaboration, and communication skills. Some memorization is necessary, but most work consists of in-class exercises and performance.

Musical Theatre (Acting + Voice)

2710	Full year	Credits: 5	Level: H
271F/S	Semester	Credits: 2½	Level: ACP

Musical Theatre develops students' use of creativity, communication, critical thinking, and collaboration by exploring the performance of characters through song. Learn musical theatre history by preparing and performing material from throughout the 20th and 21st Centuries. Develop healthy vocal techniques that will enable you to have vocal stamina as well as vocal expression and range. Use script and musical analysis to get the most out of every piece. Build your confidence in a safe and supportive creative environment. *Consider requesting this course with Vocal Ensemble.*

Actors' Workshop - (Prerequisite: **Acting Foundations** or equivalent)

2720	Semester	Credits: 1¼	Level: H
2721	Semester	Credits: 1¼	Level: ACP

* **Actors' Workshop** offers students the tools to develop unique, thoughtful, and believable performance choices on their own. The goal is to free student actors from dependence on a director and empower actors to analyze text and make strong choices on their own. Students will read and perform scenes from full-length plays. Stage combat, dialects, and other acting skills will be explored. Homework includes some reading and memorization. *Consider requesting this course with Musical Theatre or Acting & Directing or Technical Theatre.*

Acting and Directing - (Prerequisite: **Acting Foundations** or equivalent)

2730	Semester	Credits: 2½	Level: H
2731	Semester	Credits: 2½	Level: ACP

* **Acting and Directing** is designed for actors interested in putting their skills to work in short plays and for budding directors interested in learning the basics. Students will learn directing skills including script analysis, concept development, staging, rehearsal management, and designer collaboration. Homework includes memorization of short scenes. *Consider requesting this course with Musical Theatre or Actors' Workshop, or Technical Theatre.*

Actors' Studio - (Prerequisite: **Acting Foundations** or Grades 11 & 12)

274	Full year	Credits: 5	Level: H
274F/S	Semester	Credits: 2½	Level: H

Actors' Studio offers all students the opportunity to put their skills to work in a process-to-production course. The class will become a production company for a semester, with the goal of mounting a short play or short film based on the skills and interests of the students. This course is specially designed for students who want to be in a play but participate in sports or other after-school activities. Since the curriculum and literature change with each group of students, this class may be repeated without feeling redundant.

Honors Screen Acting and Production (Grades 10-12)

2750	Full Year	Credits: 5	Level: H
275F/S	Semester	Credits: 2½	Level: ACP

Honors Screen Acting and Production is for the student who wants the complete experience of creating short films. Students learn acting for camera, voiceover, and directing, as well as digital video camera techniques, lighting, sound, and editing, (skills valuable and transferable to **Film Studies**). Real world skills of creativity, collaboration, and communication will be developed as students create movies in teams.

Public Speaking and Presentation (Grades 9-12)

2760	Semester	Credits: 2 ½	Level: H
276	Semester	Credits: 2 ½	Level: ACP

* ⑨ **★ Public Speaking and Presentation** is for the student who wants to develop strong presentation delivery techniques by using their face, voice, and body to engage and keep the attention of an audience in a variety of speaking formats. Students prepare short presentations weekly, but no papers or lengthy written drafts are required.

Video Studio

0970	Semester	Credits: 2½	Level: H Returning students only
097	Semester	Credits: 2½	Level: ACP

* In **Video Studio**, students learn how to communicate with an audience using recorded images and sound. Students develop techniques for use in pre-production, shooting, on-screen and voice-over performance, and post-production. Projects include music videos, short films, documentaries, news segments, and promotional videos. Returning students may work independently on individual or group video projects for honors credit with instructor approval. Note: this is the prerequisite course for CTE Television and Video at NNHS. **Consider requesting this course with Musical Theatre or Screen Acting & Production.**

Technical Theatre Studio (Grades 9 - 12)*

2780	Semester	Credits: 2 ½	Level:H Returning students only
278	Semester	Credits: 2½	Level: ACP
278Q	Quarter	Credits: 1¼	Level: ACP

* **Technical Theatre** is a class for students who enjoy getting their hands dirty. Students learn basic techniques in scenic design, set construction, lighting design, sound design, and make-up design. Various technical theatre skills will be explored by working on practical projects in support of South Stage productions; including building and painting sets, hanging and focusing lights, and programming the light board. No experience is necessary, but a willingness to lend a helping hand and use power tools is required. *Course may be taken more than once for credit.

Costume Studio (Grades 9-12)

277	Semester	Credits: 2 ½	Level: ACP
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Costume Studio is for students interested in working behind the scenes, making and designing costumes for the stage. This course meets after school, depending on student availability. Various sewing and designing skills will be explored while working on practical projects that support South Stage shows; including hand-sewing, machine sewing, crafting, and drawing. No experience necessary, but an interest in crafts, colors, clothing, and creativity is a must! This course may be taken for repeat credit.

Work-Study in Theatre

279	Semester	Credits: +	Level: P-F
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Work-Study in Theatre provides students with training as a working stagehand or production assistant. Students must have taken or be taking a theatre course and possess a social security card. Enrollment requires the approval of the department head.

+ = To be arranged by the department.

HISTORY AND SOCIAL SCIENCE

Students are expected to take a two-year World History sequence in grades 9 and 10, and a year of United States History in grade 11. Seniors may choose from a variety of history and social sciences electives, which are only open to seniors. In the ninth, tenth, and eleventh grades there are options (413, 424/434, 425/435) that link the study of history with the study of English. These courses must be taken along with their English equivalents. If either the English course or the history course is changed at a later date, the linked class must also be changed. Not all students electing these courses will be placed in them, as space is limited; therefore, it is important that alternate choices be listed for these courses.

Ninth-Grade History and Social Science

World History I

411	Full year	Credits: 5	Level: ACP
4111	Full year	Credits: 5	Level: ACP (SAM)
4112/414	Full year	Credits: 5	Level: CP (mixed level)
412	Full year	Credits: 5	Level: CP

- ⑨ **9th Grade World History** is a survey of the fascinating history of societies from different regions of the world and the significance of connections among them. Students will engage with a variety of sources as we explore the factors that enabled these societies to thrive. We begin in Asia by examining the achievements of China and India in the medieval period as well as the origin of their lasting beliefs systems. Next, we study the origin and growth of the Islamic World and a variety of trading states that flourished in both West Africa and East Africa. This is followed by a unit centered on European history from the Middle Ages through the Enlightenment. The course closes with an examination of the impact of global connections on the eve of the modern era. In addition, there are two Choice Units when students have the opportunity to select a topic of personal interest to research. Throughout the course students develop the core reading, research, and writing skills that will serve as a foundation for their success in high school history classes.

World History and Literature (This course **must** be taken with **English 213** or **2131**)

413	Full year	Credits: 5	Level: ACP
4131	Full year	Credits: 5	Level: ACP (SAM)

- ⑨ **World History and Literature** follows much of the same content as the 9th grade world history course described above, but it is linked to a 9th grade English class. It is a survey of the fascinating history of societies from different regions of the world and the significance of connections among them. Students will engage with works of literature, textbooks, primary documents and brief video clips as we explore the factors that enabled those societies to thrive while also teaching note-taking and critical thinking skills. We begin in Asia by examining the achievements of China and India in the medieval period as well as the origin of their lasting beliefs systems. Next we study the origin and growth of the Islamic World and a variety of trading states that flourished in both West Africa and East Africa. This is followed by a unit centered on European history from the Middle Ages through the Enlightenment. The course closes with an examination of the impact of global connections on the eve of the modern era. The course also seeks to make frequent connections to events in the present and to relate world history and literature when possible, such as linking *Romeo and Juliet* to the Renaissance. Throughout the year, students work on projects that combine historical analysis with usage and composition skills. Students also develop analytical essay-writing and research skills throughout the year following similar research, writing, revision, and citation procedures as the corresponding English class.

Tenth-Grade History and Social Science

World History II

420	Full Year	Credits: 5	Level: H
421	Full Year	Credits: 5	Level: ACP
422/4212	Full Year	Credits: 5	Level: CP

World History II covers world history from the time of the French and Atlantic revolutions through the twentieth century into today's world. Students study patterns of revolution, the development of constitutional government, industrialization, the spread of nationalism, imperialism, the global wars, and a changing and more interdependent world economy. In addition to reading their textbook, students work with primary and secondary sources, maps and charts. Students also do research and write analytical essays.

Global Communities: World History II (must be taken with English 2240/1/2)

4240	Full Year	Credits: 5	Level: H
4241	Full year	Credits: 5	Level: ACP
4242	Full year	Credits: 5	Level: CP

What happens when cultures come together? From imperialism to modern globalization, cultural interactions have presented both promise and peril for the peoples involved. This Global Communities course seeks to help students examine this interaction through the study of world history and literature. Students who join the Global Community should expect to learn the skills and content of **World History II**, which covers the period of time from the French and Atlantic revolutions through the twentieth century. Students will also be asked to connect the history and literature to better understand the global community.

New Media Communities: World History II (must be taken with English 2250/1/2)

4250	Full year	Credits: 5	Level: H
4251	Full year	Credits: 5	Level: ACP
4252	Full year	Credits: 5	Level: CP

The New Media Communities World History course is linked with an English class and offers a project-based curriculum in which students gain an understanding of the history of media and how the media have in turn shaped history. Students should expect to learn the skills and content of the standard sophomore history course, World History II, which delves into major world events from the time of the French and Atlantic revolutions through the twentieth century. Additionally, students will gain skills in media literacy and production. Our goal is to develop the next generation of leaders in the media arts, and to encourage active participation in our democracy through collaborative and creative work. If you love making movies, creating your own podcasts, or designing websites (or want to learn how), this is the program for you!

Eleventh-Grade History and Social Science

430 **AP United States History**

Full year	Credits: 5	Level: H
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AP United States History explores the political, economic, and social history of the United States from the birth of the Federal Constitution to the present and prepares students in the content covered by the Advanced Placement test in United States history. The course will include an intensive review of early American history. Students read sources beyond the text, both primary and secondary, and often engage in seminar-like classes. There is emphasis on the writing of historical analytical essays in preparation for the Advanced Placement examination.

United States History, Civil War to Present

431	Full year	Credits: 5	Level: ACP
432/4312	Full year	Credits: 5	Level: CP

United States History is a political and social history of the United States, emphasizing the founding of the United States and the period from 1850 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 reading the course textbook, students will also work with selected primary and secondary sources, conduct research and write analytical essays.

Global Communities: United States History (must be taken with English 2340/1/2)

4340	Full year	Credits: 5	Level: H
4341	Full year	Credits: 5	Level: ACP
4342	Full year	Credits: 5	Level: CP

This course is a continuation of **Global Communities: World History II** and is open to students who were not in the 10th grade program on a space available basis. Like the United States History course, the Global US course focuses on the development of American institutions and culture throughout the nineteenth and twentieth centuries. However, there is also a strong focus on connecting this history to global events, as well as doing interdisciplinary work with their Global English class. In addition to reading the textbook, students also read selected primary and secondary sources, conduct research and write analytical essays. Global Communities classes include all three levels in one classroom.

New Media Communities: United States History (must be taken with English 2350/1/2)

4350	Full year	Credits: 5	Level: H
4351	Full year	Credits: 5	Level: ACP
4352	Full year	Credits: 5	Level: CP

The **New Media Communities US History** course is linked with an English class and offers a project-based curriculum in which students gain an understanding of the history of American media and how the media have in turn shaped American history. In addition to learning the Junior US History curriculum that focuses on the changing role of the US federal government and the United States' position in the world, students will learn documentary filmmaking style and technique, leading to a culminating project that connects History, English, and our broader Newton community. New Media Communities junior classes include all three levels in one classroom.

Twelfth-Grade History and Social Science Electives

The following courses are open to seniors only. They will be offered depending on student demand, staffing availability, and scheduling considerations. **Students electing these courses must also select an alternate choice.**

440 AP European History

Full year

Credits: 5

Level: H

4401 European History

Full year

Credits: 5

Level: ACP

European History is a survey of European political, economic, social and intellectual history from 1450 to the present. Working with a variety of primary, secondary, and visual sources, students will delve deeply into events in European history, from the Renaissance through the fall of communism in the late 20th century; students will also discuss the ideas of European intellectuals such as Machiavelli, Locke, and Marx. This course will prepare students to take the Advanced Placement exam in European History offered in May. Students who opt to take the course at the ACP level will use a different textbook and have different assessments.

Understanding the Contemporary World: 1945 to the Present

4410

Full year

Credits: 5

Level: H

441

Full year

Credits: 5

Level: ACP

4412

Full year

Credits: 5

Level: CP

Understanding the Contemporary World provides students with the opportunity to explore a wide range of current issues impacting the United States and the world. The curriculum responds to real-time events and involves a great deal of student input. Topics of study may include: how the international community responds to the threat of climate change, the development of modern terrorism and how the international community responds to terrorism, refugees and international immigration policies, how the international community responds to modern genocides, international diplomacy and the role of the United Nations, American intervention abroad, global healthcare and educational issues, and the American criminal justice system. Students will engage in class discussions and debates about the course content and will use newspaper articles, political cartoons, documentaries and other forms of journalism to analyze how the media reports on and impacts world and domestic events. Students choosing to take this course for honors credit will be responsible for additional readings, papers, and projects.

Race, Class, and Gender

4420

Full year

Credits: 5

Level: H

4421

Full year

Credits: 5

Level: ACP

4422

Full year

Credits: 5

Level: CP

Race, Class and Gender explores complex issues of identity that reveal the diversity of experiences in the United States. Looking at issues such as race, class, gender, sexuality, religion and immigration with a social justice lens, the course examines the history of movements for equality while focusing on current issues affecting various communities. How does one's race, gender, class, sexual orientation, religion or immigrant status impact one's life? How do systems work to maintain oppression? How can a newfound awareness of one's privileges empower one to create change? Classes are run on a discussion model, using video clips, newspaper and magazine articles, films and scholarly works to acquaint students with the skills needed to have challenging conversations about divisive topics of identity, with an eye toward finding solutions that celebrate our differences and enhance equity. Students electing the honors section will be required to prepare additional essays and/or projects.

Ethics in the Modern World

4430

Full year

Credits: 5

Level: H

443

Full year

Credits: 5

Level: ACP

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 these choices. What ideas and ethical systems can we consider as potential "compasses" for navigating the quandaries of personal and social life? Is it right to tell a lie when the truth may damage others? What is the *good life*? What are the legitimate limitations upon the state, when fighting a war, or proscribing speech? If such things as "good" and "evil" exist, how and why do they thrive? In this course, students will explore these types of questions, using original works by moral philosophers such as Plato, Aristotle, Bentham, Kant, and Mill. Students will analyze difficult ethical choices, both in world history and in their everyday lives. Students will also endeavor to refine their communication skills in the Classical tradition, practicing the mechanics of debate, and the art of dialogue.

Sustainability

4440	Full year	Credits: 5	Level: H
4441	Full year	Credits: 5	Level: ACP
4442	Full year	Credits: 5	Level: CP

We live in an increasingly interconnected world - our communities, our challenges, and our devices are interconnected in ways they never have been before. The future offers us promises and perils - how will our world encourage sustainable solutions to combat income inequality and climate change, stabilize human populations, preserve cultural and biological diversity, and promote livable cities? Students will explore these 21st century challenges, create solutions, and connect with communities around the world. For example, students could investigate how to use internet-connected devices and apps to protect endangered species or increase awareness of food problems facing the world. This course uses multiple media, including films, online videos, and conversations with students across the globe to understand ways to approach these issues. In the second semester, students will work on action projects that help devise a solution to a real world problem of their choosing. While one does not have to be a student in Global Communities in tenth and eleventh grades in order to sign up for this course, preference will be given to those students who have participated in the program for the past two years.

450 AP U.S. Government & Politics

Full year Credits: 5 Level: H

4501 US Government & Politics

Full year Credits: 5 Level: ACP

U.S. Government & Politics is a yearlong course in American government and politics. Major topics will include the constitutional basis of American government, political beliefs and behavior, political parties and interest groups, the operation of the federal government, the formation of public policy, and the development of civil liberties. Students will read a wide range of primary and secondary sources and will engage in a variety of analytical projects designed to develop a critical perspective on American political institutions and current affairs. Daily lessons will prepare students taking the course at the AP level for the Advanced Placement exam in **U.S. Government & Politics** offered in May. Students opting to take the course at the ACP level will have modified assignments and assessments.

460 AP Comparative Government

Full year Credits: 5 Level: H

4601 Comparative Government

Full year Credits: 5 Level: ACP

Comparative Government is a yearlong, mixed course that focuses on understanding and explaining politics within nations and systemically comparing these political systems. Comparison assists both in identifying problems and in analyzing policy making. There are six countries at the core of this study: China, Great Britain, Iran, Mexico, Nigeria, and Russia. The course is premised on the importance of knowing about other peoples, nations, and societies in order to better understand and participate in global political and economic changes. The AP level is equivalent to a college introductory course in Comparative Politics and prepares students for the AP examination.

470 AP Psychology

Full year Credits: 5 Level: H

Advanced Placement Psychology is a comprehensive introduction to the scientific study of behavior and mental experience, offering an overview to the field of psychology and preparation for the AP exam. Using a demanding college textbook and high-level supplementary materials, the course covers a broad range of topics, from brain physiology and reliability of memory to the stages of child development and social behavior. The course emphasizes the scientific research being conducted in these areas and the contrasting perspectives used, including biopsychology, psychodynamic psychology, behaviorism, cognitive psychology, developmental psychology, and clinical psychology.

Psychology

471	Full year	Credits: 5	Level: ACP
4712	Full year	Credits: 5	Level: CP

Psychology is a yearlong course that explores human behavior by studying topics in developmental, behavioral, social and clinical psychology. Students will use case studies to explore psychological theories, particularly as these relate to students' personal lives. There will be a strong focus on class discussions and projects that apply these theories. In addition to textbook readings, some outside reading is required.

Other Offerings

History Teaching Assistant (Grades 11-12)

498	Full year	Credits: 1¼	Level: P-F
498F/S	Semester	Credits: 5/8	Level: P-F

History Teaching Assistant offers juniors and seniors an opportunity to lead small group discussions and assist teachers in selected History and Social Science courses. Under the supervision of a teacher, the history assistant will work with foreign language-speaking students on an individual basis, and/or help other students who want or need additional support. *Teacher recommendation is required.* See page 69 for details on the role and expectations of teaching assistants.

Independent Study in History and Social Science

499	Periods per week: +	Full year	Credits: 5	Level: P-F
499F/S	Periods per week: +	Semester	Credits: 2½	Level: P-F

Independent Study in History and Social Science offers serious students with a special interest in a particular topic an opportunity to work on their own under the general supervision of a member of the History and Social Science Department. This course is open only to seniors and must be arranged in advance with a specific teacher.

+ = To be arranged by the department

MATHEMATICS

Courses in the mathematics department emphasize skill and concept development. Most courses integrate the study of Algebra, Geometry, Probability, and Data Analysis. Different courses are offered to address different learning styles, skill levels and interests. New registrants take a placement test upon registration to designate appropriate placement in courses. Students in Newton Public Schools go through a placement process at their respective Middle Schools. It is expected that students in Grade 9 take a Math 1 course and progress through Math 2-4. Deviations from this sequence are not permitted. Placement for students progressing to grades 10-12 is based on prerequisite content knowledge as determined by previous performance in courses, or, in the case of students new to the school, a placement exam. There are opportunities to access courses at different curriculum levels (CP, ACP, Accelerated, and Honors) depending on student skill development and mastery.

Honors courses are appropriate for students with a high degree of interest in mathematics, that have demonstrated exceptional understanding of mathematical concepts and skills, and that are able to think abstractly and solve problems with a high degree of independence. Advanced College Prep courses at the accelerated level (designated with “Acc”) are appropriate for students that have demonstrated a strong understanding of previous mathematical concepts, can think abstractly, and are able to work through problems with only occasional assistance. Advanced College Prep (ACP) courses provide students with more time on individual topics than the ACP Acc course and include more guided instruction when solving more complex problems. College Preparatory courses provide a more structured learning environment with additional support and time on each topic of study.

The da Vinci Program integrates Science, Technology, Engineering, Mathematics, and Art over multiple years. It is a multi-level course offering for 10th and 11th grade students along with a senior year STEAM project. See the course description under “Math 2” and “Math 3” for more information.

Foundations of Mathematics and Algebra 1

Foundations of Mathematics			
630	Full year	Credits: 5	Level: CP
Foundations of Mathematics covers the basics of algebra, geometry, number theory and statistics necessary for further study of high school mathematics. Topics include representations of data, the real number system, variables and equations, equation and inequality solving, percent, proportions, functions and their graphs, 2- and 3-dimensional geometry, and probability.			
Algebra 1			
620	Full year	Credits: 5	Level: CP
⑨	Algebra 1 is a first year course in Algebra for students that have not previously studied algebra I or need to solidify skills and concept knowledge learned in Grade 8. Topics include addition, subtraction, multiplication, and division as these relate to signed numbers, algebraic expressions, equations, sets, probability/statistics and geometric objects. Topics also include linear equations, slope and linear function, exponents, exponential growth, polynomials, linear systems. A student completing Math 620 with a B or higher is eligible to take Math 621 (an ACP course) as a sophomore.		

Math 1

601 Math 1 Honors			
	Full year	Credits: 5	Level: H
Math 1 Honors is for students who have shown a high degree of problem solving ability in their 8 th grade math courses. It expands on the topics taught in 8 th grade and includes topics from Algebra 2 and Geometry such as linear functions, systems of linear equations and inequalities, functions (domain, range, composition, and transformations), exponential functions, quadratic equations, sequences, geometric construction and transformations, triangle congruence, parallel lines, quadrilaterals, coordinate geometry, similarity, geometric proof, and probability and statistics.			
611	Full year	Credits: 5	Level: ACP
621	Full year	Credits: 5	Level: ACP
631	Full year	Credits: 5	Level: CP

Math 1 and **Math 1 Acc** extend the study of algebraic and geometric concepts begun in middle school. Topics include linear functions, systems of linear equations and inequalities, functions, exponential functions, and arithmetic and geometric sequences. Topics from geometry range from triangle congruence to similarity along with geometric reasoning and proof. Topics from statistics include displays of data, measures of center and spread, linear regression, and correlation.

642 **Topics in Algebra, Geometry, and Statistics**

Full year

Credits: 5

Level: CP

Topics in Algebra, Geometry, and Statistics continues the study of algebra, geometry and statistics begun in **Foundations of Mathematics (630)**. This course is also recommended for students who complete Algebra I (620) and would benefit from an in depth review of certain MCAS topics. Topics include statistics, properties of algebra and real numbers, equation solving, probability, logic and geometry, similarity, Pythagorean theorem, linear equations and inequalities, and polynomials.

Math 2

602 **Math 2 Honors**

Full year

Credits: 5

Level: H

Math 2 Honors completes the study of Geometry and Algebra 2 started in **Math 1 Honors** and begins a detailed study of Trigonometry. Topics include similarity, study of circles, area and volume, rational, exponential, logarithmic and trigonometric expressions and functions, geometric proof, the real and complex number system, 2-dimensional vector algebra and geometry, higher degree polynomials, trigonometric identities, and finite and infinite sequences and series.

612 **Math 2 Acc**

Full year

Credits: 5

Level: ACP

622 **Math 2**

Full year

Credits: 5

Level: ACP

Math 2 and Math 2 Acc continue the study of Algebra 2 and Geometry begun in **Math 1**. Topics include quadratic equations, relations and functions, radicals and rational exponents, functions, geometric proof, volume, similarity, introduction to trigonometry, and probability.

632 **Math 2**

Full year

Credits: 5

Level: CP

Math 2 continues the study of algebra, geometry, and statistics begun in **Math 1 (631) and Algebra 1 (620)**. Topics include polynomials, quadratic functions, similar triangles, quadrilaterals, polygons, systems of equations, circle geometry, probability, and statistics.

daVinci Math 2(must be taken with **da Vinci Science I - Chemistry 8270/1/2** and an appropriate art class - see below*)

6270

Full year

Credits: 5

Level: H

6271

Full year

Credits: 5

Level: ACP

6272

Full year

Credits: 5

Level: CP

daVinci Math 2 is a multilevel course that will engage students in the study of mathematics similar to what is learned in equivalent **Math 2** courses listed in this guide. Students are enrolled with the rest of the 10th grade da Vinci cohort, and engage in a project-based learning environment that introduces them to new material in the context of real world application, science, technology, engineering and art.*

* Students should have taken or be concurrently registered in Art Foundations. Students who have completed Art Foundations in 9th grade should enroll in an appropriate Level 1 Arts course. **Admission application must be submitted to join the da Vinci program.** Speak with your mathematics/science teacher or counselor for more information.

This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.

Math 3

603 **Precalculus Honors**

Full year

Credits: 5

Level: H

Precalculus Honors extends the study of Trigonometry begun in **Math 2 Honors**, covers topics in Precalculus, and begins the study of Differential Calculus. Topics include trigonometric functions and applications, parametric functions, polar equations, probability, 3-dimensional vectors, series, iteration, induction, limits of functions, continuity, and derivatives and their applications. Graphing calculators are used extensively in this course.

613	Math 3 Acc	Full year	Credits: 5	Level: ACP
623	Math 3	Full year	Credits: 5	Level: ACP

Math 3 and Math 3 Acc complete the study of Geometry and Algebra 2 begun in **Math 2** and begins the study of Trigonometry. Topics of study include, but are not limited to, exponential and logarithmic functions, sequences and series, trigonometric functions (graphs and properties), right and oblique triangle trigonometry, and the unit circle.

633	Math 3	Full year	Credits: 5	Level: CP
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Math 3 continues the study of mathematics begun in **Math 2 (632)** with an emphasis on mathematical modeling. Students study linear, exponential, logarithmic, and trigonometric functions (with all the prerequisite skills required) within the context of real-world problems. Additional topics include area and volume of 3-dimensional figures. **daVinci Math 3 (must be taken with da Vinci Science II - Biology 8370/1/2 and Engineering and Inventing 567)**

6370		Full year	Credits: 5	Level: H
6371		Full year	Credits: 5	Level: ACP
6372		Full year	Credits: 5	Level: CP

da Vinci Math 3 is a multilevel course that will engage students in the study of mathematics similar to what is learned in equivalent **Math 3** courses listed in this guide. Students are enrolled with the rest of the 11th grade da Vinci cohort, and engage in a project-based, student-centered learning environment that introduces them to new material in the context of real world application, science, technology, engineering and art. This course is less lecture-based than a traditional classroom.

</This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.

Math 4 - Precalculus

614	Precalculus Acc.	Full year	Credits: 5	Level: ACP
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Precalculus Acc. continues the study of Trigonometry begun in **Math 3 Acc (613)** and covers topics from Precalculus including polynomial functions, analytic geometry, polar coordinates and complex numbers, vectors, sequences and series with iteration and limits, matrices, combinatorics, and probability. Students completing course number 613 with a strong showing may elect this course with teacher approval.

Understanding Statistics (Prerequisite: successful completion of 633, 623 or 613 and have a teacher recommendation.)

616		Full year	Credits: 5	Level: ACP
6162		Full year	Credits: 5	Level: CP

This is a full year statistics course that covers both descriptive and inferential statistics in the context of real world situations and projects. Topics in this course include sampling, organizing data, averages, variation, regression, correlation, probability, several different distributions, estimation, hypothesis testing, and more. This is open to all levels of motivated learners that have the ability to work independently as well as in groups. A TI-84 graphing calculator is required. This course is open to seniors only.

618	Calculus (Prerequisites: Successful completion of 613 with an A and teacher recommendation, or successful completion of 614)	Full year	Credits: 5	Level: ACP
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Introduction to Calculus begins the study of calculus and covers functions, limits, continuity, derivatives and integration and their applications. Topics include the calculus of polynomial, rational, exponential and trigonometric functions. This course is open to seniors only.

624	Precalculus	Full year	Credits: 5	Level: ACP
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Precalculus continues the study of trigonometry begun in **Math 3 (623)** and includes Precalculus topics. Topics include sequences, probability, exponential, logarithmic, polynomial, and rational functions, trigonometric functions and their graphs, trigonometric identities and equations, conics, systems of equations and inequalities, and matrices. Students completing course number **623** with a strong showing may elect this course. This course is open to seniors only.

Full year

Credits: 5

Level: CP

Math 4 is a full-year course continuing the study of mathematics begun in **Math 3 (633)**. The course covers topics from precalculus including exponential functions and models, logarithms and logarithmic functions, right triangle trigonometry, oblique triangle trigonometry, and trigonometric/circular functions. This course is often run as a mixed level course with **Math 4 ACP (624)**. This course is open to seniors only.

Advanced Placement Offerings

604 **AP Calculus BC** (Prerequisite: Successful Completion of **603** with an A and teacher recommendation).

Full year

Credits: 5

Level: H

AP Calculus BC begins with a brief review of functions, limits, and continuity. It then extends the study of derivatives and their applications, and continues with integration. Topics include the calculus of polynomial, rational, exponential, trigonometric, polar, and parametric functions; the calculus of vectors; infinite series; and an introduction to differential equations. Graphing calculators are used extensively in this course.

608 **AP Calculus AB** (Prerequisite: Successful completion of **614** or **603**)

Full year

Credits: 5

Level: H

AP Calculus AB begins the study of calculus and covers functions, limits, continuity, derivatives and integration and their applications. Topics include the calculus of polynomial, rational, exponential and trigonometric functions; and an introduction to differential equations and slope fields. Graphing calculators are used extensively in this course. This course is open to seniors only.

605 **AP Statistics** (Prerequisite: Successful completion of **602** or **614** with an A and teacher recommendation)

Full year

Credits: 5

Level: H

AP Statistics is equivalent to a non-calculus based college level statistics course. The syllabus is divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. Major topics include: descriptive statistics, correlation and regression, sampling methods, experimental design, probability, sampling distributions, confidence intervals, and hypothesis testing.. Students will need a graphing calculator (TI-83/84, or TI-Nspire). Students completing **613** with a A or better may take **605** and **614** concurrently with Department Head approval.

Other Offerings

Concepts and Skills (Grade 10)

661

Quarter

Credits: 1¼

Level: P-F

662

Quarter

Credits: 1¼

Level: P-F

Concepts and Skills course is open by recommendation. The course reinforces the grade-level mathematics while emphasizing test-taking strategies. **Concepts and Skills** may not be applied towards mathematics graduation requirements.

Mathematics Peer Tutor (Grades 11 - 12)

697

Full year

Credits: 2½

Level:P-F

697F/S

Semester

Credits: 1¼

Level:P-F

Mathematics Peer Tutor provides an opportunity for students to work 1-1 helping other students learn mathematics. Teacher recommendation and department head approval is required.

Mathematics Teaching Assistant (Grades 10 - 12)

698

Full year

Credits: 1¼

Level:P-F

698F/S

Semester

Credits:5/8

Level:P-F

Mathematics Teaching Assistant provides an opportunity for students to assist in mathematics classrooms. Requires approval of the mathematics teacher that the student will be assisting and the department head. See page 69 for details on the role and expectations of teaching assistants.

Independent Study in Mathematics

699

Periods per week: +

Full year

Credits: 2½

Level:P-F

699F/S

Periods per week: +

Semester

Credits: 1¼

Level:P-F

Department Head approval required.

+ = To be arranged by the department

Mathematics: COMPUTER PROGRAMMING

Computer programming courses are elective courses offered through the Mathematics Department. These courses will only run if enrollment and staffing allocations are sufficient. These courses do not satisfy the mathematics requirements for graduation. *Note: Home access to a reasonably recent Mac or PC (running Windows) computer is required for all honors courses. A Mac/PC laptop is helpful, but not required. If you require assistance in this area, please contact the Mathematics Department Head for options.*

650 Introduction to Programming

* Semester Credits: 2½ Level: ACP

Ⓢ **Introduction to Programming** is a course in which students who have little or no programming experience can get a taste of what the field of Computer Science and Software Development is all about. Students will learn the basics of coding through the Swift language, and will eventually have enough skills to culminate the semester-long course by developing an interactive, command line system on a subject of their choice. Programming topics include: variables, types, storing/modifying/presenting information, arrays, loops, functions and structs. There are no prerequisites for this course.

651 Computer Science 1 (Prerequisite: Successful completion of 650, or prior programming experience and permission of instructor)

Semester Credits: 2½ Level: H

Computer Science 1 will provide students with a brief review of basic programming skills, using the Swift language. Students will then continue to explore higher level programming concepts, including: collection-based data structures (arrays, sets, dictionaries/maps), algorithms, developing code from specs, functional programming, and console-based user-interfaces. In addition to programming, students will also learn fundamental ideas in computer science, including: components of a modern computing system and the history of programming languages.

652 Computer Science 2 (Prerequisite: Successful completion of 652)

Semester Credits: 2½ Level: H

Computer Science 2 gives students the opportunity to build upon their foundation of programming skills by focusing more on the use of appropriate data structures, with a goal of being able to define their own, based on needs. Students will also have the opportunity to explore ideas of object-oriented programming, such as inheritance and protocols. The course will culminate with a substantially-sized, object-oriented project, in which students have the chance to develop software in a group setting.

653 Computer Science 3 (Prerequisite: Successful completion of 653)

Semester Credits: 2 Level: H

Introduction to Computer Science 3 will begin to introduce students to more advanced ideas in computer science. Students will continue learning about and implementing their own data structures, including: stacks, queues, maps and trees. These data structures will be analyzed in terms of their trade-offs of performance vs data storage. In addition to new data structures, students will be analyzing the efficiency of algorithms using big-O notation. Recursive algorithms will also be included.

659 Computer Programming Teaching Assistant (Grades 10-12)

Full year Credits: 1¼ Level: P-F

Computer Programming Teaching Assistant provides an opportunity for qualified students to assist in Computer Programming classes. See page 69 for details on the role and expectations of teaching assistants.

SCIENCE

The science department offers students an opportunity to explore the physical and biological world through a balance of student-centered, hands-on learning experiences, experimentation, collaboration, and more traditional classroom experiences. Emphasis is placed on *how* science develops explanations while students explore the content. Scientific inquiry and creative problem solving are central as students develop their ability to think critically about the behavior of the physical and biological world, and to build reasoned arguments based on observable data. First year survey courses in physics, chemistry, and biology are offered as the foundations for electives that explore more specific topics. AP courses in Physics, Chemistry, Biology, and Environmental Science are offered as second year coursework following a full-year, laboratory-based course. Additional second year electives are offered at multiple levels so that all students can explore an area of curiosity or pursue a future area of study. Our elective offerings include Organic Chemistry, Biotechnology, Physics & Music, Biotechnology, Marine Science, Neurobiology, Astronomy, Anatomy & Physiology, etc. Students may also explore Tech Ed/Engineering electives that afford them the chance to experience applications of science (see page NNNN).

Ninth-Grade Physics

811	Physics I	Full year	Credits: 5	Level: ACP
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⑨ **Physics I** is an introductory physics course for ninth graders. The course stresses experimental design, laboratory investigation, data collection, and analysis through traditional or computer-based methods, critical thinking skills, and algebra-based problem solving. Students enrolled in this course should be proficient using algebra and comfortable learning independently from a textbook. Teachers will use differentiation to meet the needs of students and to present challenging materials across a range of math skill levels. Topics include measurement, motion and forces, energy and momentum, heat, electricity and magnetism, and waves. This course prepares students for the Introductory Physics MCAS exam.

812	Physics I	Full year	Credits: 5	Level: CP
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⑨ **Physics I** is an introductory physics course for ninth graders. The course stresses experimental design, laboratory investigation, data collection and analysis through traditional and computer-based methods, critical thinking skills, and problem solving. Topics include measurement, motion and forces, energy and momentum, heat, electricity and magnetism, and waves. This course is designed for students who would benefit from increased teacher support in a more structured learning environment. While algebra will be used, the emphasis of this course is more qualitative than quantitative. This course will prepare students for the Introductory Physics MCAS exam.

Physics and Engineering Projects

813		Full year	Credits: 5	Level: ACP
8132		Full year	Credits: 5	Level: CP

⑨ **Physics and Engineering Projects** is a course for ninth grade students who want to apply the concepts they learn in physics to projects that they will build within each physics unit. Topics include measurement, motion and forces, heat, energy and momentum, electricity and magnetism, and waves.. The engineering design process will be called upon to improve building design and to complement the physics content. This course is offered at the CP and ACP level, with greater independence expected at the ACP level and more supports offered at the CP level. This course will prepare students for the Introductory Physics MCAS exam.

da Vinci Program - Science

daVinci Science I - Chemistry l (must be taken with **daVinci Math 2** 6270/1/2 and an appropriate art class-see below*).

8270		Full year	Credits: 5	Level: H
8271		Full year	Credits: 5	Level: ACP
8272		Full year	Credits: 5	Level: CP

daVinci Science I-Chemistry is a student-driven integrated course with a focus on chemistry and its applications to life science. Students in this multi-leveled course will discover the principles of chemistry through interactive projects, hands on exploration, and collaboration in the classroom, laboratory, and the community. Students will explore how chemistry impacts the structure and function of organisms, and how energy connects these domains. Each term will culminate with a student-driven investigation integrating these themes with principles of chemistry, biology, technology, art, and mathematics. Students will be exploring how they might design products and systems that may address some of the world's technological imperatives, including clean water and renewable energy.

* Students should have taken or be concurrently registered in Art Foundations. Students who have completed Art Foundations in 9th grade should enroll in an appropriate Level 1 Arts course. **Admission application must be submitted to join the da Vinci program.** Speak with your mathematics/science teacher or counselor for more information.

daVinci Science II - Biology </ (must be taken with **da Vinci Math 3** 6370/1/2 and **Engineering and Inventing** 567)

8370	Full year	Credits: 5	Level: H
8371	Full year	Credits: 5	Level: ACP
8372	Full year	Credits: 5	Level: CP

daVinci Biology II explores the themes of Change, Balance, and Harmony, both in biological and chemical systems. Students will deepen their understanding of the molecular and cellular basis of living organisms and examine the role and impact of humans in creating balance and harmony in the ever-changing world around them. Students will study principles of biochemistry, cell and molecular biology, genetics, evolution, human physiology, nanotechnology, biotechnology, and medical sciences. Student-centered projects integrate engineering design principles, scientific and mathematical knowledge to create interdisciplinary, hands-on, creative products of their understanding.

da Vinci III STEAM Capstone Project </

8470	Full year	Credits: 5	Level: H
8471	Full year	Credits: 5	Level: ACP

da Vinci III STEAM Capstone Project is the culmination of the da Vinci program. The course will further hone students' capacity to take on a long-term project by introducing smaller projects that build towards a student-driven end of year capstone. Throughout their senior year, students will be expected to synthesize the content and skills from their first two years in da Vinci together with senior electives they have chosen to demonstrate their independent learning in a capstone project. In the spring of senior year, students will present their work to stakeholders within the community. Registration is limited to current da Vinci juniors. Concurrent registration in two additional STEAM electives is mandatory. For more information about course expectations, please see Science/Tech Ed department chair.

</ This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.

Chemistry

At Newton South, ninth grade Physics is typically followed by a course in Chemistry in grade 10 and Biology in grade 11.

820 **Honors Chemistry**

Full year	Credits: 5	Level: H
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Honors Chemistry is a rapidly paced and in-depth study of the principles of chemistry. Admission to the course depends on previous performance in science, facility with mathematical skills, a demonstrated readiness to engage in abstract/independent problem solving, and performance on a diagnostic test. Course topics include atomic structure, stoichiometry, chemical reactions, kinetic theory, states of matter, thermochemistry, periodicity, bonding, kinetics, equilibrium, and nuclear chemistry. Emphasis is placed upon the quantitative aspects of chemical principles. Laboratory work is an integral part of the course, and comprehensive lab reports are required. Students are expected to have a strong mathematics background, excellent reading skills, exceptional study habits, and the ability to work both independently and cooperatively in small groups.

821 **Chemistry**

Full year	Credits: 5	Level: ACP
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Chemistry is a college preparatory course with emphasis placed on students' conceptual understanding of the big ideas in chemistry and their development of quantitative skills to analyze and solve complex problems. Topics include atomic structure, periodicity, bonding, stoichiometry, chemical reactions, kinetic theory, thermochemistry, equilibrium, and states of matter. Laboratory activities, engineering design challenges, and research projects present opportunities to build students' understanding of the content and further develop learning skills.

822 **Chemistry**

Full year	Credits: 5	Level: CP
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Chemistry is a college preparatory course that presents the fundamentals of chemistry using a thematic approach. Topics include atomic structure, periodicity, bonding, stoichiometry, chemical reactions, kinetic theory, thermochemistry, equilibrium, and states of matter. Laboratory work is an integral component of the course. The content of the course and the associated skills are structured in a way that develops the learning habits of students, and prepares them for continued success in science. Chemistry 822 provides students with greater teacher support to access all of the foundational ideas within chemistry

Introduction to Advanced Chemistry (Grades 10 - 11)

8241	Full year	Credits: 5	Level: ACP
8242	Full year	Credits: 5	Level: CP

Introduction to Advanced Chemistry is a multi-leveled course designed to present students with a strong foundational understanding of the content presented in AP Chemistry. Students who succeed in the class will have the opportunity to take AP Chemistry in 11th or 12th grade. The course stresses greater depth of understanding across a more limited scope of content as compared with 821 or 822. Emphasis will be placed on lab design, atomic structure, bonding, intermolecular forces, chemical reactions, and the mathematical analysis of chemical interactions.

840 **AP Chemistry** (Grades 11 - 12)

Full year	Credits: 5	Level: H
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AP Chemistry provides students with a college-level foundation in chemistry together with the development of strong science practices. Students deepen their understanding of chemistry and hone their lab skills through hands-on labs and inquiry-based investigations. AP Chemistry follows College Board standards for Advanced Placement courses and focuses on inorganic chemistry with the emphasis on quantitative relationships. Students entering this course are expected to have a strong mathematical background and to have mastered the fundamentals of stoichiometry. Successful completion of a previous chemistry course, and the recommendation of a science teacher are required for admission. Students electing this course are expected to take the Advanced Placement exam in Chemistry. A summer assignment will be required.

8450 **Honors Chemistry II** (Grades 11 - 12) (next offered in 2022-2023)

Full year	Credits: 5	Level: H
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Honors Chemistry II is a second year offering that affords students the opportunity to gain further insight into chemistry. In addition to working to gain a deeper understanding of fundamental chemistry, topics will include spectroscopy, transition metal complexes, quantum theory, electrochemistry, and may also include current topics based on student interest. In addition to laboratory experiences, students will engage in computer modeling and advanced mathematical analysis of atomic structure and chemical interactions. A strong math background is required, including concurrent or past coursework in calculus.

Chemistry II - Citizen Scientist (Grade 11 - 12) (offered 2021-2022)

8461	Full year	Credits: 5	Level: ACP
8462	Full year	Credits: 5	Level: CP

Chemistry II - Citizen Scientist is an elective course open to seniors who have successfully completed biology and chemistry. The hands-on survey course explores applications of chemistry in the world around us. Students will examine the chemical processes involved in the human body, the materials around us, and in the natural environment. Students will gain exposure to applied chemistry topics in: organic chemistry, biochemistry, forensic science, materials science, environmental chemistry, and analytical chemistry. Laboratory work and techniques are emphasized and students will have opportunities to connect chemistry to their every day living.

849 **Organic Chemistry** (Grade 12) (offered 2021-2022)

Full year	Credits: 5	Level: ACP
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Organic chemistry is the study of compounds constructed primarily of carbon. This course will introduce and explore the structures, properties, and preparation of organic molecules. Processes from the pharmaceutical, polymer, and petroleum industries will be examined. The class will also investigate the strange and wonderful world of nature's organic compounds. Laboratory work and inquiry-based projects will be assigned throughout the year. This course will provide a solid organic chemistry background for anyone interested in a healthcare or scientific career.

Biology830 **Honors Biology**

Full year	Credits: 5	Level: H
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Honors Biology follows a full year of chemistry and is open to students by teacher recommendation. This course is an intense survey of modern biology with an emphasis on functional processes in living organisms in the context of evolution. Weekly laboratory activity expands upon and reinforces course concepts. Biochemistry, cell and molecular biology, genetics, evolution, human physiology, and introduction to the different biological domains are addressed in depth. A demonstrated ability to excel in language-based learning tasks is highly recommended.

831 **Biology**

Full year	Credits: 5	Level: ACP
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Biology is a general survey course in life sciences that includes weekly laboratory activities emphasizing process skills, experimental design, data analysis, and critical thinking. The course requirements include strong reading and writing skills, the ability to work independently, and demonstrated ability with independent language-based learning challenges.

832 **Biology**

Full year

Credits: 5

Level: CP

Biology is a general survey course in the life science that includes weekly laboratory activities emphasizing process skills, experimental design, data analysis, and critical thinking. College Preparatory Biology will cover the same general topics in the life sciences as Advanced College Preparatory Biology 831, with smaller dependence on math and less independent learning from the textbook. This college preparatory course is designed for students who would benefit from increased teacher support in a more structured learning environment.

Global Biology </ (Grade 11)

8340

Full year

Credits: 5

Level: H

8341

Full year

Credits: 5

Level: ACP

8342

Full year

Credits: 5

Level: CP

This course is one of the Interdisciplinary Studies courses offered as part of Newton South's Smaller Learning Communities. The science content of this course will be the same as described in 830/831/832, however, there will be interdisciplinary lessons and assessments that connect to the 11th grade Global Communities History and English curricula. This course is available only to students who are currently enrolled in the Global Communities Program.

</ This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.

850 **AP Biology** (Grade 12)

Full year

Credits: 5

Level: H

AP Biology is open to students who have successfully completed a full year laboratory based course in biology. It is an in-depth, lab-based course equivalent to an introductory college course. It covers the topics and laboratory activities outlined by The College Board in preparation for the Advanced Placement examination in biology. Students are expected to be motivated and willing to spend considerable time and effort in working independently and collaboratively to master the material. A demonstrated ability to excel in language-based learning tasks is essential for success in this course.

Neurobiology (Grade 12)

860

Full year

Credits: 5

Level: H

8601

Full year

Credits: 5

Level: ACP

Neurobiology is a senior elective course covering general topics in neuroscience equivalent to a first year university curriculum. Topics include: neuro-anatomy, cells of the nervous system, transmission of action potential, synaptic transmission, neurophysiology, neuropharmacology, development, sensory systems, learning, memory, emotion, and consciousness. One term is devoted to the study of psychoactive drugs. Students must have previously taken a full year course in biology and chemistry.

Physics Electives841 **Physics II** (Grade 11 - 12)

Full year

Credits: 5

Level: ACP

Physics II is a class designed for upperclassmen to have a second experience studying topics such as motion, forces, gravity, energy, momentum, waves, and electricity and magnetism. Students will also have the opportunity to cover content not seen in any other physics course at South. Topics may include special relativity, high energy/particle physics, optics and quantum mechanics. Students taking this course should be very comfortable with algebra and geometry and be willing to apply trigonometry to analyze phenomena in two dimensions.

Physics Through Electronics Projects (Grade 11 - 12)

842

Full year

Credits: 5

Level: ACP

8422

Full year

Credits: 5

Level: CP

In **Physics Through Electronics Projects**, students will build class and individual electronics projects that may include drones, timing devices, accelerometers, static electric generators, radio, musical instruments and tesla coils. Curriculum will focus on *applying* physics to the real world electronics, developing and mastering basic circuitry to support the concepts in physics. Building from students experience during 9th grade, students will further develop an understanding of how things work and the importance of being scientifically literate. Emphasis will be placed on reinforcing laboratory skills and developing a qualitative understanding of fundamental concepts in electricity and magnetism. Students will be able to drive much of the curriculum based on their individual interests.

Physics & Music (Grades 11 - 12)

843	Full year	Credits: 5	Level: ACP
8432	Full year	Credits: 5	Level: CP

Physics and Music is an elective course open to juniors and seniors. The course focuses on the science of sound. Semester one covers acoustic phenomena with an emphasis on the physics of acoustic musical instruments and culminates in the design and creation of a musical instrument. Semester two covers the physics of audio electronics including: microphones, speakers, recording, and audio synthesis, and culminates in an independent project involving electronic audio. This course is available to all levels of learners and can be differentiated for assessment at the ACP or CP level. Students should be comfortable with algebra, and do **not** need to be musicians or be proficient in music theory.

870 **AP Physics C Mechanics (Grade 12)**

Full year	Credits: 5	Level: H
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AP Physics C Mechanics is open to students who are enrolled in or have already taken **AP Calculus BC** (604) or **AP Calculus AB** (608). This course is equivalent to a first semester college course in classical mechanics for students in a physical science or engineering curriculum. Calculus is used throughout the year and students should expect to apply topics covered in calculus directly in AP Physics. A major focus is on developing systematic approaches to solving complex problems. The laboratory component of this course is emphasized. Students use computer based probes to collect data. Both spreadsheet programs and statistical techniques are used to analyze data. After successfully completing this course, students are prepared to take the Advanced Placement Physics C: Mechanics exam.

880 **AP Physics C (Mechanics and Electricity & Magnetism) (Grade 12)**

Full year	Credits: 5	Level: H
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AP Physics C is open to students who are enrolled in or have already taken **AP Calculus BC** (604). This course is equivalent to a first year (two semester) college course in both classical mechanics *and* E&M, for students in a physical science or engineering curriculum. Topics in the course include Newton's laws, conservation laws, rotation, gravitation, simple harmonic motion, electrostatics, electrodynamics, circuits, magnetism, and electromagnetism. Calculus is used throughout the year and students should expect to apply topics covered in AP Calculus directly in AP Physics C. A major focus is on developing systematic approaches to solving complex problems. The laboratory component of this course is emphasized. After successfully completing this course, students are prepared to take the Advanced Placement Physics C: Mechanics exam as well as the Electricity & Magnetism exams. The pace of the course makes successful independent learning an essential element in this course.

Other Science Offerings for Grades 11 and 12**Astronomy and Earth Science (Grade 12)**

851	Full year	Credits: 5	Level: ACP
8512	Full year	Credits: 5	Level: CP

Astronomy and Earth Science is an elective course introducing basic concepts of astronomy and earth science. Topics covered in astronomy range from the solar system to cosmology. Earth science topics include geology, meteorology, and oceanography. The course is available to seniors who have completed physical science, biology, and chemistry.

AP Environmental Science (Grade 12)

8550	Full year	Credits: 5	Level: H
855	Full year	Credits: 5	Level: ACP

AP Environmental Science will cover the scientific principles and methodologies used to explore the interconnected relationships in the natural world and their links to various element cycles. Students will identify and investigate environmental problems, evaluate and analyze the risks associated with these problems, and will explore prevention strategies and provide solutions. Prerequisites for the course include a year of Biology and Chemistry. Students will be required to review problems using dimensional analysis and study environmental laws over the summer. This multi-leveled course will be offered at the AP level and also at the ACP level for students who are curious to explore this subject and who do not plan to prepare for the AP exam.

506 **Sustainable Agriculture & Food Systems**
(Offered through the Family and Consumer Sciences department – see F&CS for description)**Marine Biology (Grade 12)**

861	Full year	Credits: 5	Level: ACP
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Marine Biology is a course open to seniors who have successfully completed yearlong courses in biology and chemistry. This course is an introduction to the scientific study of the oceans, their boundaries, and their contents. It covers geological, physical, and chemical oceanography in addition to marine biology, marine management, and human impact on the marine biome. Lab and hands-on activities will focus on the investigation of different marine environments through a variety of techniques.

Global Marine Biology (Grade 12)

8620	Full year	Credits: 5	Level: H
8621	Full year	Credits: 5	Level: ACP
8622	Full year	Credits: 5	Level: CP

Students will investigate the effects of climate change and globalization on marine ecosystems. Global Marine students will engage in a series of lab investigations and field experiences to understand the role they can take in becoming marine stewards. The class will culminate in a capstone project that is connected to the work students have done in the prior two years of the Global Program. The content will complement the Global Sustainability class. Scheduling priority is given to students previously enrolled in the Global Communities Program.

Biotechnology (Grade 12)

8710	Full year	Credits: 5	Level: H
871	Full year	Credits: 5	Level: ACP

Biotechnology is an elective laboratory course open to seniors who have taken Biology and Chemistry. The course will cover many new developments in science including forensics, gene therapy, cloning, DNA, microbiology, and genetic engineering. The related issues of bioethics will also be addressed. Much of the class work will be hands-on, and students will drive much of the content of the course. There will be an opportunity for field trips to local labs and hospitals.

881 Anatomy and Physiology (Grade 12)

Full year	Credits: 5	Level: ACP
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Anatomy and Physiology is an elective course open to seniors who have successfully completed biology and chemistry. The course will focus on the structure and function of the human body. Students will study the anatomy of each of the major body systems and learn function at a molecular, cellular, tissue, and organ level of analysis. The course will stress normal structure and function as a way of understanding diseases and disorders of the human body. Laboratory techniques will focus on the anatomy through required dissections, stressing the importance of observational skills. Physiology will be reinforced through a variety of measurement techniques.

882 Anatomy and Physiology (Grade 12)

Full year	Credits: 5	Level: CP
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Anatomy and Physiology is a college preparatory elective course open to seniors who have successfully completed biology and chemistry. The hands-on course will focus on the structure and function of the human body. The course will follow a thematic approach of how the body works, examining both normal function and diseases and disorders. Topics include the muscular, skeletal and nervous systems, organs and tissues, and the respiratory and circulatory systems. Physiology will be reinforced through a variety of lab techniques including dissections. Case studies will allow students the opportunity to apply their learning to real-life situations.

Other Science Offerings**Introductory Physics Study (Grades 9 - 10)**

890	Full year	Credits: 2½	Level: ACP
890F/S	Semester	Credits: 1¼	Level: ACP

Ⓢ **Introductory Physics Study** provides ninth grade students an opportunity to practice for the science MCAS test. Students will be selected by a combination of prior MCAS score, course level, teacher recommendation, and enrollment in special programs.

Biology Concepts and Skills

892	Full year	Credits: 2½	Level: ACP
892F/S	Semester	Credits: 1¼	Level: ACP

Biology Concepts and Skills provides students in grades 10-12 an opportunity to practice for the science MCAS test in Biology. Students will be placed in this course on an as needed basis.

Science Peer Tutor (Grades 11-12)

897	Full year	Credits: 2½	Level: P-F
897F/S	Semester	Credits: 1¼	Level: P-F

Science Peer Tutors assist in the Science Help Center by helping students with specific questions about science. Students from physics, chemistry, and biology class drop by the Science Help Center for help on homework, labs or general science questions. The Science Peer Tutor should have a good background in each of these sciences. You must have approval of your current science teacher and register with the department chair.

Science Teaching Assistant (Grades 11 - 12)

898	Full year	Credits: 1¼	Level: P-F
898F/S	Semester	Credits: 5/8	Level: P-F
8984	Full year	Credits: 2½	Level: P-F
8984F/S	Semester	Credits: 1¼	Level: P-F

Science Teaching Assistants work with a specific teacher. Students will be asked to help teachers prepare for the laboratory component of classes by: preparing solutions and mixtures and setting up/ breaking down equipment. TAs could also help teachers in specific classes by providing academic support to the students. You must have the approval of a science teacher and register with the department chair indicating the teacher you wish to assist. See page 69 for details on the role and expectations of teaching assistants.

Independent Study in Science

899	Periods per week: +	Full year	Credits: 5	Level: P-F
899F/S	Periods per week: +	Semester	Credits: 2½	Level: P-F

Independent Study in Science is generally for seniors who have successfully completed biology, chemistry, and physics and have made prior arrangements with the department head. Some possibilities for independent study that might lead to an affiliation with a science-related career are horticulture (working in the greenhouse), laboratory teacher aides, and a meteorological project. There is a physics option available for the study of electromagnetism.

+ = To be arranged by the department, subject to advanced approval of department chair.

TECHNICAL EDUCATION & ENGINEERING

Tech Ed and Engineering courses offer students the chance to learn through designing, building, revising, and collaborating on both teacher and student directed projects. The real-world, practical experiences are designed to carry over into students' future pursuits as critical thinkers, creative problem solvers, and well-informed consumers. Recently added is the Engineering Certificate sequence, through which students can engage in a longitudinal study of engineering throughout their high school careers, culminating with a student-driven capstone build in their Senior year.

Drafting

551 Architecture I

Semester	Credits: 2½	Level: ACP
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⑨ **Architecture 1** introduces the fundamentals of residential design and building techniques from house framing to electrical work. Students familiarize themselves with CAD drafting software and manual drafting instruments to complete a set of working blueprints. Students will also design their own ranch style house and build a ¼" scale model.

552 Architecture II (Prerequisite: **Architecture I**)

Semester	Credits: 2½	Level: ACP
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⑨ **Architecture 2** is a continuation of the study of the skills learned in **Architecture 1**. The student draws a complete set of working plans for a residential addition: plans, elevations, sections, details, 2-point perspective. Students will explore landscape design, urban design and energy efficient housing along with historical turning points in Architecture.

553 CAD and 3D Modeling

Semester	Credits: 2½	Level: ACP
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⑨ **CAD and 3D Modeling** is taught as a language that is essential for students considering technical careers. Students will design objects in both two and three dimensions. Each student will work on hand printing, 2-dimensional CAD printing, and 3-dimensional printing of objects. Students will use our 3D printer to render their designs.

Engineering Technology

Newton South offers the opportunity for students to earn an Engineering Certificate, parallel to the offering at Newton North High School. Students who wish to commit to this program will enroll in a sequence of engineering courses starting in ninth grade.

Engineering Certificate - Total of 60 Credits for Certificate

Engineering Certificate Electives –10 Credits

562	Engineering I	2.5 credits
563	Engineering II	2.5 credits
564	Engineering III	5 credits
561	Freshman Engineering	2.5 credits
567	daVinci Eng. & Invent.	2.5 credits

General Technology Electives – 10 Credits

551/552	Architecture I / II	2.5 credits
553	CAD and 3D Modeling	2.5 credits
565/566	Robotics I / II	2.5 credits
572	SolidWorks	1.25 credits
573	Materials Science	1.25 credits
574	Industrial Design	1.25 credits
575	Electronics	1.25 credits
578/579	Graphic Design I/II	2.5 credits
581/582	Woodworking I / II	2.5 credits
650/652/658	Intro to Programming	2.5 credits
651/656	Advanced Programming	2.5 credits

Science – 20 Credits

811/8111/812/813	Physics	5 credits
820/821/822	Chemistry	5 credits
830/831/832	Biology	5 credits
8270/71/72	da Vinci Chemistry	5 credits
8370/71/72	da Vinci Biology	5 credits
840	AP Chemistry	5 credits
850	AP Biology	5 credits
870/880	AP Physics C	5 credits
841/842	Physics II	5 credits
847	Physics and Music	5 credits
871	Biotechnology	5 credits
8470/71	da Vinci Capstone	5 credits

Math – 20 Credits

601/611/621/631	5 credits
602/612/622/627	5 credits
603/613/623/633/637	5 credits
604/605/608/614/616/618/624/634	5 credits

561 **Freshman Engineering**

Semester

Credits: 2½

Level: ACP

- ⊕ **Freshman Engineering** affords 9th grade students to gain a foundational understanding of engineering principles through a series of projects. This class will explore the engineering design process, mechanical engineering, gearing, pulley and lever systems. This course will take a broader scope so that students can build the skills necessary for success in engineering coursework.

Engineering I (Grades 10 - 12)

5621

Semester

Credits: 2½

Level: ACP

- * **Engineering I** is designed to expose students to some of the many forms of engineering. In this class the students will learn about the engineering design process, introduction to structures, electrical engineering, power & energy and prototype building. Most 3-D designs will be made in SolidWorks for simulation purposes. Students will use various testing equipment including multimeters and oscilloscopes to collect and analyze data.

Engineering II (Prerequisite: **Freshman Engineering** or **Engineering I**) (Grade 10-12)

5631

Semester

Credits: 2½

Level: ACP

- * **Engineering II** is designed to expose students to some of the many forms of engineering. In this class the students will learn extensively about structural engineering concepts along with SolidWorks, metalworking and C.N.C. milling. The students will design and develop working electronic circuits and be able to calculate resistance, voltage and current using Ohm's law and Kirchhoff's current and voltage laws. The students will build and test circuits that contain resistors, capacitors, diodes, transistors, and small integrated circuits.

Engineering III (Prerequisite: **Engineering I and II**) (Grade 11-12)

5640

Full Year

Credits: 5

Level: H

- * **Engineering III** will afford the opportunity to engage in a year long in-depth investigation of Engineering by sustaining a year-long student-driven build that incorporates the content mastered in Engineering 1+2. Students will build upon their knowledge of Physics, Chemistry, electrical, and mechanical engineering, as members of cooperative teams, to design various projects through the year. **Admission into the course is by instructor approval, and may be limited only to those students who are actively pursuing an Engineering Certificate at Newton South.**

- 565 **Robotics I**
Semester Credits: 2½ Level: ACP
 ⑨ Students are introduced to **Robotics** through hands on learning activities and lectures. Students in groups will program robots to navigate around obstacles. They will also add sensors such as infrared, touch photoresistors and ultrasonics to send feedback signals to the navigation control program. Robots will be programmed using the C-based language of Arduino to carry out particular autonomous tasks. This course will help to prepare students interested in participating on the Robotics Team.
- 566 **Robotics II** (Prerequisite: **Robotics I**)
* Semester Credits: 2½ Level: ACP
 ⑨ **Robotics II** is a continuation of **Robotics I**. The projects will get more complicated with the addition of new sensors and programming techniques.
- 567 **daVinci Program: Engineering and Inventing** </ (must be taken with **daVinci Science II - Biology** 8370/1/2 and **daVinci Math 3** 6370/1/2 for da Vinci Program students)
Semester Credits: 2½ Level: ACP
Engineering and Inventing students explore hands-on engineering as a way to further express their learning within the da Vinci classes. Students learn basic engineering concepts, solve 3D design challenges, and invent and construct engineered works of art.
 </ This is one of the Interdisciplinary Studies (ID) courses offered as part of Newton South's Smaller Learning Communities. For a description of this program please see page 3.
- 572 **SolidWorks** (offered in 2021-2022)
Quarter Credits: 1¼ Level: ACP
 ⑨ **SolidWorks** will introduce students to one of the standard modeling program used in the industry. Students will explore the computer application through multiple projects that build in their level of sophistication as the semester progresses. If time permits, students will use our 3D printers to create their projects.
- 573 **Materials Science** (Grade 10-12) (next offered in 2022-2023)
Quarter Credits: 1¼ Level: ACP
Materials Science explores the substances that make up our modern world, and how technology can use these materials to improve the quality of life for the human race. Metal, ceramics/glass, polymers and composites will be explored through hands on activities and study. Students enrolled in this class must have passed chemistry or be concurrently enrolled. This class is offered every other year.
- 574 **Industrial Design** (offered in 2022-2023)
Quarter Credits: 1¼ Level: ACP
 ⑨ This course will focus on various topics including innovative product design through production and fabrication; innovation through socially responsible, humanitarian and sustainable design; and innovation through science and technology. This class is offered every other year.
- 575 **Electronics** (offered in 2021-2022)
* Quarter Credits: 1¼ Level: ACP
 ⑨ The course provides an introduction to the actual design, construction, testing and measurement of electrical circuits, giving the hobbyist a jumping-off point for further pursuit of the subject. In addition, the course highlights some key concepts of IC chips, semiconductors and semiconductor devices.

Graphic Communications

- 578 **Graphic Design I**
* Semester Credits: 2½ Level: ACP
 ⑨ **Graphic Design I** covers all aspects of graphic design. Students will use various design software, Photoshop, Illustrator Acrobat, Microsoft Word and InDesign along with manual techniques to make clip art, greeting cards and small newspaper layout. Students also produce multi-color designs on paper, cloth, or plastics to create posters, t-shirts or bumper stickers through screen-printing processes, sublimation printing, and also produce work on a digital color/bw printers.

- 579 **Graphic Design II** (Prerequisite: **Graphic Design I**)
 * Semester Credits: 2½ Level: ACP
 ⑨ A continuation of **Graphic Design I**, this studio based class concentrates on desktop publishing, using Adobe Illustrator, PhotoShop and InDesign to create advanced publications along with direct screen-printing techniques and sublimation printing.

Woodworking

- 581 **Woodworking I**
 * Semester Credits: 2½ Level: ACP
 ⑨ **Woodworking I** is an activity-centered program in which students select, construct, and finish pieces of furniture. Emphasis is placed on the students' acquiring proficiency in the set-up, maintenance, and safe use of the most frequently used machines. Students are trained to work with a partner while constructing their own project. They are also expected to work from drawn plans and written instructions, and work in a safe manner.
- 582 **Woodworking II** (Prerequisite: **Woodworking I**)
 * Semester Credits: 2½ Level: ACP
 ⑨ **Woodworking II** is a continuation of the skills learned in **Woodworking I**. In addition, students will develop their own designs using CAD and hand drawn methods, plan the fabrication method, and estimate the cost of producing their project.

Work-Study and Independent Study in Technical Education

- 596 **Graphics Work-Study**
 Full year Credits: 5 Level: P-F
Graphics Work-Study offers students an opportunity to learn all the production capabilities available in the graphics area. Students are employed to produce school projects ranging from *The Orange Lion* to graduation programs. **Election of this course is subject to the approval of the instructor and department head.**
- 597 **Maintenance Work-Study**
 Full year Credits: 5 Level: P-F
Maintenance Work-Study requires a minimum of five hours of work per week. Students taking or who have satisfactorily completed a course in **Woodworking** are eligible for this program. **Election of this course is subject to the approval of the instructor and department head.**
- 599F/S **Independent Study in Technical Education**
 * Semester Credits: 2½ Level: P-F
Election of Independent Study in Technical Education is subject to the approval of the instructor and department head.

⑨ = course is open to ninth graders.

* = counts toward Fine, Performing, and Technical Arts credit.

WELLNESS

The Wellness Department is pleased to offer a progressive and sequential education to Newton South students. This curriculum aligns with key learning objectives and state and national curriculum frameworks. The curriculum is designed to help students understand the **Wellness and Community Building Models** and their connection to the **Social and Emotional Learning (SEL)** competencies. Wellness is an active process of becoming aware of and making choices toward a healthy and fulfilling life for the mind, body, and spirit. SEL is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

All Newton South students are required to complete **five** credits in Wellness in order to graduate. Ninth grade students are enrolled in core Wellness classes. Tenth, Eleventh, and Twelfth grade students are required to complete a Wellness course **each year**, and must take one class from **three out of the following four categories**: Adventure Leadership, Group Dynamics, Personal Fitness, and Stress Management.

NINTH GRADE CORE COURSES

771 Ninth-Grade Wellness - Exploring Wellness

⑨ Quarters 1-4 Credits: 1 Level: No level

Ninth grade curriculum incorporates a Wellness introduction and the SEL competency Social Awareness. Wellness is the act of practicing healthy habits on a daily basis to attain better physical and mental health outcomes, so that instead of just surviving, you're thriving! By making simple and healthy choices on a daily basis, you will be well on your way towards reducing stress, having positive social interactions and achieving optimal wellness.

SEL Competency: Social Awareness. Curriculum Learning Objectives: Perspective taking, Empathy, Appreciating diversity and Respect for others.

772 Ninth-Grade Health - Sexuality and Health

⑨ Quarters 1-4 Credits: 1 Level: No level

This course is composed of topics that will enable students to build self-esteem, make responsible, healthy decisions, and develop coping skills through objective content. Using the SEL competency Self-Awareness as the main focus, topics that will be covered include a drug and alcohol education unit, human sexuality including reproductive anatomy, choosing abstinence, healthy relationships, contraception methods, sexually transmitted diseases, sexual orientation, sexual harassment and violence prevention, and the practice of peer refusal skills. Learning is accomplished through the use of lectures, videos, guest speakers, current literature, and interactive and kinetic activities and projects.

SEL Competency: Self-Awareness. Curriculum Learning Objectives: Identifying emotions, accurate self-perception, recognizing strengths, self-confidence, and self-efficacy

WELLNESS CATEGORIES & COURSES

Courses for 10th, 11th, and 12th grades only

Adventure Leadership

774 Climbing the E.L.M. Tree

Quarter 1 & 4 Credits: 1 Level: No level

Climbing a tree has never been so much fun! This course utilizes outdoor adventure to discover our resiliency, solve problems, and connect more deeply with each other, our purpose, and ourselves. Empowered students will establish working relationships while they care for each other's physical and emotional safety. Whatever the nature of the adventure, it takes us out of our comfort zones, sparks the imagination, bonds us to each other, and leads us toward growth. This course utilizes both high and low elements on the challenge course.

SEL Competency: Responsible Decision Making. Curriculum Learning Objectives: Identifying problems, analyzing situations, solving problems, evaluation, and reflecting.

775 **Expanding Horizons**

Quarter 2 & 3

Credits: 1

Level: No level

Expand your horizons through a variety of unique, non-traditional adventure activities designed to develop soft skills like leadership, communication, and interpersonal skills. This course will challenge your body and brain with exciting opportunities to problem solve with your classmates. Ready, set, go! This course uses low elements on the challenge course.

SEL Competency: Responsible Decision Making. Curriculum Learning Objectives: Identifying problems, analyzing situations, solving problems, evaluation, and reflecting

Group Dynamics

776 **Play 4 Life**

Quarter 1 & 4

Credits: 1

Level: No level

“I’m going to get credit to play?” Of course! Everyone should have the opportunity to explore ways to stay fit through physical activities that promote longevity in personal- and social- health and wellness. We can stay active for a lifetime through activities like racket sports, golf and other cooperative (and competitive) games to help us develop competence and enjoyment for daily physical activity and build meaningful relationships.

SEL Competency: Relationship Skills. Curriculum Learning Objectives: Communication, Social Engagement, Relationship-building, and Teamwork.

777 **Around The World In 80 Days**

Quarter 2 & 3

Credits: 1

Level: No level

What is Sepak Takraw? How do you play Korf Ball? What are the rules to Rugby? How did cricket become so popular in so many countries? If you participate in ATW you will find out the answer to all these questions and more. ATW is a course that allows you to learn, teach, explore and play games from many countries and cultures. Relationship building and Teamwork will be in the forefront as we learn new ways to play, move and compete.

SEL Competency: Relationship Skills. Curriculum Learning Objectives: Communication, Social Engagement, Relationship-building, and Teamwork.

797F/S **Leadership Assistant** (Grade 12 only)

Quarters 1-4

Credits: 1

Level: No level

The objective of this program is to encourage students to experience leadership opportunities through a growth-mindset while learning about the SEL competency Relationship Skills. The goal is to learn to assist, lead, and teach with Wellness teachers in the ninth grade wellness core curriculum courses, OR, assist members of the Inclusion Program who have special needs in Wellness. Approval from the Wellness Department is required. *SEL Competency: Relationship Skills. Curriculum Learning Objectives: Communication, Social Engagement, Relationship-building, and Teamwork.*

798 **Connections/STRIDE Program Wellness Teaching Assistant** (Grades 11-12 only)

Quarters 1-4

Credits: 1

Level: No level

Connections/STRIDE Program Wellness Assistant is designed for students who would like to work with students in the Connections or STRIDE program as a wellness assistant. The purpose of this role is to serve as a positive peer role model for students in the Connections or STRIDE program and may involve assisting students in a Wellness class or in another activity designed to target their social/emotional health. A willingness to learn about human differences is required. Scheduling is done on an individual basis with Connections or STRIDE Teachers.

Personal Fitness

778 **O₂ Opportunities**

Quarter 1 & 4

Credits: 1

Level: No level

Clean air and open spaces will create an outdoor experience where students engage in activities that have a direct impact on their well-being. This class is tailored to the needs of students looking for a more active approach to taking care of their physical and mental health. It will include resistance training, along with activities that work on cardiovascular endurance. Students will be empowered to make good decisions, meet challenges, and develop positive behaviors that decrease everyday stress.

SEL Competency: Self-Management. Curriculum Learning Objectives: Impulse control, stress management, self-discipline, self-motivation, goal-setting, and organizational skills.

779 **Well U**

Quarter 2 & 3

Credits: 1

Level: No level

This course is designed to give students the opportunity to learn and apply fitness concepts to the seven dimensions of Wellness. Students will benefit from comprehensive resistance training and cardiorespiratory endurance activities. Students will learn the basic fundamentals of strength training, aerobic training, nutrition, and overall fitness training. Students will be empowered to make good decisions, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

SEL Competency: Self-Management. Curriculum Learning Objectives: Impulse control, stress management, self-discipline, self-motivation, goal-setting, and organizational skills.

502 **Sports Nutrition** (Grades 11-12 only)

Quarters 1-4

Credits: 1

Level: No level

Sports Nutrition explores nutrition and its link to physical fitness, sports performance, and health promotion. Emphasis is on examining how much foods and fluids active people require, what types of food to eat and when. Students learn through class discussion, projects and interpretation of current nutrition information. Laboratory experience focuses on the preparation of nutritious meals and snacks that are specific to meeting the nutritional needs of active people. This course is offered jointly through the Family & Consumer Science Department and Wellness departments. *SEL Competency: Relationship Skills. Curriculum Learning Objectives: Communication, Social Engagement, Relationship-building, and Teamwork.*

Stress Management

790 **Brain Train**

Quarter 1 & 4

Credits: 1

Level: No level

Brain Train, a self/stress management course designed to cultivate self-awareness and personal growth, enhancing skills to manage the demands of school and life. As humans we experience stress, both good and bad, on a regular basis. To better manage individual stress levels, students will learn about how the brain handles stress: its causes and effects; how it impacts the seven dimensions of wellness. We then explore a range of stress management and relaxation techniques that can train the brain and body to de-stress our mind and body: time management skills, breathing techniques, progressive muscle relaxation, mindfulness, meditation, guided imagery/creative visualization, restorative yoga, yoga nidra, etc. Full participation with an open, non-judgmental mind is beneficial for this course.

SEL Competency: Self-Management. Curriculum Learning Objectives: Impulse control, stress management, self-discipline, self-motivation, goal-setting, and organizational skills.

781 **Yo-Co**

Quarter 2 & 3

Credits: 1

Level: No level

Yoga Length & Core Strength! Take this stress management and lifelong wellness course to learn these forms of physical fitness and stress relief for a healthy and balanced lifestyle. Eastern practices meet Western influences in this course that combines the physical and mental aspects of yoga's full-body lengthening and stretching, with core stability exercises for strength and balance, benefiting the body and mind!

SEL Competency: Self-Management. Curriculum Learning Objectives: Impulse control, stress management, self-discipline, self-motivation, goal-setting, and organizational skills.

WORLD LANGUAGE

The World Language Department offers sequential programs in Chinese, French, Latin, Russian, and Spanish, as well as a two-year sequence in ASL. We strongly recommend that students consider their high school study of language as part of a long-term commitment to become proficient in at least one language other than English. The primary objective of all language courses is communicative proficiency, a goal requiring commitment over time.* **To this end, the department recommends that students pursue the study of at least one world language through the upper levels, including level 5, where it is offered.**

In modern language classes, a variety of multi-modal assessments gauge student progress along the ACTFL proficiency continuum, as well as their mastery of targeted vocabulary and grammatical structures. Students take integrated performance assessments to demonstrate their ability to understand, speak, read and write another language in a thematic context. Students have the opportunity to demonstrate their level of proficiency on nationally normed assessments with the potential to earn a State Seal of Biliteracy in the fall of their senior year.

We encourage students to explore the possibility of participating in one of our study abroad programs as a means to further develop their cultural and linguistic skills. The Jennifer Price Global Education Leadership Fund (GELF) exists to provide scholarship support to make this feasible for all students.

World Language courses are geared to students who take them as a second or third language. **Native speakers of Chinese, French, Russian and Spanish who wish to study their own language must submit a writing sample to determine if they might benefit from a World Language course in this language.** See guidance counselors (Oak Hill, Brown or NSHS) for a placement assessment information form before the registration deadline and return the form to the counselor or contact the World Language Department Head at NSHS.

**Communicative proficiency refers to the types of tasks a student is able to accomplish with a language (in terms of reading, writing, speaking, and listening) in an unrehearsed, real world context. The target proficiency level for students who have completed both a middle school sequence and a four-year high school sequence is Intermediate High. An overview of proficiency guidelines by the American Council of Teachers of Foreign Languages can be found here: <https://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>*

Ninth Grade World Language Courses

A. CONTINUING COURSES

Most students enter world language courses at Newton South having begun the study of a world language at the middle school level. For the majority of these incoming ninth-grade students, a second-year course in that same language (described in subsequent pages) is the most appropriate course. These include:

311B Novice French 2	381B Novice Spanish 2
312 Intermediate French 2	382 Intermediate Spanish 2
342 Intermediate Chinese 2	

B. BEGINNING COURSES

Incoming ninth-graders wishing to begin the study of a world language (or to start another) may elect one of the following courses (described in subsequent pages). The appropriate selections should be made with the assistance of a guidance counselor.

311A Novice French 1	381A Novice Spanish 1
341 Chinese 1	351 Latin 1
361 Russian 1	

World Language Courses for Grades Nine, Ten, Eleven, and Twelve

Chinese

Chinese (Mandarin) classes are taught with an emphasis on communication in cultural contexts. Students are involved in various activities such as role-playing, games and small group work. During the first semester, students typically have the opportunity in class to interact with exchange students and teachers from China. A balance of assessment activities combines proficiency and achievement testing throughout the year. Placement for both ACP and Honors Chinese classes is guided by teacher recommendation.

Heritage/native speakers of Chinese who have not taken Chinese within the Newton Public Schools must submit a writing sample to determine whether they can benefit from World Language courses in their native language. See guidance counselor during registration for the placement form and return the completed form to the counselor or World Language Department Head at NSHS.

The **341-345 ACP** sequence develops proficiency in all aspects of language learning in cultural and literary contexts through oral and written expression. It also provides a systematic refinement of linguistic structure.

341 **Chinese 1**

Full year Credits: 5 Level: ACP

⑨ **Chinese 1** provides students the opportunity to learn the fundamentals of Chinese conversation through topics such as school, family, daily routines and weather in the standard Mandarin dialect. Classes are taught in a cultural context in order for students to develop increasing understanding of the Chinese people, their history, and civilization. This is a textbook-based course with cultural activities.

342 **Chinese 2**

Full year Credits: 5 Level: ACP

⑨ **Chinese 2** is for students who have completed the middle-school sequence or first-year Chinese. Students build upon concepts from first-year Chinese, expanding upon basic structures. Students increase oral proficiency to a level at which they can converse in Chinese using basic, everyday language on themes such as clothing, shopping, leisure activities, and sports and health. Students who successfully complete **Chinese 2** will have sufficient character recognition to be able to read simple written Chinese. This is a textbook-based course with selected authentic materials.

343 **Chinese 3**

Full year Credits: 5 Level: ACP

Chinese 3 is a continuation of **Chinese 2**, with emphasis on improving conversational skills while expanding vocabulary and character recognition. Students learn to handle more complex themes such as career choices, respect for the environment, and caring for a community. This is a textbook-based course with authentic reading materials.

344 **Chinese 4**

Full year Credits: 5 Level: ACP

Chinese 4 is a continuation of **Chinese 3**, and is a textbook-based course supplemented with authentic reading and video materials. Students reach increasingly advanced levels of proficiency in speaking, reading and writing as they explore themes such as family routines and traditions, transportation and geography, social relationships between generations, and friendship.

345 **Chinese 5**

Full year Credits: 5 Level: ACP

Chinese 5 is the senior course and the culmination of the ACP sequence. While still a textbook-based course, cultural topics and contemporary issues related to China are explored through authentic readings and videos. Literature (short stories and poetry) and films are woven into the course content.

The **3430-346 honors** sequence is an intensive and accelerated program for students who are enthusiastic and highly motivated in their study of Chinese and who have demonstrated sophisticated linguistic skills and the capacity to work independently. The sequence culminates in the AP Chinese Language and Culture course.

3430 **Chinese 3**

Full year Credits: 5 Level: H

In this textbook-based course, spoken Chinese is stressed with a focus on basic sentence patterns for daily conversation. In addition, students are introduced to Chinese culture and contemporary society. Students will develop proficiency in all aspects of language learning through frequent and intensive oral and written expression.

3440 **Chinese 4**

Full year Credits: 5 Level: H

Chinese 4 is an advanced course that builds upon the foundations laid in **Chinese 3**. In this textbook-based course with authentic reading materials, there is a continued emphasis on written expression, grammar and vocabulary expansion in culturally specific contexts. Students examine an increasing scope of Chinese culture through the incorporation of music and film in the course.

3450 **Chinese 5**

Full year Credits: 5 Level: H

Chinese 5 continues to build upon the skills students hone in Chinese 4. The course will help students further develop and refine their language skills as they focus on particular grammatical structures. Contemporary issues related to China are explored through authentic readings and videos. Literature (short stories and poetry) and films are woven into the course content.

346 **AP Chinese Language and Culture**

Full year

Credits: 5

Level: H

AP Chinese Language and Culture, the culminating course in the honors sequence, prepares students for the Advanced Placement examination in language and culture and for upper-level college courses in Chinese. Students hone their language skills across communicative modes, developing knowledge in pronunciation, vocabulary, idiomatic expressions, grammatical structures, and written characters. In addition to textbooks, students make use of authentic materials, including newspapers, fiction and nonfiction texts, poetry, and films.

French

The **311-315 Advanced College Preparatory** program emphasizes proficiency-based instruction and uses textbooks, readers and authentic materials, including print, audio, and video texts, to develop communication skills in French and to investigate the cultures of the French-speaking world. Students have many opportunities to speak and write French in communicative contexts. They interview one another, take part in small-group discussions, perform role-plays, write original stories, and create skits and presentations. The complexity of the communicative tasks increases as students acquire skills and competency. The **3121-3151 SAM** sequence provides more targeted support and additional scaffolding to students in the ACP classroom. Assessments in SAM courses are modified accordingly.

311A **Novice French 1**

Full year

Credits: 5

Level: ACP

Ⓣ **French 1**, which is taught in French, uses a textbook as well as authentic materials to examine the functions and themes of daily life, such as self, family, home, clothing, friends, food, telling time, leisure, and weather. In addition to basic French syntax, students are exposed to the diversity of the Francophone world.

311B **Novice French 2**

Full year

Credits: 5

Level: ACP

Novice French 2 is the appropriate course for students who have completed the study of French 311A (Novice French 1) at the high school level, and may also meet the needs of other students with a novice-mid proficiency level in French. While continuing to delve into topics concerning daily life, students refine the linguistic skills necessary to readily communicate needs and interests. Upon successful completion of this course, students are well prepared for Intermediate French 2 (312).

Intermediate French 2

312

Full year

Credits: 5

Level: ACP

3121

Full year

Credits: 5

Level: ACP (SAM)

Ⓣ **French 2** uses a textbook and its ancillary materials as well as numerous authentic sources. French 2 features the French- Canadian experience and targets themes such as sports and leisure, travel, and the home. Students learn to narrate past events and experiences.

French 3

313

Full year Credits: 5

Level: ACP

3131

Full year

Credits: 5

Level: ACP (SAM)

French 3 uses a textbook and its ancillary supports to explore themes such as describing oneself, one's responsibilities at home and to the natural world, and life in a global community. Reading comprehension skills are developed through a focus on excerpts of francophone literature from around the globe, including the Caribbean. Students further develop their ability to narrate past events and express and defend opinions.

French 4

314

Full year

Credits: 5

Level: ACP

3141

Full year

Credits: 5

Level: ACP (SAM)

French 4 uses a textbook and its ancillary supports to explore themes such as travel and health, family and friendship, urban life and the professions. Readings are thematically linked to the units of study and include excerpts from the classical French tradition and the global francophone community. Students refine their use of more advanced structures with the goal of fostering a more sophisticated level of expression.

French 5

315

Full year

Credits: 5

Level: ACP

3151

Full year

Credits: 5

Level: ACP (SAM)

French 5 is the senior course and the culmination of the sequence. This is a language and culture course taught through the lens of contemporary French film; students will explore eight to ten films over the course of the year that represent a wide variety of genres and styles. The primary goal of this class is for students to use film as a means to enhance their ability to communicate in French, and to learn more about life in contemporary France. The course is taught entirely in French and students are expected to communicate exclusively in the target language. Students use a film-based textbook to explore aspects of life in

contemporary France and Europe such as relationships, sports and leisure, education, and the legacy of colonialism. Grammar review is contextualized to the films, as is vocabulary acquisition.

The **303-305 Honors** sequence is an intensive program for students who are highly motivated and enthusiastic in their study of French, and who have demonstrated sophisticated language skills. In addition to preparing students to take the AP French language exam, this sequence develops proficiency in all aspects of language learning in cultural and literary contexts through oral and written expression. It also provides a systematic refinement of linguistic structure.

303 **French 3H**

Full year

Credits: 5

Level: H

Moving at an intensively accelerated pace, **French 3H** offers an overview of French history up to World War II and a look at the art of Europe, West Africa and Haiti. In addition to examining various authentic texts and films, students also read a short novel.

304 **French 4H**

Full year

Credits: 5

Level: H

French 4H draws primarily from authentic sources with targeted review of grammatical concepts as needed. Literary selections offer an increased level of sophistication and require a deeper level of cultural analysis. Explored in the context of 19th and 20th century French history, these themes include love and friendship, the search for self, ethnic identity, post-colonialism and existentialism.

305 **AP French Language**

Full year

Credits: 5

Level: H

AP French Language (in tandem with French 4H) is designed to promote communicative proficiency in French, and to enable students to explore culture in contemporary and historical contexts. Using a variety of authentic print, audio and video sources from around the Francophone world, students explore such universal themes as global challenges, the evolving roles of science and technology, personal and public identities, and family and communities. As students examine various cultural products, practices and perspectives, they hone their ability to express ideas, exchange opinions, and interpret both written and spoken French.

Latin

The sequence **351-355** teaches students two languages. Directly it teaches Latin—its vocabulary, grammar, and literature—and indirectly it teaches English, a Germanic tongue whose vocabulary derives largely from Latin and whose literature is shaped by the Classical inheritance. Accordingly, the relevance of Latin to the English language and to our Western culture is emphasized throughout and across the curriculum. Students develop reading skills as they analyze (and at times dramatize) the authentic poems, letters, and histories of Roman authors such as Catullus, Ovid, Pliny, Cicero, and Vergil.

351 **Latin 1**

Full year

Credits: 5

Level: ACP

- Ⓣ **Latin 1** is designed for students who have not yet studied a world language or who wish to start studying a second world language. It grounds students in elementary Latin vocabulary and grammar. With this foundation, students also learn English derivatives from Latin words and begin to develop close reading skills. Roman mythology, geography, daily life, and history are all explored through group projects.

352 **Latin 2**

Full year

Credits: 5

Level: ACP

Latin 2 builds on the skills and concepts that students have acquired in the first-year course. In Latin 2, students largely complete their study of basic Latin grammar, double the size of their vocabulary, and learn to read considerably more complex and interesting Latin prose. Accompanying this more mature encounter with the Latin language is a more intellectual study of Roman culture and history.

Latin 3

353

Full year

Credits: 5

Level: ACP

3530

Full year

Credits: 5

Level: H

Latin 3 is for students who have successfully completed Latin 2. After learning in quarter one the most important remaining concepts of advanced Latin grammar, students begin in quarter two to read authentic Latin literature. They start with the simple prose of the historian Eutropius, marching through the Alps with Hannibal and leading the Roman resistance with Scipio. Then they graduate to the love poetry of Catullus — learning to scan multiple poetic meters and to recognize literary devices — and reflecting on the unchanging nature of love. Time permitting, students delve into the works of other authors in the fourth quarter. **Latin 3 H** is for students who have completed Latin 2 with extraordinary success, and enrollment is guided by

teacher recommendation. **Latin 3 H** students are expected to read a great deal more extensively and independently than **Latin 3 ACP** students, and to translate more exactly.

Latin 4

3540	Full year	Credits: 5	Level: H
354	Full year	Credits: 5	Level: ACP

Latin 4 is for advanced Latin students who have successfully completed Latin 3. Students at both the honors and ACP levels conduct a survey of Roman literature, reading Pliny's letters describing the eruption of Mount Vesuvius, Cicero's oration decrying the traitor Catiline, Ovid's tales of divine and human folly, and Vergil's epic story of the founding of Rome. While doing so, they become expert at scanning dactylic hexameter and more readily recognize literary devices, both in prose and verse. This immersion in literature leads naturally to subtle discussions of Roman values and identity. All the while, with any luck, students also learn to love what they read. **Latin 4 H** is for students who have completed Latin 3 with extraordinary success. While much of the reading content is the same as for **Latin 4 ACP** students, students in the honors sequence are expected to read a great deal more extensively and independently than their ACP peers, and to translate more exactly.

Latin 5

3550	Full year	Credits: 5	Level: H
355	Full year	Credits: 5	Level: ACP

Latin 5 is offered to students who, under exceptional circumstances, have already completed the Latin 4 curriculum, either at Newton South or at a different school. **Latin 5** students meet in the same period as Latin 4 students but work independently within the classroom. The curriculum is adaptable to the interests and strengths of individual students, but typically includes new and/or especially challenging writers, such as Vergil, Cicero, Propertius and Tacitus. Students in Latin 5 are asked to conceive their own ideas for creative and educational projects to share with their Latin 4 peers.

Russian

The 361-369 courses are sequential. **Heritage speakers of Russian who have not taken a course at NSHS must submit a writing sample for their placement in Russian to determine if they can benefit from World Language courses in their native language.** See guidance counselor for the placement form before the registration deadline and return the completed form to the counselor or World Language Department Head at NSHS.

The Russian program emphasizes oral and written communication combined with grammatical competence. Using authentic readings, video, and songs, students are exposed to the culture, literature and history of Russia and the former Soviet Union. **Russian 1 is offered for students who are completely new to the language and is not an option for heritage speakers of Russian.**

361	Russian 1	Full year	Credits: 5	Level: ACP
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⑨ **Russian 1** is designed for students taking Russian as a foreign language. This course provides a solid foundation in the mechanics of reading, writing, listening, and speaking, as well as an introduction to geography and poetry. Students who hear or speak Russian at home are not eligible for Russian 1. A student who hears or speaks Russian at home but cannot read or write it should enroll in 362 (Russian 2).

362	Russian 2	Full year	Credits: 5	Level: ACP
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⑨ **Russian 2** emphasizes oral and written proficiency with an expanding grammar base. This is the appropriate class for students who have completed Russian 1, or who hear or speak Russian at home but cannot yet read or write in Russian.

Russian 3

•	Full year	Credits: 5	Level: ACP
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Russian 3 uses authentic reading selections in combination with a grammar text. This class is designed for students who have completed Russian 2. For students who read and write Russian, placement is contingent upon a writing sample submitted to the Russian teacher.

363	Russian 4	Full year	Credits: 5	Level: ACP
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369	Prototype AP Russian Language and Culture	Full year	Credits: 5	Level: H
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Russian 4 and **Prototype AP Russian Language and Culture** combine to form the culminating course in the sequence with an alternative year curriculum that continues to build proficiency in Russian through the use of authentic reading selections, film, and supplementary texts. Readings may include texts by authors such as Tolstoy, Chekhov, and Zoshchenko. In their second year of the sequence, students work in the same classroom as Russian 4, but largely independently of the teacher, and access computer-based activities designed to prepare them for the AP Prototype Russian Language and Culture Examination.

Spanish

The **391-395 College Preparatory** sequence emphasizes real-life communication skills in Spanish in a cultural context and incorporates a variety of print, audio and visual materials into classroom instruction. Classes are interactive and students have many opportunities to write and speak Spanish in small groups. The sequence is intended for students who benefit greatly from smaller class size, a tightly scaffolded approach, a deliberate focus on aural comprehension and oral production, and a highly contextual approach to grammar as they develop listening, speaking, reading and writing skills in Spanish.

391 Novice Spanish 1

Full year

Credits: 5

Level: CP

Novice Spanish 1 introduces students to basic communication skills, building a foundation for understanding and speaking, and then reading and writing in Spanish. Students use a variety of print, audio, and visual material as they explore themes such as daily routines, family, home and school, and basic leisure activities.

392 Novice Spanish 2

Full year

Credits: 5

Level: CP

Novice Spanish 2 is designed for students who have completed a first year novice course at the high school level. A marked emphasis is placed on listening and speaking skills as students also begin to build proficiency in reading and writing. Various student projects (such as posters, videos, oral presentations) permit students to use and apply newly acquired vocabulary and structures.

393 Spanish 3

Full year

Credits: 5

Level: CP

Spanish 3 continues to build upon and refine the skills students develop in Spanish 2. With a continued emphasis on speaking and listening skills, students also refine their writing as they begin to read longer and more complex texts. Through a variety of projects, students use and apply newly acquired vocabulary and grammatical skills as they continue to explore Hispanic cultures around the world.

394 Spanish 4

395 Spanish 5

Full year

Credits: 5

Level: CP

Spanish 4 and **Spanish 5** combine to form the culminating course in the sequence with an alternating year curriculum that utilizes a communicative approach to advance students' listening, speaking, reading and writing skills in Spanish. Through units of thematic study that include authentic texts, readers, and audio and video material, students will broaden their receptive and communicative skills in Spanish. As they consider these themes, students will make comparisons with and connections to their own lives.

The **381-385 Advanced College Preparatory** program emphasizes proficiency-based instruction and uses textbooks, readers and a variety of authentic materials to develop communication skills in Spanish and to investigate the cultures of the Spanish-speaking world. Students have many opportunities to speak and write Spanish in communicative contexts. They interview one another, do role-plays, write original stories, and create and perform skits. The difficulty of the communicative tasks increases as students acquire skills and competency. The **3821-3831 SAM** sequence provides more targeted support and additional scaffolding to students in the ACP classroom. Assessments in SAM courses are modified accordingly.

381A Novice Spanish 1

Full year

Credits: 5

Level: ACP

- ⑨ **Novice Spanish 1** is a textbook-based course in which students become acquainted with the various Spanish-speaking regions of the world. Students develop basic communication skills around themes such as school, family, daily life and routines. Frequent use of audio, visual and computer resources supplement skill building and comprehension.

381B Novice Spanish 2

Full year

Credits: 5

Level: ACP

- ⑨ **Novice Spanish 2** is the appropriate course for students who have completed the study of Spanish 381A (Novice Spanish 1) at the high school level, as well as for other students who have a novice-mid proficiency level in Spanish. While continuing to delve into topics concerning daily life, students refine the linguistic skills necessary to readily communicate their needs and interests. When they have successfully completed this course, students are well prepared for Intermediate Spanish 2 (382).

382 **Intermediate Spanish 2** Full year Credits: 5 Level: ACP

3821 **Intermediate Spanish 2** Full year Credits: 5 Level: ACP (SAM)

⑨ **Intermediate Spanish 2** is an appropriate course for students who have successfully completed the middle school sequence in Spanish, as well as the Novice Spanish 1 / Novice Spanish 2 sequence at the high school. Emphasis is placed on developing proficiency in each of the four skills (listening, speaking, reading, and writing) as students explore themes such as travel, health, and leisure while studying Hispanic cultures around the world. **Intermediate Spanish 2 SAM** is an option that provides formalized scaffolding and support at the Spanish 2 level, enabling students who are still developing the skills necessary to succeed at the ACP level to enroll in an ACP course. Assessments are modified in line with SAM supports. Students who are considering enrolling in a CP class but who might benefit from the challenges of an ACP classroom should speak to a teacher or counselor about the possibility of registering for SAM. Teacher recommendation is required.

Spanish 3

383 Full year Credits: 5 Level: ACP

3831 Full year Credits: 5 Level: ACP (SAM)

Spanish 3 continues to build students' vocabulary and functional linguistic skills as they delve into the cultural aspects of storytelling, the contributions of ancient Mayan and Aztec civilizations to the world, culinary traditions of the Hispanic world, audiovisual artistic expression in the current Latino culture of the US, and collective efforts to care for our planet. Various audio and visual resources reinforce and enrich the curriculum. **Spanish 3 SAM** continues to provide additional scaffolding and support to students within the ACP classroom, along with assessments that are modified accordingly. The goal is to gradually release students from these supports.

383 **Spanish 4** Full year Credits: 5 Level: ACP

Spanish 4 is an upper-level course in which students build increasingly complex vocabulary sets while refining their ability to narrate and express opinions in Spanish. They build conversational skills and presentational skills while exploring themes such as sports, health and wellbeing, art and music of the Spanish-speaking world, and careers and job readiness.

384 **Spanish 5** Full year Credits: 5 Level: ACP

Spanish 5 is the senior course and the culmination of the sequence. This is a language and culture course taught through the lens of contemporary Latin American and Spanish resources; students explore mature themes of identity and social justice through several contemporary films and documentaries from various countries over the course of the year. The primary goal of this class is for students to use authentic resources as a means to enhance their ability to communicate in Spanish as they learn more about life and current events in Latin America and Spain. The Spanish 5 course focuses on vocabulary building and communicative skills, and is appropriate for students of a wide variety of proficiency levels.

The **373-375 Honors** sequence is an intensive program for students who are highly motivated and enthusiastic in their study of Spanish, and who have demonstrated sophisticated linguistic skills. This sequence develops proficiency in all aspects of language learning in cultural and literary contexts through oral and written expression. It also provides a systematic refinement of linguistic structure.

373 **Spanish 3H** Full year Credits: 5 Level: H

Moving at an accelerated pace, **Spanish 3H** broadens students' vocabulary base and intensively builds linguistic structures in reading, writing, speaking and listening; students are expected to build and refine oral expression through active participation in class discussions. A wide variety of authentic texts, short stories, articles, videos and documentaries are used to build a deeper understanding of the culture and history of the Spanish-speaking world.

374 **Spanish 4H**
 Full year Credits: 5 Level: H
Spanish 4H draws primarily from authentic audio, video and print sources with an intense and targeted review of grammatical concepts as needed. Students read a play, a novel and a selection of short stories from a variety of Spanish-speaking countries, and actively debate and analyze the themes that emerge from these works. Through this literary and cultural exploration, students focus on the consistent refinement of oral and written expression.

375 **AP Spanish Language**
 Full year Credits: 5 Level: H
 In tandem with Spanish 4H, **AP Spanish Language** prepares students for the Advanced Placement examination in language and for upper-level college courses in Spanish by promoting proficiency in Spanish. As students examine various cultural products, practices and perspectives from around the Spanish-speaking world, they will hone their ability to express ideas, exchange opinions, and interpret both written and spoken Spanish. Students make use of a variety of audio, video and written materials from authentic sources as well as supplementary grammar text(s).

Other Offerings in World Language

331 F/S **American Sign Language 1** (Grades 9-12)
 Semester Credits: 2½ Level: ACP
 ⓘ **American Sign Language 1** introduces visual sign language (using hands, arms, body, and face). Students will learn hand shapes (alphabet and numbers), and sign vocabulary. Students will study basic grammatical rules of ASL (American Sign Language). Through assignments both inside and outside of the classroom, students will learn about the Deaf Community and Deaf Culture. The study and practice of Culturally Appropriate Behavior (CAB) is a key part of the course. This class is taught in ASL.

332S **American Sign Language 2** (pre-requisite: **American Sign Language 1**)
 Semester Credits: 2½ Level: ACP
American Sign Language 2 builds on the vocabulary and grammatical rules learned in **American Sign Language 1**. Students will focus on non-manual markers (face and lip movement) and role-playing, and through this will expand their expressive and receptive skills in ASL. Through assignments both inside and outside of the classroom, students will improve their understanding and knowledge of Deaf Culture. Students enrolled in ASL2 often act as mentors and assistants to their peers in ASL1. This class is taught in ASL.

397 **World Language Peer Tutor**
 Full year Credits: 2½ Level: P-F
World Language Peer Tutor offers skilled students the opportunity to work one on one with students in need of extra support in World Language. Teacher recommendation is required. Students can opt to work with a particular teacher during a regularly scheduled J-block, or meet one on one with students during a regularly-scheduled block.

World Language Teaching Assistant

398 Full year Credits: 1¼ Level: P-F
 398F/S Semester Credits: 5/8 Level: P-F
World Language Teaching Assistant offers skilled students who have completed a language sequence the opportunity to lead small groups and to assist teachers in selected World Language courses. Teacher recommendation is required. At the beginning of the academic year, the interested student must submit a proposal in writing to the department head, signed by the supervising teacher. See page 69 for details on the role and expectations of teaching assistants.

Independent Study in World Language

398 Full year Credits: + Level: P-F
 399F/S Semester Credits: + Level: P-F
Independent study in World Language is intended only for students whose learning needs or level of study require a course not previously listed. Approval is by department head and is based on teacher availability as well as student need. **Interested students must submit a proposal in writing to the department head, signed by the participating teacher.**

ALL SCHOOL OPPORTUNITIES

Teaching Assistants

Business - see page 15	Music - see page 34
English - see page 23	History - see page 42
Fashion - see page 24	Mathematics - see page 46
2-D Art - see page 26	Computer Programming - see page 47
Mixed Media - see page 27	Science - see page 54
Ceramics - see page 28	Connections/STRIDE Program Wellness - see page 59
Photography - see page 29	Leadership - see page 59
Media - see page 30	World Language - see page 68

Teaching Assistants work closely with a teacher to support the content learning of students in the teacher’s class. Teaching Assistants may work with individuals or with groups of students in the class, assist in the preparation of classroom materials, and provide general support to the classroom as a whole. Teaching Assistants are expected to:

1. Model positive academic and social behaviors.
2. Be prepared for class and on time.
3. Be attentive to class instruction in order to be able to aid students as needed with content.
4. Assist the teacher as requested in working with individual students or groups of students.
5. Ask for help as needed on how to perform challenging tasks or work with students.
6. Work cooperatively with supervising teacher.

Students who wish to enroll as a Teaching Assistant should reach out to one of their teachers and to the department head in the appropriate subject area. Students will need to complete a Teaching Assistant Application.

902 Community Leader (Grades 11 - 12, with permission from instructor)

Full year Credits: 1 Level: P-F

Community Leader is a voluntary service opportunity for juniors or seniors to attend freshman advisories regularly to provide leadership and peer mentoring for freshman students, as well as assist Community teachers. Community Leaders are responsible for initiating one program per semester with the freshman students, attending regularly scheduled Community Leader group meetings, and assisting Community teachers as needed. Permission of the program coordinator and application are required. See guidance counselor Mr. Amani Allen (Wheeler) if interested.

903F/S Peer Leadership (Grades 10 - 12)

Semester Credits: 1 Level: P-F

Peer Leadership Peer Leadership is for students who want to explore and develop their own leadership style and celebrate diversity at Newton South and the community at large. Students will participate in self- exploration activities and are expected to actively engage in candid conversations around race, class, gender, ethnicity, etc. with a focus on how students at South can play a more active role in developing an inclusive community. They will then have the opportunity to create and implement school-wide initiatives and enrichment programs at Newton South designed to make positive and inclusive change happen. Class enrollment is determined through nomination and invitation. Students who are interested in this class should see their guidance counselor or history teacher.

904 One to One Mentoring (Grades 11 - 12)

Full year Credits: 5 Level: No level

Newton’s One to One Mentoring Program is a yearlong service-learning program in which participants serve as mentors or "bigs” to children in need of mentoring in Newton Public School. Boston students will be matched with young NPS students who also live in Boston. Students participate in an orientation/training program in September and October, which is led by a social worker, who is manager of the program. High school students are matched with a mentee or "little" in November. Students are required to meet their mentee for 2.5 hours a week from November through May. Participation in the program is contingent on students having a solid academic and attendance history. *1 class and 1 meeting per week with mentee

906F METCO Community (Grade 9 only)

Semester Credits: ⁵/₈ Level: P-F

- Ⓢ This course is required for all ninth graders in the METCO program. Led by the NSHS METCO counselor, METCO Advisory provides support, orientation, and community building to students as they adjust to the academic and social challenges of high school.

910S W.I.S.E. Senior Project/Internship Program

Semester*

Credits: 2½**

Level: P-F

The W.I.S.E Senior Project/Internship Program is a senior elective that gives you an opportunity beyond the classroom to pursue a passion or interest through an internship placement or project of your own design. Senior projects/ internships are designed to help you explore a personal interest, a possible career choice, a special talent, a research project, or a community service project.

Internships and projects have provided powerful real-life experiences, often guiding future studies and jobs. Past internships have included placements in business/marketing, government, and the medical field. Projects have ranged from creative art designs to scientific inventions/experiments to backyard building projects. Students are encouraged to choose a project or internship that they are passionate about.

The Program is offered during the second semester. You may be eligible to be released from some classes during term 4 to devote time to your WISE experience. The number of classes from which you are released is determined by the breadth and scope of the project and the number of hours spent at the internship. The project/internship hour requirement is determined on a case-by-case basis. You will receive 3.75 credits for each class from which you are released.

* = class meets during Q3 with students continuing project/internship during Q4.

** = 2½ credits are given for a part-time project/internship and 5.0 credits for a full-time internship.

996F/S Peer Tutor

Semester

Credits: 1¼

Level: P-F

Peer tutor is a great opportunity to hone your skills as a communicator and to help out a student who struggles in a subject that is an area of strength for you. You will meet with a 9th or 10th grader in the student support center and help them get organized, keep up with assignments, and work to build skill in the area where they struggle. **If you excel in any of your classes, and are comfortable working one-on-one with a younger student, please consider applying.** Teacher recommendation for the subject(s) you would like to tutor is a requirement. There is also a mandatory two-block training during the school day in late September. You can pick up a copy of the Peer Tutor Recommendation Form outside room 1312 or from your counselor. Let us know on your Peer Tutor Recommendation Form if you are interested in creating short, helpful videos (Khan Academy style) about key skills and content in 9th and 10th grade courses. Please contact Ms. Leslie if you have questions.

Connections/STRIDE Program Peer Tutor

911F/S

Semester

Credits: 1

Level: P-F

⑨ **Connections/STRIDE Program Peer Tutor** is designed for students who would like to work in the Connections or STRIDE program as a peer tutor. The purpose of this role is to serve as a positive peer role model for students in the Connections or STRIDE program and may involve assisting students in elective classes, in academic support blocks, or in social groups. A willingness to learn about human differences is required. Scheduling is done on an individual basis with Connections or STRIDE Teachers.

798F/S Connections/STRIDE Program Wellness Assistant (Grades 11-12 only. Also listed in Wellness)

Semester

Credits: 1

Level: P-F

Connections/STRIDE Program Wellness Assistant is designed for students who would like to work with students in the Connections or STRIDE program as a wellness assistant. The purpose of this role is to serve as a positive peer role model for students in the Connections or STRIDE program and may involve assisting students in a Wellness class or in another activity designed to target their social/emotional health. A willingness to learn about human differences is required. Scheduling is done on an individual basis with Connections or STRIDE Teachers.

Office Assistant

915

Full Year

Credits: 2½

Level: P-F

915F/S

Semester

Credits: 1¼

Level: P-F

⑨ **Office Assistant** provides the opportunity for students to assist in the House Offices, the College and Career Center, or with the Student Activities Coordinator on a regular basis. Students who volunteer would assist with tasks such as distributing mail, office filing, assisting with school mailings, data entry, and website maintenance. Permission of the Dean for House Office assistant, Mrs. Sabet for the College and Career Center assistant, or Mr. Hardiman for Student Activities assistant, is required.

Bilingual Academic Peer Education (Grades 11 - 12)

917F/S	Semester	Credits: 1¼	Level: P-F
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Bilingual Academic Peer Education is for fluently bilingual juniors and seniors who are in good academic standing. Students learn basic tutoring techniques and apply them in a bilingual classroom setting. Sections meet twice a week concurrently with an ELL Academic Study class and are limited to 4 students per section. Students will need the signature of their counselor and a teacher to be eligible. The ELL Program coordinator makes the final decision based on recommendations as well as the language and academic needs of currently enrolled students.

Library Service (Grades 10 - 12)

919	Full Year	Credits: 2½	Level: P-F
919F/S	Semester	Credits: 1¼	Level: P-F

Library Service offers students the opportunity to assist with the daily operation of our innovative learning center. Students assist library staff by performing organizational and clerical tasks, shelving and retrieving materials, and working on library displays. Space is very limited and the ability to work independently with limited supervision is necessary; permission of a library teacher is required.

CORE COHORT

CORE (Community, Opportunity, Responsibility & Excellence) provides students in grades 10, 11, and 12 additional structure and support in a regular education setting. The cohort offers English and history classes, academic support periods, increased communication between school and home, and additional attendance and academic monitoring of student progress. Seniors who have been in the CORE Cohort during prior years are encouraged to continue taking academic support periods within CORE during grade 12. Placement in the CORE Cohort is made on a case-by-case basis in consultation with the student and his or her parents, guidance counselor, dean, and IEP or 504 team if the student has one. Although CORE is a general education cohort, students in CORE who are on Individual Education Plans (IEPs) can receive special education services within the cohort.

Sophomore English

2291	Full year	Credits: 5	Level: ACP
2292	Full year	Credits: 5	Level: CP

Junior English

2391	Full year	Credits: 5	Level: ACP
2392	Full year	Credits: 5	Level: CP

World History 1775 to Present (Grade 10)

4291	Full year	Credits: 5	Level: ACP
4292	Full year	Credits: 5	Level: CP

United States History, Civil War to the Present (Grade 11)

4391	Full year	Credits: 5	Level: ACP
4392	Full year	Credits: 5	Level: CP

Academic Study (Grade 10)

973	Full year	Credits: 5	Level: P-F
9732	Full year	Credits: 2½	Level: P-F

Academic Study (Grade 11)

974	Full year	Credits: 5	Level: P-F
9742	Full year	Credits: 2½	Level: P-F

Academic Study (Grade 12)

975	Full year	Credits: 5	Level: P-F
9752	Full year	Credits: 2½	Level: P-F

SPECIAL EDUCATION PROGRAMS AND SERVICES

In order for students to be enrolled in special education 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. The IEP Team will determine enrollment in these classes. Please refer to the district-wide program guide for available special education supports: https://www.newton.k12.ma.us/cms/lib/MA01907692/Centricity/Domain/108/ProgramGuide_January272017.pdf

CAREER & TECHNICAL EDUCATION PROGRAMS

The Career & Technical Education (CTE) programs offer our Newton Public School students unique opportunities to explore a variety of career fields. During the students' CTE program experience, they will access, analyze, and synthesize information, create and problem solve using critical and innovative thinking skills as well as collaborate in teams, develop leadership skills and enhance their communication skills. Through a comprehensive sequencing of technical and academic courses, students develop a solid foundation of knowledge and 21st century competency skills essential for a smooth transition to college/university and or the workforce. Students who participate in CTE programs develop an individual Career Plan designed to help them make informed choices, traditional and non-traditional, now and for their futures. Upon graduation, students will be prepared to pursue a two- or four-year college education, a technical training institute, apprenticeships, and/or enter the workforce. Students who complete a three-year CTE Major program receive a high school diploma, as well as a certificate of completion in the CTE program of study, an OSHA 10 Certification, and an industry recognized certification (Automotive Technology, Construction Technology, Culinary Arts, and Early Education & Care). Six of the Newton Public Schools CTE programs are Chapter 74 approved, meaning they meet rigorous state requirements including a set number of hours of study in a field.

All CTE programs are regularly reviewed by the Department of Elementary and Secondary Education

CTE Chapter 74:

Automotive Technology

TV Media Arts

Carpentry/Construction Technology

Culinary Arts

Drafting

Early Education & Care

Graphic Communications

CTE Non-Chapter 74:

Design & Visual Communications

The CTE Exploratory and Major 1 Courses at Newton North are scheduled during the 1st block of the day so students have minimal impact on their schedule at Newton South. Transportation is provided in both directions to support students' commitments to pursue a CTE program.

NOTE: *The bus to bring students from South to North for first period departs South at 7:05. If a student typically takes a bus to South, the student may not arrive in time for this 7:05 bus and will need to make his/her own arrangements to either get to South in time for the 7:05 bus or to get to North for first class at 7:50. Transportation, although provided, does require a little extra effort, but it is so small in comparison to the benefits!*

EXPLORATORY PROGRAM - Exploratory meets four blocks a week for one semester

The first course in the sequence of a CTE program is called Exploratory Program. During this course a student "explores" the career area while developing the necessary foundation of competency-based knowledge and skills as well as safety fundamentals in the technical field of interest. During the Exploratory Program, students research a variety of occupational and career information using an assortment of Internet platforms, and begin to create and develop an individualized Career Plan.

*Grade 11/12 students are only allowed to take this class if after all Freshmen and Sophomores have been placed, there is a spot available. Note, this is a rare occurrence.

MAJOR 1

Students who have successfully completed the Exploratory Program course and would like to continue their education and training in the chosen CTE program apply to pursue Major 1. During Major 1 students enhance and expand on the foundation of knowledge and skills established in exploratory. Students continue to develop their career plans, and learn the value of a strong work ethic while focusing on skills necessary for the 21st century. Career planning at this level requires students to explore labor market trends in the chosen CTE program and related fields, build a personal budget based on an occupation of interest and earn a Safety Training Certificate. Major 1 courses meet four blocks per week for the full year.

To apply to a CTE program as a Major 1, students need to have placed well according to the Exploratory Program Rubric, earned an Exploratory Safety Training Certificate, received the teacher's recommendation and complete the CTE program application. For applications see the CTE teacher, counselor, CTE office in room 112 or refer to the form in the back of this Opportunities Book.

MAJOR 2

Major 2 is the next course in the sequence of a CTE program of study and is for students who want to cultivate their knowledge and skills in the field of study, who have successfully completed Major 1 and who have been recommended by the teacher. During Major 2 students apply and strengthen their knowledge and skills by engaging in real-world experiences in their CTE learning environment. Major 2 courses meet 8 blocks a week. Students in Major 2 will be registered for Health & Wellness (PE033); this PEHW course includes First Aid, Safety and CPR and is incorporated into the 8 blocks. This PEHW meets a graduation requirement and is also a requirement to be eligible for a cooperative education work place learning experience second semester in their senior year.

MAJOR 3

For students who have developed a genuine interest in the CTE program, who have successfully completed Major 2 and who have been recommended by the teacher, Major 3 is the last course in the sequence of the CTE program of study. Students refine their foundation of academic knowledge and technical competency skills. Major 3 courses meets 12 blocks a week. 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; it's an embedded 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 Major 3 in a CTE program are eligible to receive college credits through post-secondary articulation agreements when they continue their education in the career pathway. These credits are issued after the completion of the first semester of their post-secondary studies. At the end of the Major 3 description for each CTE program there is a list of the postsecondary institutions and the course number offered in the articulation agreement.

HONORS OPTION FOR MAJOR 2 AND MAJOR 3

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

- Interest, ability and motivation to meet the challenges of an honors level course.
- The ability to be an independent learner in the program setting.
- Aspirations for an advanced level of learning and critical thinking through more challenging assignments, coursework and learning opportunities.
- Assistance with program/shop management.
- The ability to simultaneously handle multiple projects.
- Desire to take on complex projects and be held to a higher standard of quality.
- Commitment to complete projects before or after school when necessary.
- Leadership and collaborative teamwork skills to coordinate a team of students to complete a group project.

CAREER & TECHNICAL EDUCATION COOPERATIVE WORK EXPERIENCE

CTE Co-Op work experience is available to students in Major 3. The cooperative education work placement offers students an additional learning dimension to their educational experience and is designed to apply and expand their knowledge and skills with an authentic work experience in the business community. This is a paid, supervised, instructional experience that is directly related to the student's CTE program. A student's day is divided between their academic studies and their worksite 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 earn their OSHA 10 Certification for safety, completed their Career Plan, and received the recommendation of their teacher.

POST-GRADUATE

Consideration for post-graduate CTE study will be made on a space available basis, and only with the approval of the principal and Director of Career & Technical Education. Applicants should see their guidance counselor to begin this process mid-way through their senior year. The guidance counselor will contact the CTE director about the request who will then notify the principal and schedule an interview to meet with the student.

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 and Early Education & Care (Early Childhood Education). The information can be accessed on the following website: www.masscc.org/articulation

If one of the Chapter 74 Programs is a career area of **serious** interest for a student (whether after college or right out of high school) and the student is willing to commit to commuting to North for the course, the student should pursue a Chapter 74 exploratory course that is offered at North (left column below). This avenue will allow for a smoother transition into a major for a CTE program, all of which are housed at North. For students who are not sure about their future endeavors but would like to sample a variety of career interests and would prefer to not commute to North, they should register for the career area electives offered at South (right column below). If after taking a career area elective at South a student would like to continue studying this career area that is one of our CTE programs the student needs to begin the application process by notify the present teacher. The conversation and process will continue with the counselor and the Director of CTE. More detailed information about the Chapter 74 CTE programs is located on-line in the Opportunities Book for Newton North High School.

<p align="center">Courses Listed in this column are State approved and regulated Chapter 74 Programs.</p> <p align="center">They are all housed at Newton North High School.</p>	<p align="center">Courses listed in this column are electives that are housed at South that provide a similar experience to the CTE Exploratory Programs housed at North (see the column to the left).</p>
<p>Automotive Technology - CIP CODE: 470604 880 Exploratory Automotive Technology Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students acquire the fundamental knowledge and understanding of the basic automobile systems including the use of tools and equipment, and safe workplace-practices. Students in the Automotive Technical Program learn by working on vehicles in our garage classroom using state of the art Mitchell 1 repair software, as well as related-theory instruction in the technical classroom using CDX interactive experimental curriculum. Proper dress and footwear is required.</p>	<p align="center">There is no Automotive Technology elective available at Newton South.</p>
<p>Carpentry/Construction Technology - CIP CODE: 460201 887 Exploratory Carpentry Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students will develop entry-level competency skills and an understanding of safe and proper methods as well as the safe use and handling of hand tools. Students will engage in all basic operations, including, planning, layout, industry related math skills, measuring, cutting, installing, fastening, sanding, and finishing. Proper dress and footwear is required</p>	<p>581 Woodworking I Periods per week: 4 First or Second half Credits: 2½ No Level</p> <p>Woodworking I is an activity-centered program in which students select, construct, and finish pieces of furniture. Emphasis is placed on the students' acquiring proficiency in the set-up, maintenance, and safe use of the most frequently used machines. Students are trained to work with a partner while constructing their own project. They are also expected to work from drawn plans and written instructions, and work in a safe manner.</p>

Newton North High School	Newton South High School
<p>Culinary Arts - CIP CODE: 120503 902 Exploratory Culinary Arts Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students will develop and apply basic food service principals as well as kitchen safety and sanitation codes. With this fundamental knowledge and skills students will rotate through a variety of learning stations on a daily basis. Students will be introduced to the commercial food preparation of a bakery and a restaurant; making homemade pasta is a favorite student lesson. If you are interested in learning about the fine art of cooking, the operations of a restaurant and the hospitality the Tiger’s Loft is the place to start! Students also learn to enjoy meeting people, building customer relations, solving daily challenges, have high energy and enjoy a fast paced work environment.</p>	<p>507 Culinary Arts Exploratory Periods per week: 4 First or Second half Credits: 2½ Level: ACP</p> <p>This course is designed for students who want to acquire the fundamental food preparation techniques central to all areas of the food service business. Students are introduced to quantity food preparation in the areas of baking, pastry and hot and cold meals. Students will rotate through food preparation stations and actively participate in the business of food service. Emphasis is on learning basic culinary skills, and kitchen sanitation and safety practices that align with the food service industry. Students will gain practical experience while preparing and serving meals in the “Lion’s Den Bistro,” Newton South’s student run restaurant.</p>
<p>Drafting - CIP CODE: 151301 5911 Exploratory Drafting Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students learn to draft exciting 3dimensional spaces and objects on the computer using two different industry standard software programs: Autodesk’s Revit ®and Inventor ®programs. These drafting software programs allow students to see their 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! The course introduces the basic drafting principles of reading drawings, and creating spaces and objects. Many assignments allow students to apply their drafting skills into projects of their own design such as 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,then this is the class for you!</p>	<p>551 Architecture I</p> <p>Periods per week: 4 First or Second half Credits: 2½ No Level</p> <p>Architecture 1 introduces the fundamentals of residential design and building techniques from house framing to electrical work. Students familiarize themselves with CAD drafting software and manual drafting instruments to complete a set of working blueprints. Students will also design their own ranch style house and build a ¼" scale model.</p>
<p>Early Education and Care - CIP CODE: 131210 894 Exploratory Child Development Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory 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 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</p>	<p>521 Child Development Periods per week: 4 First or Second half Credits: 2½ Level: ACP</p> <p>Child Development focuses on the conditions that influence human growth and development from before birth to age five. Visits to class by parents with infants and toddlers help students to analyze the social, emotional, physical and cognitive development of the young child. Current issues affecting children in American society are presented, and students will learn about career opportunities in child-related fields. Students will write, create, and perform their own original puppet shows for preschool-aged children in the community. Students work regularly in the preschool classroom. Students interested in Early Childhood Education are encouraged to take this class as a pre-requisite.</p>

Newton North High School	Newton South High School
<p>Graphic Communications - CIP CODE: 100301 932 Exploratory Graphic Communications Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students will be introduced to a variety of graphic communications techniques. Students will design a personal crest, memo pads, school poster, T-shirts, buttons, and note cards as well as class projects: Photoshop Morph and custom Illustration. Students will produce work on digital 1-color and 4-color printers and learn how to silk screen on T-shirts. All graphics will be created using the Adobe Creative Suite: InDesign, Photoshop, Illustrator, Acrobat software on Macintosh computers</p>	<p>578 Graphic Design Periods per week: 2 Full Year Credits: 2½ No Level</p> <p>Graphic Design I covers all aspects of graphic design. Students will use various design software, Photoshop, Illustrator Acrobat, Microsoft Word and InDesign along with manual techniques to make clip art, greeting cards and small newspaper layout. Students also produce multi-color designs on paper, cloth, or plastics to create posters, t-shirts or bumper stickers through screen-printing processes and also produce work on a digital color/bw printers</p>
<p>Design & Visual Communications CIP CODE: 500401 978 Exploratory Design & Visual Communications Periods per week: 4 Second half Credits: 2½ No Level</p> <p>This exploratory course welcomes students of all backgrounds to learn the creative design process and bring ideas to life. 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. 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 through authentic work experience.</p>	<p>There is no singular Design & Visual Communications elective at South; however, many electives provide the same components of the Exploratory Program offered at North.</p>
<p>Television & Video Production - CIP CODE: 090701 173 Exploratory TV Media Arts Periods per week: 4 Second half Credits: 2½ No Level</p> <p>Exploratory students are given the opportunity to develop into creative professionals and media artists, working with images and sounds to entertain, inform, and persuade viewer, using state-of-the-art multimedia equipment. Students will learn the fundamental aspects of visual storytelling to create multiple original short films and news stories. Working in teams, they either report stories on camera or direct from behind the scenes to shoot, edit, and weave together short video segments. Projects will take students beyond the traditional classroom setting to new environments where they'll conduct authentic learning by capturing stories throughout the school.</p>	<p>097 Video Exploratory Periods per week: 2 Full Year Credits: 2½ Level: ACP</p> <p>In Video Production, students learn how to communicate with an audience using recorded images and sound. Students develop techniques for use in pre-production, shooting, on-screen and voice-over performance, and post-production. Projects include music videos, short films, documentaries, news segments, and promotional videos. Returning students may work independently on individual or group video projects for honors credit with instructor approval. Note: this is the prerequisite course for CTE Television and Video at NNHS.</p>



Newton South High School is a community of students, families, faculty and staff committed to engaging all students with challenging coursework, so they can develop into knowledgeable, thinking, and creative individuals with the ability to communicate and interact successfully with those in the world around them.

We believe that all students can reach high levels of success when they:

- know they are safe, valued, and respected by teachers and peers
- are given equitable access to learning resources and opportunities
- are connected to and supported by a community of students and adult learners
- are guided by adults who work collaboratively towards a common purpose
- are motivated, challenged and inspired by connections between the classroom and the world
- demonstrate a strong work ethic, a spirit of inquiry, and a passion for learning
- maintain a balanced, healthy lifestyle

Academic Expectations

Newton South students are expected to master course content. With this foundation of acquired knowledge students will:

Inquire- ask questions and seek answers through research, using technology and other resources, to create new understandings of the world

Solve Problems- develop solutions to problems in situations that stretch understanding and require innovative thinking

Think Critically- analyze, interpret, synthesize, evaluate, and draw conclusions to develop deeper understandings

Create- build, compose, design, or perform to develop an understanding of themselves, others, or the world

Communicate- write and speak with clarity and purpose to a variety of audiences

Social and Civic Expectations

As they achieve at a high level academically, students are expected to:

Act responsibly- consider the impact of one's decisions while assuming responsibility and accepting consequences

Collaborate- work effectively and respectfully with diverse groups of peers and adults

Contribute- explore and make positive contributions to the world beyond the classroom

Maintain Balance- develop skills, including strategies to manage workload and stress, to maintain a balanced and healthy lifestyle

At

Newton South

We.....

