



NEWTON  
SOUTH

2024  
2025

PROGRAM of  
STUDIES

# NEWTON SOUTH HIGH SCHOOL

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Secretary: Lucia Curran  
Counselors: Ariel Kenyon  
James Medeiros  
Donna Segal  
Chris Hardiman

### Goldrick House

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Dean: Marc Banks  
Secretary: Diane Trieger  
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Dear Newton South Student,

I am excited to present you with the 2024-2025 Newton South Program of Studies! These pages contain one of the most comprehensive academic programs of any high school in the Commonwealth. Each course is crafted to provide you opportunities to engage creatively, problem-solve, and grow. Each year offers a chance for you to consider the path you would like to take moving forward and engage with courses that pique your specific interests.

We are 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. We hope that by examining the above we will provide more students access to a challenging and enriching curriculum of their choice to best prepare them for the future ahead.

Please know you do not have to make these decisions alone! Your teachers, counselors, advisors, coaches, and deans stand ready to help you discuss and choose the best options for you. Most importantly, spend some time exploring and discussing options with your parents and guardians. They know you best, and will always be your strongest advocates.

I wish you good luck on your journey! We are all looking forward to assisting you on your way, and remember to always “Listen First, Show Respect, Take Responsibility and, most importantly, Show Kindness” as a member of our Newton South “Lion” community.

Sincerely,

Tamara Stras  
Principal

# South Human Rights Council



The South Human Rights Council (SHRC) is a team of staff and students who help safeguard and promote the rights of all members of the diverse Newton South High School community. The SHRC engages in work through its many committees, including the student curriculum committee, the teacher professional development committee, the diversity, equity, and inclusion committee, and the communications committee. In addition, the SHRC supports affinity groups, festivals, and enrichment opportunities. Special events that the SHRC sponsors include the Latino Culture Festival, Native American Culture Festival, LGBTQ+ Festival, (Dis)ability Awareness Festival, The Mahrajan Festival, the Black Culture Festival, the AAPI Festival, the Jewish Awareness Festival, and Holocaust Remembrance Day, various special topics discussions, and more.

**Email us at  
[nshshrc@gmail.com](mailto:nshshrc@gmail.com)**

# 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 inter-disciplinary 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 human existence. From subatomic 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. da Vinci is a differentiated program: Students may enroll at the Honors, ACP, or CP level and need not be at the same level in all da Vinci classes.

da Vinci is a multi-year cohort program:

- o 10th grade da Vinci chemistry, math, and art
- o 11th grade da Vinci biology, math, and engineering
- o 12th grade da Vinci capstone

Details about specific da Vinci courses can be found within each department listing. The da Vinci 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. Students should see their mathematics/science teacher or counselor for more information.

**The Global Justice Program-** A three-year program beginning in Grade 10. As Dr. Martin Luther King said, "Injustice anywhere is a threat to justice everywhere." With this in mind, the Global Justice Program seeks to examine race, gender, socioeconomics, religion, sexual orientation, and climate. How do we deal with injustices around the world? How do we deal with injustices in our own communities? The program aims to keep students together in cohorts, where they will work on collaborative, interdisciplinary projects, as well as more traditional assessments.

**The New Media Communities Program -** A two-year program beginning in Grade 10. New Media Communities combines English and History with project-based work in media analysis and media production. In addition to rigorous work studying history and literature, students will collaborate with their friends in filmmaking, audio production, music production, graphic design, web design, and more; in doing so, we will deepen our creative strengths and gain new ones. Sophomores will learn audio storytelling and production, participating in the nationwide NPR Student Podcast challenge. Juniors will expand their knowledge from Sophomore year and focus on using documentary cinema to enhance understanding of American history and literature. Their work will culminate in a 10-15 minute collaborative documentary project to be submitted for local and national competitions. Throughout the program, our main goals will be to foster community, challenge ourselves, and tell stories to matter to us and to the world. 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:

**020F/SS Art Foundations**

**090F/SS Foundations: Media Arts**

**091F/SS Digital Arts Explorations**

**092F/SS or 0920F/SS Digital Arts Studio**

**081F/SS Photography Explorations**

**082F/SS or 082S Photography Studio**

**097F/SS or 0970F/SS Video Studio**

**270F/SS Acting Foundations**

**275F/SS or 2750S Acting for the Screen & Stage**

**273F/SS or 2730F/SS Actors Workshop**

Look for the ^ 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 recent offerings. The list is not exhaustive and is subject to change based on availability and enrollment. For up-to-date information, please visit <https://www.newton.k12.ma.us/Page/2012>.

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 <https://www.newton.k12.ma.us/Page/2043>.

For more information on scholarships or any of the global travel opportunities below, please email Newton's Global Education Programs Developer Star Lew at [lewy@newton.k12.ma.us](mailto:lewy@newton.k12.ma.us).

## 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 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 Language 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 or spring 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 may be from all grades with a preference towards juniors and seniors in good standing. Applications become available in May the year preceding the trip from Newton South METCO Counselor & Legacy Scholars Director 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: Biennial - 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 (Washington, D.C.)** - 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. A detailed program overview can be found here: <https://pavaos.wixsite.com/nshsunesco>

## **Global Communities Travel Programs**

Periodically, the Global Communities program offers 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 the chosen 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; this interest should be shared with the counselor and Director at the time of course registration. Transportation, although provided, does require a little extra effort, but it is a small price to pay 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, 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:

### **Advisory**

Advisories are a cohort of students that meet on Mondays 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 our school's core values, and last, but not least, have fun together by playing games and relaxing.

### **9th grade Clusters**

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, Math, 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 academic expectations in ninth grade.

### **WIN Block**

WIN Block is an opportunity for students to sign up for learning opportunities providing "What I Need" three times a week, in between the first and second instructional blocks on Wednesday and Friday and after the last scheduled class period on Thursday. It is a time when students can meet with their teachers for extra help or to make-up work, participate in social emotional learning opportunities, or elect from amongst other enrichment learning opportunities. All staff are required to be available to assist students during two of the three WIN Blocks.

### **Lion Block**

Lion Block meets at the end of the day on Tuesday, and is an opportunity for student clubs and activities to meet, as well as for teachers to hold optional learning and enrichment 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 Student Support Center**

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 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](mailto: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. Librarians also meet regularly with students one-on-one to assist them with research, citation, and book recommendations. 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

## Department Requirements

The Newton School Committee sets requirements for graduation at Newton North and Newton South High Schools. Beginning in 2022-2023, students must earn a minimum of 243 credits in order to graduate and meet the requirements listed below. 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	48 credits
Science	24 credits (12 in biological science and 12 in physical science)
History and Social Science	36 credits (includes 12 credits in United States History)
Mathematics	24 credits
Fine, Performing & Technical Arts <i>Art, Business, Family &amp; Consumer Science, Media Arts, Music, Drama, Speech, Computer Programming, Journalism, and Technical Education</i>	12 credits
Wellness	15 credits

The remaining 84 credits required to get to 243 can be earned through electives or other course offerings.

## Credits

Credits are assigned to courses depending on the frequency of meeting and preparation required.

<b>3x per week courses</b>	<b>2021-2022 and prior</b>	<b>2022-2023 and beyond</b>
Full year courses	5.0 credits	12.0 credits
Semester courses	2.5 credits	6.0 credits
Non-Wellness quarter courses	1.25 credits	3.0 credits
Wellness quarter courses	1.0 credits	3.0 credits
Teach Assistants, Peer Tutors, Independent Studies	2.5/1.25/0.625 (based on length of course)	6.0/3.0/1.5 (based on length of course)

All courses, minimum credit, and graduation requirements listed in the Program of Studies reflect the new credit system. Courses that meet fewer than 3 blocks per week will be awarded prorated credit.

Students will be required to take a minimum of 72 credits, although juniors and seniors who are committed to extra curricular activities are allowed to enroll in a minimum of 66 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 66 credits along with extra curricular activities.

## MCAS Graduation Requirement

In addition to the requirements set by the Newton School Committee, the Commonwealth of Massachusetts requires that students seeking to earn a high school diploma must earn their competency determination in English Language Arts (ELA), Mathematics, and Science and Technology/Engineering. This is earned through the Massachusetts Comprehensive Assessment System, or MCAS.

The Science MCAS is taken in grade 9 and the ELA and Math MCAS are taken in grade 10. Students who do not pass the MCAS tests may retake these tests in future school years. Students may also be able to earn their competency determination through an alternate assessment.

For more information about MCAS graduation requirements, please visit the Massachusetts Department of Elementary and Secondary Education's website here: <https://www.doe.mass.edu/mcas/graduation.html>

## Course Details

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.

### 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.

## Course Levels

College Preparatory (CP)	Advanced College Preparatory (ACP)	Honors/AP
In College Preparatory classes, students learn core grade-level content and skills of the course that they will need for future study in the discipline. Lessons are presented at a flexible pace. Students investigate, analyze, synthesize, evaluate, and solve problems with targeted support.	In Advanced College Preparatory classes, students learn core grade-level content and skills of the course that they will need for future study in the discipline. Additional content may be presented. Students investigate, analyze, synthesize, evaluate, and solve problems.	In Honors or AP classes, students learn core grade-level content and skills that they will need for future study in the discipline. Lessons are taught at a rigorous pace. Additional content will be presented. Students investigate, analyze, synthesize, evaluate and apply content and skills learned in class to novel situations.

\*\* In the Mathematics department, there is one additional level called, "Accelerated," that is between the ACP and Honors level.

No Level (N)	Pass-Fail (P-F)
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.	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.

**Assessments for each Level:**

With each level change, there is a different expectation that students are able to transfer and apply content and skills learned in class to increasingly abstract and novel problems and situations.

## 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. Newton South High School calculates an unweighted grade point average (GPA). GPA is computed three times:

- Grades from the end of ninth and tenth grades and the first two quarters of eleventh grade
- At the beginning of senior year
- After the first two terms of senior year.

GPA does not include Wellness courses, any course with level P-F, classes taken during summer school, or classes taken at other institutions.

4.0 = A	2.7 = B-	1.3 = D+
3.7 = A-	2.3 = C+	1.0 = D
3.3 = B+	2.0 = C	0.7 = D-
3.0 = B	1.7 = C-	0.0 = F

## 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 students for their postsecondary endeavors. However, please pay careful attention in planning for electives.

## **Registration and Scheduling**

Registration and scheduling is structured in a way to promote equitable access to opportunities within the school and to encourage a balance in terms of the breadth and depth of student choice. Newton South High School builds the school-wide schedule based on requests made by students. Our process has allowed the majority of students to receive all of the courses they request. Consequently, student requests impact the number of courses and sections of each course that the school is able to run. This impacts staffing decisions which are made in the spring of each school year. In order to meet the needs of students, appropriately staff the building, create optimal class sizes, and remain within budget constraints, students can not change their registration requests after the Verification period has closed in April.

### **Phase One: Registration (February/March)**

- Program of Studies is released
- During the registration and verification process, students are encouraged to consult with their parents/guardians, counselors, teachers, and department heads (if necessary) to determine the proper courses for them to take.
- Students should carefully consider course choices to provide appropriate challenge and support within courses and across their schedule because it will not be possible to make changes after the Verification process.
- Teachers will talk about the course recommendation process in each of their classes and provide students with the opportunity to discuss their individual course recommendations. Then, teachers will enter course recommendations for students into Aspen.
- Students will enter elective course requests into Aspen
- School counselors will meet with students to check requests for completeness and accuracy

### **Phase Two: Course Request Verification (early April)**

- Students will receive their official registration cards in Aspen. These cards will include the courses the teachers recommended and the courses the students added themselves.
- Students can make changes to their officially requested courses during the Verification Period. In cases where a change requires a teacher recommendation, students will need to see the appropriate teacher and the teacher will initiate the change. All other changes can take through a guidance counselor or submission of the Verification Period Change Form. Students do not make changes themselves in Aspen,
- All students will “sign” the Verification Period Form, either to acknowledge that their requests are correct or to submit changes
- After this point, no changes to requests are allowed

### **Phase Three: Building Schedules (late April/early May)**

- Department heads work together to determine the number of sections of each course that will be offered based on the number of students requesting each course and budgetary constraints on the building.
- The 2024-2025 schedule is built with the goal of maximizing the number of students who receive the maximum number of requested courses, while minimizing the number of conflicts
- Counselors will reach out to students directly if there is a unresolvable scheduling conflict

### **Phase Four: Error Correction through Google Form (Summer)**

- In early August, students will receive a class list in Aspen. This class list will include all the classes on a student’s schedule, but does not include blocks or teachers.
- Students can report errors through a Google form shared with students via email. Errors include:
  1. Missing required course
  2. Scheduled for wrong level (will be verified by Department Head)
  3. Underenrolled (under 72 credits, or 66 credits for upperclassmen with Dean approval)
  4. Unbalanced semester loads
  5. Enrolled in the same course twice
  6. Scheduled for a course you’ve already taken
- Any requests that are not deemed as an error or will require consultation with a guidance counselor will be referred to Arena Scheduling

### **Phase Five: Arena Scheduling For Schedule Changes (September)**

In early September, Newton South will hold an Arena Day for scheduling changes. Students with errors that require consultation can come speak to their guidance counselor in person to address the scheduling issue. Only schedule issues deemed as errors will be processed at Arena Day.

## 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	Drop Deadline
Full Year Courses	September 30th	Midpoint of the first term
Semester Courses	Three weeks after the start of the course	Midpoint of the first term of the course
Quarter Courses	Two weeks after the start of the course	Three weeks (of class meetings) after the course begins

Students may initiate drops up to and including the first deadline above without having a final grade recorded on report card or transcript. Courses that are dropped after this deadline will be graded as a W. For GPA computation, a W carries no weight. Students are reminded that all final grades are included on the students' report cards and transcripts.

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.

# 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

111F/SS	Introduction to Business	ACP
112F/SS	Personal Finance	ACP

## ELL: English Language Learners

All courses should be chosen in consultation with ELL staff

## English

211S	Ninth-Grade English	ACP
2111S	Ninth-Grade English	ACP(SAM)
212S	Ninth-Grade English	CP
261F/SS	Introduction to Publications	ACP

## Family and Consumer Sciences

501QS	Healthy Cooking and Baking	ACP
502QS	Sports Nutrition	ACP
503QS	International Cuisine AAAE	ACP
504QS	International Cuisine EA	ACP
505QS	Intermediate Intl Cuisine	ACP
506QS	Sustainable Agriculture & Food Sys	ACP
506F/SS	Sustainable Agriculture & Food Sys	ACP
507F/SS	Culinary Arts Exploratory	ACP
511F/SS	Fashion, Clothing, Design & Const. 1	ACP
512F/SS	Fashion, Clothing, Design & Const. 2	ACP
521F/SS	Introduction to Early Childhood Education	ACP

## Fine & Performing Arts: Art

020F/SS	Art Foundations	ACP
021F.SS	2D Explorations	ACP
*Explorations classes can be taken concurrently with 020F/SS & 090F/SS		
041F/SS	3D Explorations	ACP
*Explorations classes can be taken concurrently with 020F/SS & 090F/SS		
061F.SS	Ceramics Explorations	ACP
*Explorations classes can be taken concurrently with 020F/SS & 090F/SS		
081F/SS	Photography Explorations	ACP
*Explorations classes can be taken concurrently with 020F/SS & 090F/SS		
091F/SS	Digital Art Explorations	ACP
*Explorations classes can be taken concurrently with 020F/SS & 090F/SS		

## Fine & Performing Arts: Music

701SS	AP Music Theory 1	H
711F/SS	Music Technology & Composition	ACP
713F/SS	Music Production	ACP
721FS	Concert Band	ACP
7220S	Symphonic Band	H
722S	Symphonic Band	ACP
7240S	String Orchestra	H
724S	String Orchestra	ACP
731S	Jazz Improv 1	ACP
731F/SS	Jazz Improv 1	ACP
735S	Jazz Combo	ACP
736F/SS	Lab Jazz Ensemble	ACP
743F/SS	Vocal Ensemble	ACP
738QS	History of Black American Music	ACP

## Fine & Performing Arts: Theatre

270F/SS	Acting Foundations	ACP
270QS	Acting Foundations	ACP
2760F/SS	Public Speaking and Presentation	H
276F/SS	Public Speaking and Presentation	ACP
278F/SS	Technical Theatre Studio	ACP
278QS	Technical Theatre Studio	ACP

## History and Social Sciences

411S	World History I	ACP
4111S	World History I	ACP(SAM)
4112S	World History I	CP
412S	World History I	CP

## Mathematics

601S	Math 1	H
611S	Math 1 Acc	ACP
621S	Math 1	ACP
631S	Math 1	CP
641S	Foundations of Math	CP

## Computer Programming

650F/SS	Intro to Object Oriented Programming	ACP
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## Science

811S	Physics I	ACP
812S	Physics I	CP
813S	Physics & Engineering Projects	ACP
8132S	Physics & Engineering Projects	CP
890S	Introductory Physics Study	ACP
890F/SS	Introductory Physics Study F/S	ACP

## Technical Education and Engineering

551F/SS	Architecture I	ACP
552F/SS	Architecture II	ACP
553F/SS	CAD and 3D Modeling	ACP
561F/SS	Freshman Engineering	ACP
565F/SS	Robotics I	ACP
566F/SS	Robotics II	ACP
578F/SS	Graphic Design I	ACP
579F/SS	Graphic Design II	ACP
581F/SS	Woodworking I	ACP
582F/SS	Woodworking II	ACP

## Wellness

771QS	Ninth-Grade Wellness	N
772QS	Ninth-Grade Health	N

## World Language

341S	Chinese 1	ACP
342S	Chinese 2	ACP
311AS	Novice French 1	ACP
311BS	Novice French 2	ACP
312S	Intermediate French 2	ACP
351S	Latin 1	ACP
361S	Russian 1	ACP
362S	Russian 2	ACP
381AS	Novice Spanish 1	ACP
381B	Novice Spanish 2	ACP
382S	Intermediate Spanish 2	ACP

## All School

906FS	METCO Advisory	P-F
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Career and Technical Education Exploratory Programs  
(at Newton North) - Please see chart on page 73



# 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.

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 at the following levels: 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 2022-2023 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.

## COURSE LINE DESCRIPTION KEY

a. Introduction to Business b. (Grades 9 - 12)

c. 111F/SS

d. Semester

e. Credits: 6

f. Level: ACP

g. 9

a. Name of course

b. Grade, prerequisites, corequisites: This information will tell you the grade levels that may take the course, and if there are prerequisite or corequisites course requirements.

c. Course Number: This number is used in the registration process to identify the specific course. The exact course number is important, as it can sometimes indicate the specific level or length of course. In some cases, # may replace a course number to indicate that registration for this course is not open during normal registration. Please see the description for instructions on how to participate in these courses. Most require students to request the course in the fall, after their schedule has been published.

d. Length of course: This indicates if a course is offered as a Full Year, Semester, or Quarter course. If courses are only offered during specific semesters or quarters, it will be noted.

e. Credits: The number of credits earned for successful completion of the course

f. Level: This indicates if the curriculum level is College Prep (CP), Advanced College Prep (ACP), Honors (H), No Level (N) or Pass-Fail (P-F).

g. Miscellaneous information:

9 Course is open to 9th graders

\* Course fulfills Fine, Performing and Technical Arts requirement

^ Course is part of an Interdisciplinary Studies program (see pg 6 for more details)

# BUSINESS

Course offerings in the Business and Technology Department are designed to provide students with the opportunity to learn business and computer literacy skills basic to personal, school, and career activities, prepare students for courses taken at the college level, and develop the students' understanding of current business events and how they relate to everyday adult life.

## **Introduction to Business (Grades 9 - 12)**

**111F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

Ⓣ \* Introduction to Business introduces students to the world of business and provides insights into how businesses operate. This course explores how businesses are organized and managed. Students will develop an understanding of the economic theory of supply and demand. Students will also investigate the production, marketing, and finance decisions of the business manager. Students will use a marketplace simulation program to test their business theories. Students must take this course before enrolling in specialized business courses.

## **Personal Finance (Grades 9 - 12)**

**112F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

Ⓣ \* Personal Finance focuses on the personal financial decisions facing young adults today and throughout their lifetime. Included but not limited to, getting a job, purchasing a car, housing options, banking skills, college financial planning, obtaining and managing good credit, budgeting skills, saving skills, taxes, investment options, consumer skills and retirement planning. Students will gain a broad overview of financial analysis principles such as risk management, time value of money, stocks and bonds. This important course prepares young people to face "Real-Life" financial responsibilities of the modern world.

## **Entrepreneurship (Grades 10 - 12, Prerequisite: 111F/SS Intro to Business)**

**113F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

\*Entrepreneurship explores the process of creating a real business venture. Students will study the characteristics and strategies of the entrepreneur. Students will debate various ethical issues in business, and will examine the legal requirements of business ownership. Students will work in a group setting to develop business ideas, research market opportunities, and develop marketing and financial plans. Students will use basic accounting reports to track their business's progress and to assist in the decision-making process. Groups will prepare a formal presentation to market their business idea to the class and to the instructor. Individual and collaborative projects and presentations constitute a significant part of the course work.

## **Fashion Marketing and Merchandising (Grades 10 - 12, Prerequisite: 111F/SS Intro to Business)**

**114QS**

**Quarter**

**Credits: 3**

**Level: ACP**

\*Fashion Marketing and Merchandising brings to life the business aspects of the fashion world. It presents the basics of market economics, textiles, design, and promotion. It gives an in depth view of the fundamentals and strategies for retail success. It will stress marketing as the basis for successful fashion merchandising activities that satisfy the changing consumer market. We will also discuss the many career opportunities related to fashion and how to prepare for them including entrepreneurship.

## **Principles of Marketing (Grades 10 - 12)**

**116F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

\*Principles of Marketing explores product design, pricing, distribution, and promotion strategies utilized by today's successful businesses. Students will learn how companies develop target markets through extensive marketing research methods. Through a "hands-on" approach involving various projects and the exploration of current events, students gain an understanding of how to make effective marketing decisions. This course provides an excellent background for those who plan to enroll in a business school in college. Individual and collaborative projects and presentations constitute a significant part of the course work.

## **Financial Planning for Seniors (Grade 12, Grade 11 if space available)**

**117QS**

**Quarter**

**Credits: 3**

**Level: ACP**

\*Financial Planning for Seniors is intended for seniors who will be venturing out on their own in a short time and will help them with understanding financial literacy and preparing for next steps after high school. This will be a detailed course which will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management. Students are provided with a foundational understanding for making informed personal financial decisions leading to financial independence.

## Teach Assist Business (Grades 10 - 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level: P-F

Teach Assist Business requires prior approval of the business teacher and the business Department Head. See page 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

# ELL: ENGLISH LANGUAGE LEARNING

The English language learning courses are offered for students for whom English is not a first language. Placement in these courses is determined based on previous schooling as well as a score on the WIDA Screener Placement Test. Results of the assessment are used to determine a student's English proficiency level and course placement. All courses listed below should be chosen in consultation with ELL staff.

The ELL Department offers a strong program of academic and English language development courses. These courses have been developed to align with WIDA standards for English development and can be taken in place of a class offered by the English or History Departments. Content area courses are also taught in English using sheltered techniques.

Students are required to take an English course each of their four years at Newton South in order to meet the twenty-credit requirement. The English courses offered through the ELL Department have students enrolled from across grade levels since courses are leveled by English proficiency. Five levels of English as a Second Language, ranging from emerging to bridging, are offered. These courses provide rigorous high school level curricula while developing proficiency in all four areas of the English language: listening, speaking, reading, and writing.

## English

### ELL English 1/ Entering(Grades 9 - 12)

**151S** **Full Year** **Credits: 12** **Level: ACP**

Ⓢ This course is for beginner English Learners. Students entering this class are able to express basic ideas through writing and speaking, and are starting to read and understand conversational English. Students will use a variety of materials to develop reading strategies. They will focus on writing as they work on sentence structure, expression, and paragraph development. Students will develop vocabulary and learn how to engage in academic conversations.

### ELL English 2/ Emerging (Grades 9 - 12)

**152S** **Full Year** **Credits: 12** **Level: ACP**

Ⓢ This course builds on the skills learned in ELL English 1, and is for students who are becoming comfortable with expressing their thoughts and feelings through writing and speaking. Students at this level are beginning to read and understand academic texts. Students will continue their development of reading comprehension through both narrative and informational texts, while continuing to expand their vocabulary. Students will write well developed paragraphs, working toward writing an essay.

### ELL English 3/ Developing (Grades 9 - 12)

**153S** **Full Year** **Credits: 12** **Level: ACP**

Ⓢ This course builds on the skills learned in ELL English 1, and is for students who are becoming comfortable with expressing their thoughts and feelings through writing and speaking. Students at this level are beginning to read and understand academic texts. Students will continue their development of reading comprehension through both narrative and informational texts, while continuing to expand their vocabulary. Students will write well developed paragraphs, working toward writing an essay.

### ELL English 4/ Expanding (Grades 9 - 12)

**154S** **Full Year** **Credits: 12** **Level: ACP**

Ⓢ ELL English 4 is an extension of the skills learned in ELL English 3. Students interpret and analyze a variety of texts and genres. The class focuses on reading, listening comprehension, speaking and pronunciation skills, and writing multiple- paragraph compositions that demonstrate organization of ideas, use of a thesis statement, and supportive elements. Basic research, presentation, and computer skills are also part of the curriculum.

**ELL English 5/ Bridging (Grades 9 - 12)****155S****Full Year****Credits: 12****Level: ACP**

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

**History****History for English Literacy (Grades 9 - 12)****160S****Full Year****Credits: 12****Level: CP**

⑨ History for English Literacy Learners is a Common Core guided course offered to newcomers to English who may have experienced gaps in their schooling and/or need foundational skills in reading and writing. Students work on developing academic English vocabulary related to both history and modern society. Students study maps, geography, economics and the structure of governments through individual and group projects.

**ELL World History (Grades 9 - 12)****161S****Full Year****Credits: 12****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.

**ELL United States History (Grades 9 - 12)****162S****Full Year****Credits: 12****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 the 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.

**Academic Study****ELL Independent Study (Grades 11 - 12)**

#

**Full Year****Credit: 6****Level: P-F**

#

**Semester****Credit: 3****Level: P-F**

#

**Quarter****Credit: 1.5****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. Interested students should speak with the Department Head in the fall.

**Bilingual Academic Peer Education (Grades 11 - 12)****917S****Full Year****Credit: 6****Level: P-F****917F/SS****Semester****Credit: 3****Level: P-F****917QS****Quarter****Credit: 1.5****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. Interested students should speak with the Department Head in the fall.

# ENGLISH

All full-time students are required to take an English course each semester of attendance and must earn at least 48 credits in English before graduation. Seniors may elect an additional yearlong course if space is available. The English Department curriculum consists of yearlong courses. Students may take Honors-level 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. All courses use an antiracist lens to study literature.

## 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

<b>211S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2111S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP (SAM)</b>
<b>212S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

☉ 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 essays that expose students to multiple voices and perspectives. Students study analytical and creative writing, sentence composing, vocabulary, mechanics and usage, speaking, and listening. All students will complete multiple formative and summative writing assignments, including a larger analytical paper.

## 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 a unit on public speaking, during which they prepare and deliver a 4-6-minute speech. All tenth grade classes cover the skills appearing on the MCAS exam.

### Sophomore English (Grade 10)

<b>220S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>221S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2212S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
<b>222S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

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 Justice Communities: World Literature 10 (Grade 10, Corequisite: 4240S or 4241S or 4242S Global Justice: Modern World History)

<b>2240S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>2241S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2242S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ Are you interested in participating in a small community with a cohort of people interested in social justice issues? Global Justice Communities: World Literature 10 explores literature through its historical context, matching the history curriculum with the English one. Global justice includes collaborative, interdisciplinary projects, as well as more traditional writing assignments. Focusing on community and citizenship, Global Justice considers the ways that world literature reflects, critiques, and challenges unjust power structures throughout history. All three levels of Global classes meet together in one classroom. Students requesting this course must also select an alternate choice.

**New Media Communities: English 10 (Grade 10, Corequisite: History 4250S or 4251S or 4252S NMC: Modern World History)**

<b>2250S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>2251S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2252S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ 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: English 10 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 read 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! Students requesting this course must also select an alternate choice.

### **Junior English**

Students entering grade eleven take one of the following yearlong courses according to the placement recommended in grade ten. Every junior English course emphasizes reading in American literature to complement American history courses that students also take in grade eleven. Students will complete a major creative writing piece.

#### **Junior English (Grade 11)**

<b>230S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>231S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2312S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
<b>232S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

The core of Junior English is an exploration of American literature and the nature of the American experience. Texts may include poetry or works by Gene Luen Yang, Celeste Ng, F. Scott Fitzgerald, Zora Neale Hurston, Arthur Miller, Frederick Douglass, Sherman Alexie, Toni Morrison, 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.

#### **Global Justice: American Literature (Grade 11, must be paired with: 4340S or 4341S or 4342S Global Justice: US History)**

<b>2340S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>2341S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2342S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ Global Justice Communities: American Literature is a continuation of the tenth grade Global Justice course. We will use American literature to ask questions about race, class, gender, sexual orientation, and American society. What is our obligation to our communities—local and global? How do we create a more just society? This class is open to new students (who did not join the program in 10th grade) on a space available basis.

#### **New Media Communities: English 11 (Grade 11, Corequisite: 4350S or 4251S or 4352S NMC: US History)**

<b>2350S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>2351S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2352S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ 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: English 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. Students requesting these courses must also select an alternate choice.

### Senior Honors Courses

#### AP English Literature and Composition (Grade 12)

<b>250S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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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.

#### AP English Language and Composition (Grade 12)

<b>260S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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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 nonfiction and journalism by reviewing pressing topics in the public discourse and weighing how these events are being rendered to their intended audiences. 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 publications and fields, covering topics ranging from childrearing to athletics, from misinformation to partisan media. 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 (Grade 12)

<b>241S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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<b>2412S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Contemporary Literature examines our complex modern world through the lens of various genres, including, but not limited to, historical fiction, the realistic novel, and non-fiction. Literary works 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, and *Wench* by Dolan Perkins Valdes. Students will continue their work on textual analysis and analytical, personal, and creative writing. Critical thinking, effective rhetoric, vocabulary, and writing strategies also are important components of this course.

#### Shakespeare (Grade 12)

<b>2430S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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<b>243S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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Does reading Shakespeare sometimes feel like reading in another language? Do you want the skills to read Shakespeare on your own and impress your friends? 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. We will watch film versions of his plays, as well as act out and write scenes of our own. 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 Justice English: Words that Change the World (Grade 12, Prerequisite: enrolled in Global Justice program)

<b>2440S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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<b>244S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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<b>2442S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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^ What is the most important word to you? What is the most important word in your community? In *Global Justice: Words that Change the World* we'll consider the ways language can humanize or dehumanize, give voice to the marginalized, change minds or create chaos. Texts for study may include John Okada's *No-No Boy*, Mary Shelley's *Frankenstein*, Jhumpa Lahiri's *Interpreter of Maladies*, and Shakespeare's *Hamlet*, as well as a variety

of films, essays and poems. In your own writing (personal, analytical, and creative) we'll focus on developing your voice on the page, looking for ways language can communicate care and authenticity. 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 picking their own keyword and engaging in a conversation with that word or idea in writing (with the hopeful goal of making it public).

### **Horror and Science Fiction (Grade 12)**

<b>2450S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>245S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

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 (Grade 12)**

<b>2460S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>246S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

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.

### **African-American Literature (Grade 12)**

<b>2520S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>252S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>2522S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

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.

### **Asian and Asian-American Literature (Grade 12)**

<b>2530S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>253S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

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.

### **Jewish and Jewish-American Literature (Grade 12)**

<b>2540S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>254S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

Jewish and Jewish-American Literature is an exploration of Jewish identity through the ages, through the eyes of novelists, poets, and essayists. While we will start at the very beginning, with the story of Abraham in Genesis, most of our work will focus on literature since 1900, both fiction and nonfiction, both translated and written in English. Representative texts may include the short stories of Sholem Aleichem and Grace Paley; My Name is Asher Lev, by Chaim Potok; Panther in the Basement, by Amos Oz; Maus, by Art Spiegelman; The Red Tent, by Anita Diamant; and The Jewish State, by Theodor Herzl. Through reading, discussion, research, and writing, students will explore the complex nature of Jewish identity in the twenty-first century.



## Film Studies (Grade 12)

2550S

Full Year

Credits: 12

Level: H

255S

Full Year

Credits: 12

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 *Moonlight*, *Citizen Kane*, *Moonrise Kingdom*, *The Babadook*, *Do The Right Thing*. The spiritual core of the course, however, is creative: over the year, students will write original screenplays, and 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.

### Introduction to Publications (Grades 9 - 12)\*

261F/SS

Semester

Credits: 6

Level: ACP

Ⓢ \* 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.

### Publications In Practice (Grades 10 - 12)

263F/SS

Semester

Credits: 6

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)

264F/SS

Semester

Credits: 6

Level: ACP

264QS

Quarter

Credits: 3

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)\*

2760F/SS

Semester

Credits: 6

Level: H

276F/SS

Semester

Credits: 6

Level: ACP

Ⓢ \* Offered through the Theatre department – see F&PA for description.

## 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

### Healthy Cooking and Baking (Grades 9 - 12)

**501QS**

**Quarter**

**Credits: 3**

**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.

### Sports Nutrition (Grades 10 - 12, Grade 9 if space available)

**502QS**

**Quarter 1-4**

**Credits: 3**

**Level: ACP**

Ⓢ \* Sports Nutrition is a hands-on cooking class where students participate in weekly cooking labs to prepare healthy meals and snacks. The course explores how to make healthy choices for any lifestyle, and how adolescents can optimize athletic performance through diet. The focus is on promoting a healthy balance of foods, as well as a healthy relationship with food. Students learn through class discussion, projects and working collaboratively with their peers to prepare nutrient-dense recipes. 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 10, 11 and 12.

SEL Competency: Self-Management

### International Cuisine of Asia, Africa, Australia & Europe (Grades 9 - 12)

**503QS**

**Quarters 1 & 2**

**Credits: 3**

**Level: ACP**

Ⓢ \* International Cuisine 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.

### International Cuisine of Europe & the Americas (Grades 9 - 12)

**504QS**

**Quarters 3 & 4**

**Credits: 3**

**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.

### Intermediate International Cuisine (Prerequisite: 503S International Cuisine AA or 504S Inter. Cuisine Europe & the America)

**505QS**

**Quarters 1-4**

**Credits: 3**

**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.

### Sustainable Agriculture & Food Systems (Grades 9 - 12)

**506F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

**506QS**

**Quarter 1 or 4**

**Credits: 3**

**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 (Grades 9 -12)**

**507F/SS Semester Credits: 6 Level: ACP**

☉ \*Culinary Arts Exploratory 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 & Food Service Management (Grades 10 - 12, Prerequisite: 507S, Culinary Arts Exploratory)**

**508F/SS Semester Credits: 6 Level: ACP**

\*In Culinary Arts & Food Service Management 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)**

**# Semester Credits: 3 Level: ACP**

**# Quarter Credits: 1.5 Level: ACP**

Students continue to manage the activities of the Newton South Farm and pursue projects relevant to sustainable agriculture on a weekly basis. Students are required to complete a capstone research paper or project. Enrollment requires teacher and department head approval. Interested students should speak with the Department Head in the fall.

## **Fashion, Clothing, Design and Construction**

### **Fashion, Clothing, Design and Construction 1 (Grades 9 - 12)**

**511F/SS Semester Credits: 6 Level: ACP**

☉ \* Fashion, Clothing, Design, and Construction 1 students will learn the skills necessary for hand stitching as well as machine sewing. Students will gain knowledge of different types of fabric, sketching skills, pattern design and reading, altering and mending clothing. We will look at the garment industry and fashion trends and their impact on our world. 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 (Grades 9 - 12, Prerequisite: 511S Fashion, Clothing, Design and Construction 1)**

**512F/SS Semester Credits: 6 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(Grades 10 - 12, Prerequisite: 512S Fashion, Clothing, Design and Construction 2)**

**513F/SS Semester Credits: 6 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.

### **Teach Assist Advanced Fashion Projects (Grades 10 - 12)**

**# Full Year Credit: 6 Level: P-F**

**# Semester Credit: 3 Level: P-F**

**# Quarter Credit: 1.5 Level P-F**

This course allows students to continue to work on more advanced projects of their choice and also act as a teaching assistant to younger students. Students can enroll in this course for multiple semesters allowing them to continue to pursue their interest in fashion and clothing construction. Enrollment requires department head approval. Interested students should speak with the Department Head in the fall.

## Early Childhood Education

### Introduction To Early Childhood Education (Grades 9 - 12)

521F/SS

Semester

Credits: 6

Level: ACP

Ⓣ \* This course 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 but have opportunities to interact with the preschool children in structured activities. Students interested in Early Childhood Education are encouraged to take this class as a prerequisite.

### Early Childhood Education Exploratory 1 (Grades 10 - 12)

532F/SS

Semester

Credits: 6

Level: ACP

\* Early Childhood Education Exploratory I 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.

### Early Childhood Education Independent Study for Juniors

(Grade 11 , Prerequisite: 532S Early Childhood Education Exploratory 1)

533S

Full Year

Credits: 12

Level: ACP

533F/SS

Semester

Credits: 6

Level: ACP

\* Early Childhood Education Exploratory 2 is by approval of the 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 WIN block meetings required.

### Early Childhood Education Independent Study for Seniors

(Grade 12, Prerequisite: 533S Early Childhood Education Exploratory 2)

540S

Full Year

Credits:12

Level: ACP

540F/SS

Semester

Credits: 6

Level: ACP

\* Early Childhood Education Exploratory 3 is by approval of the 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.

### Early Childhood Education Minor (Grade 12, Prerequisites: 521S, 532S, and 533S Early Childhood Education Exploratory 1, 2, and 3)

541S

Full Year

Credits: 18

Level: H

\* 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.

### Early Childhood Education Major

(Grade 12 only, Prerequisites: 521S, 532S, and 533S Early Childhood Education Exploratory 1, 2, and 3, must meet all graduation requirements)

542S

Full Year

Credits: 30

Level: H

\* 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.

**Child Growth and Development: This course is offered as a dual enrollment course in conjunction with Middlesex Community College. Students will receive 6 credits towards graduation as well as 3 college credits. (this course is open only to students enrolled in 541 or 542 and runs concurrently with those classes)**

**543DE Semester 1 Credits 6 (+3 college credits) Level: H**

\*This course provides a chronological overview of the theory and principles of child growth and development from conception through adolescence, with an emphasis on the period from birth through age eight, exploring the interrelationships between theory, research and practice. Development is studied in the contexts of family, gender, culture, language, socioeconomics, diversity, and society.

Students enrolled in this course will access the course here at newton South but receive college credit from Middlesex Community College

## FINE & PERFORMING ARTS

### Art, Music & Theatre courses

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 commit to this program will enroll in a sequence of art, music, and/or theatre classes starting in 9th grade specializing in one discipline. 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 senior year.

#### Fine & Performing Arts Certificate

<p><b>Visual Art Certificate</b> - 36 Visual Arts Credits, 6 additional credits in any F&amp;PA class &amp; a demonstrated commitment to community.  <b>Courses</b> 020S - 099S  <b>Community:</b> TA, Work-Study, Club Leader, Community Service Coordinator (ex. Make Art Day, Media PR).  <b>Seal Application to be submitted by student to Department Head.</b></p>	<p><b>Music Certificate</b> - 36 Music Credits, 6 additional credits in any F&amp;PA class &amp; a demonstrated commitment to community.  <b>Courses</b> 701S - 758S  <b>Community:</b> TA, Work-Study, Club Leader, Community Service Coordinator (ex. Festies, Concert Coordinator)  <b>Seal Application to be submitted by student to Department Head.</b></p>	<p><b>Theatre Certificate</b> - 24 Credits, 6 additional credits in any F&amp;PA class &amp; a demonstrated commitment to community.  <b>Courses</b> 270S - 279S  <b>Community:</b> TA, Work-Study, Unified Theatre, Children of the Candy Corn, participation in South Stage.  <b>Seal Application to be submitted by student to Department Head.</b></p>
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### Fine & Performing Arts: VISUAL ART

Classes in the Visual Arts 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 Grades 9 - 10

Your journey in the Visual Arts starts with Art Foundations. This course gives students a sampling of two of our five core disciplines while learning the essentials of visual communication. Art Foundations is the prerequisite for all other art courses.

da Vinci Students who have not taken it should enroll in Art Foundations. Otherwise, daVinci students should enroll in an Explorations course.

11th and 12th graders may begin with an Explorations course.

#### Art Foundations (Grades 9 - 10. Grades 11 - 12 should start with an Explorations level class)

**020F/SS Semester Credits: 6 Level: ACP**

\* Art Foundations is an ideal starting point for any student interested in 2D (Photo, Drawing, Digital Imaging) or 3D Art (Sculpture). The semester is split in half: one half is spent exploring 2D Art, and the other half is spent exploring 3D Art. The course focuses on the fundamentals of art-making and equips students with the tools necessary to advance to any next-level art class. Grades 11-12 should start with an Explorations course.

## Art Explorations (Second Level Art Classes or Grades 10+)

Explorations classes are second-level classes that build upon skills and concepts students learn in Art Foundations. Art Explorations can be a starting point for older students taking high school art for the first time.

### 2D Explorations (Prerequisite for Grade 9 only: Art Foundations or concurrent enrollment in Art Foundations. No prerequisite for Grades 11-12)

**021F/SS** Semester Credits: 6 Level: ACP

Ⓘ \* In 2D Explorations, 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 concepts that will be explored in a creative atmosphere. 2D media covered in this course include but are not limited to graphite, collage, and painting.

### 3D Explorations (Prerequisite for Grade 9 only: Art Foundations or concurrent enrollment in Art Foundations. No prerequisite for Grades 11-12)

**041F/SS** Semester Credits: 6 Level: ACP

Ⓘ \* In 3D Explorations, students learn to express concepts and narratives through three-dimensional sculpture. This course is designed to broaden students' technical ability with diverse mediums such as, but not limited to, paper mache, yarn, wire, and found objects. The design process is emphasized through planning and ideation while introducing students to the expressive freedom of building with physical objects and materials.

### Ceramics Explorations (Prerequisite for Grade 9 only: Art Foundations or concurrent enrollment in Art Foundations. No prerequisite for Grades 11-12)

**061F/SS** Semester Credits: 6 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.

### Photo Explorations (Prerequisite for Grade 9 only: Art Foundations or concurrent enrollment in Art Foundations. No prerequisite for Grades 11-12)

**081F/SS** Semester Credits: 6 Level: ACP

Ⓘ \* Photo Explorations introduces students to DSLR cameras, digital editing, film photography, and darkroom printing. The class will consist of photo projects, technical demonstrations, critiques, and discussions. Students will be required to photograph inside and outside of class.

### Digital Art Explorations (Prerequisite for Grade 9 only: Art Foundations or concurrent enrollment in Art Foundations. No prerequisite for Grades 11-12)

**091F/SS** Semester Credits: 6 Level: ACP

Ⓘ \* Digital Art Explorations is a mid-level course for students who want to develop their skills in digital imaging and animation using the visual and creative skills established in Art Foundations. **Digital Imaging** includes computer-based painting, drawing, and image editing using Adobe Photoshop, Illustrator and other 2D design programs to explore new methods of artistic expression and visual communication. **Digital Animation** uses programs like Adobe Animate and Cinema 4D to create computer-based animations in 2D and 3D digital media. Projects may include 3D modeling, motion graphics, and stop-motion animation.

### Video Studio (Grades 10-12)

**097F/SS** Semester Credits: 6 Level: ACP

**097QS** Quarter Credits: 3 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. This course may be repeated for credit. Students can take Honors Video after completing this course.

## Art Studio (Third Level Art Classes)

### 2D Studio (Grades 10-12. Prerequisite: 2D Explorations or Art Foundations with instructor recommendation)

<b>022S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>022F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* 2D Studio is designed to give students space 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. A student can choose to do an in-depth study of a medium or to try various media (e.g., charcoal, oil pastel, watercolor, colored pencils, ink, printmaking, etc.). Students can enroll in this course more than once.

### 3D Studio (Grades 10-12. Prerequisite: 3D Explorations or 3D Honors Art)

<b>042S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>042F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* 3D Studio builds on skills gained in previous courses. Students develop and refine their individual artistic voices through three-dimensional sculptural media in self-directed explorations. Working with paper mache, wire, assemblage, found objects, and glass, students will be challenged to create sculptures that express concepts, narratives, and individual perspectives. They will research the works of sculptors from different eras and cultures and create art that responds to what they observe. Students can enroll in this course more than once.

### Ceramics Studio (Grades 10-12. Prerequisite: Ceramics Explorations or Honors Ceramics)

<b>062S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>062F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* Ceramics Studio is designed to allow students to explore their own areas of interest while also working through guided assignments. The curriculum will focus on additional training in hand-building and wheel-throwing techniques. This class requires more independent thought, creativity, and a willingness to explore how people use art to make meaning of their world. Students can enroll in this course more than once.

### Photography Studio (Grades 10-12. Prerequisite: Photography Explorations)

<b>082S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>082F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* In Photography Studio, assignments will build off of previous photography curriculum. Students will continue using digital and film photography to explore the world in more personal and expressive ways while working through guided assignments. Students will explore the work of contemporary photographers. Students are required to photograph inside and outside of class. Students can enroll in this course more than once. Students must complete Photography Explorations ACP to take this course.

### Digital Arts Studio

<b>092F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b> (Grades 10-12. Prerequisite: Media Arts Explor)
<b>0920F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b> (Grades 10-12. Prerequisite: Media Arts StuACP)

\* Digital Arts Studio enables students with digital art experience to continue to build their creative repertoire using a range of offerings. 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. \* Honors Digital Arts Studio focuses on portfolio development and developing expertise in one or more areas of digital media. Projects can be individual or group-based in this student-driven curriculum. Students must complete Digital Arts Studio (formerly Media Arts Studio) at the ACP level before taking an Honors level course.

## Honors Art (Third Level+ Art Classes)

### Honors 2D Art (Grades 10-12. Prerequisite: 2D Explorations)

<b>025S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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\* 2D Honors Art is a structured full-year course for dedicated art students who are interested in refining their drawing and painting skills. In-depth material investigations and a supportive environment enable students to express emotions, opinions, and complex ideas using visual language. The use of art terminology and critiques are also employed by students to discuss and improve their work. After this course, students will have a collection of work that explores their opinions and ideas, which will serve as a foundation for an art supplement portfolio.





## Art Teaching Assistants

2D Art Teaching Assistant (Grades 10-12 with instructor approval.)

3D Art Teaching Assistant (Grades 10-12 with instructor approval.)

Ceramics Teaching Assistant (Grades 10-12 with instructor approval.)

Photography Teaching Assistant (Grades 10-12 with instructor approval.)

Digital Lab Teaching Assistant (Grades 10-12 with instructor approval.)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level P-F

Prospective teaching assistants should speak with teachers in the fall about applying.

## Fine & Performing Arts: MUSIC

South Music offers a wide variety of courses for beginning or experienced musicians. Students are encouraged to pair two courses together to build a breadth of experience and depth of study.

Don't play an instrument yet? Courses like Music Technology, Chorus, and History of Music classes are rewarding starting points. Entry into Honors sections requires the approval of the instructor. Honors sections of performance ensembles include the completion of two projects per semester as specified by the instructor, as well as an additional meeting once per week.

## Music Technology and Production

### Music Technology and Composition

**711F/SS Semester Credits: 6 Level: ACP**

⑨ \* Music Technology and Composition is an introductory course for students who want to learn to write and produce music in a collaborative community. 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 the use of computer sequencing software, mixers, effects processors, microphones, and current and vintage recording equipment.

### Music Production (Grades 10-12. Prerequisite: Music Technology and Composition)

<b>7130F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
<b>713F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* 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 online resources to 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. Students can enroll in this course more than once.

### Advanced Music Production and Songwriting (Grades 10-12. Prerequisite: Music Production or AP Music Theory I)

<b>715S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>715F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>

\* Advanced Music Production and Songwriting explores the process of creating, performing, and recording a song. Students will explore song structure, lyric writing, and recording techniques to create an original collection in collaboration with other musicians. Students can enroll in this course more than once.

## Music Theory

### AP Music Theory I

<b>701SS</b>	<b>Semester 2</b>	<b>Credits: 6</b>	<b>Level: H</b>
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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 may be offered every other year.

**AP Music Theory II (Grades 10 - 12, Prerequisite: AP Music Theory I or equivalent)****702FS****Semester 1****Credits: 6****Level: H**

\* 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 may be offered every other year.

**Instrumental Music****Symphonic Band****7220S****Full Year****Credits: 12****Level: H****722S****Full Year****Credits: 12****Level: ACP**

⑨ \* Symphonic Band is a large performing group for winds, brass, and percussion. A wide range 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 the core music group for these instruments. Students selecting the Honors level 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. Students can enroll in this course more than once. Students enrolled in this class are eligible to audition for District, All-State and All Eastern competitions. Freshman are eligible for Junior Districts.

**String Orchestra (Grades 9-12)****7240S****Full Year****Credits: 12****Level: H** (Grades 10-12, Prerequisite: permission of instruction or audition)**724S****Full Year****Credits: 12****Level: ACP** (Grades 9-12)

⑨ \* String Orchestra is a collaborative community that explores traditional, classical, and contemporary music to 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 WIN 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. Currently String Orchestra is limited to those students who play violin, viola, cello or string bass. Students enrolled in this class are eligible to audition for District, All-State and All Eastern competitions.

**Select Wind Ensemble (Grades 10-12, Prerequisite: permission of instruction or audition)****728S****Full Year****Credits: 12****Level: H**

\* This group is for winds, brass, and percussion players currently enrolled in Symphonic Band who want musical and technical challenges along with a chance to study additional repertoire at grade levels 5 and 6. The course will meet one evening and one morning weekly for one hour each. 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. Students can enroll in this course more than once. Students enrolled in this class are eligible to audition for District, All-State and All Eastern competitions.

**Jazz Improvisation**

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

**Jazz Improvisation 1 (Prerequisite: Students should be able to execute all 12 major scales from memory)****731S****Full Year****Credits: 12****Level: ACP****731F/SS****Semester****Credits: 6****Level: ACP**

⑨ \* Jazz Improvisation 1 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.

**Jazz Improvisation 2 (Prerequisite: permission of instructor)**

<b>732S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: ACP</b>
<b>732F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* In Jazz Improv 2 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. Students should study privately and must be able to execute all 12 major scales from memory.

**Jazz Improvisation 3 (Grades 10-12. Prerequisite: permission of instructor)**

<b>733S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>733F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* Jazz Improvisation 3 is for students who have completed Jazz Improvisation 2. Students study ii-V progressions with an emphasis on developing techniques and understanding jazz theory. Students continue to develop improvisational and compositional skills. Permission from the instructor is required.

**Jazz Improvisation 4 (Grades 11-12. Prerequisite: permission of instructor)**

<b>734S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>734F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>

\* In Jazz Improv 4 students continue the study of the blues and ii-V progressions, with an introduction to more advanced chord changes. In addition to continuing to develop techniques and understanding jazz theory, there will be an emphasis on playing in all 12 keys. Students continue to develop compositional skills. Permission from the instructor is required. Taking this course as a semester option? Consider pairing this with Lab Jazz or Chamber Ensemble. Permission from the instructor is required.

**Honors Jazz Combo (Grades 10-12. Audition only)**

<b>7350S</b>	<b>Full Year</b>	<b>Credits: 6</b>	<b>Level: H</b>
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\* 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 NSHS 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. Students taking this course as Honors should be willing to act as a mentor for the ACP students. Students enrolled in this class are eligible to audition for MMEA District, All-State and All Eastern competitions.

**ACP Jazz Combo (Grades 9-12)**

<b>735S</b>	<b>Full Year</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
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Ⓣ \* ACP Jazz Combo is for students who have completed or are currently enrolled in Jazz Improv and want to explore improvisation with student mentors from the Honors Jazz Combo. 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. Students can take this class multiple times until being accepted into an audition based Jazz group.

**Jazz Ensembles**

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

**Lab Jazz Ensemble (Prerequisite: permission of instructor)**

<b>736F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
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Ⓣ \* Lab Jazz Ensemble is the main jazz group open to all instrumentalists who wish to perform the music of the big band tradition. We welcome flute, oboe, french horn, bassoon, cello, and more! Any instrumentalist may enroll! Lab Jazz Ensemble introduces 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 or Vocal Ensemble.

**Honors Jazz Ensemble (Grades 10-12. Prerequisite: Lab Jazz Ensemble or permission from instructor)**

<b>737S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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\* Jazz Ensemble is a select group that features the performance of traditional and contemporary big band music. Jazz Ensemble uses a specific instrumentation of five trumpets, four trombones, five saxophones (two altos, two tenors, and a bari), piano, guitar, bass, and drums. Membership is by audition in March and with the permission of the instructor. Students in this course are expected to attend all rehearsals and concerts during and outside regular school hours. Students enrolled in this class are eligible to audition for MMEA District, All-State and All Eastern competitions.

**Music History****History of Black American Music (Grades 9-12)**

<b>738QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>
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Ⓢ Black American Music History goes through a timeline of what Black Americans and immigrants created throughout the last 200 years in America. This course will cover all of the art forms created by Black Americans and how they have evolved into the popular genres we have today. For example Jazz, Funk, R&B and Hip Hop. Students will be able to watch, listen to and perform music in class though beatmaking. No experience with instruments is required.

**Vocal Performance****Chorus (Vocal Ensemble)**

<b>743F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
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Ⓢ \* Chorus (Vocal Ensemble) is the foundational singing course at Newton South 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 prerequisite for all vocal performance classes at South. Can be repeated with the permission of the instructor. Request this course with Acting Foundations to build your musical theatre skills.

**Newton South Madrigals (Grades 10-12. By audition only)**

<b>747S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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\* Newton South Madrigals is the most advanced vocal group at Newton South. Students will explore their own vocal and musical development through the study of advanced vocal techniques, ear training and music theory from the classical, jazz, gospel, folk, and pop traditions. Advanced repertoire (up to eight parts and in multiple languages) will be performed in concerts and festivals (MICCA) 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 WIN 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. Students enrolled in this class are eligible to audition for MMEA District, All-State and All Eastern competitions.

**Music Work Study and Teaching Assistants****Work-Study in Music (Grades 10-12)**

#	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
#	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
#	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level: P-F</b>

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 the Department Head. Interested students should speak with the Department Head in the fall.

**Work-Study in Music: Concert Manager (Grades 10-12)**

#	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
#	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
#	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level: P-F</b>

Work Study: Concert Manager duties 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 the 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. Interested students should speak with the Department Head in the fall.

### Teach Assist Music (Grades 10-12)

#	<b>Full Year</b>	<b>Credit:6</b>	<b>Level: P-F</b>
#	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
#	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level P-F</b>

Permission to enroll in Music Teaching Assistant must be obtained from a music teacher in the fall.

## 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 upper-level acting classes and a great place for freshmen and sophomores to start. After Acting Foundations, upper-level theatre courses will meet on a yearly rotation basis and offer older students various entry points in the curriculum.

### Acting Foundations

<b>270F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>270QS</b>	<b>Quarter</b>	<b>Credit: 3</b>	<b>Level: ACP</b>

Ⓢ \* 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. Consider requesting this course with Vocal Ensemble to build your Musical Theatre skills.

### Actors' Workshop ( Grades 10 - 12. Prerequisite: Acting Foundations or permission from the instructor)

<b>2730F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
<b>273F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>273QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

\* 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.

### Acting for the Screen & Stage (Next offered in 2025-2026. (Grades 10-12. Prereq: Acting Foun or permission from the instructor)

<b>2750S</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
<b>275F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>275QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

\* Acting for the Screen & Stage is for the performance student who wants to explore screen acting techniques, as well as non-realistic stage acting techniques that range from the classical to the cutting-edge. Students learn acting for camera, voiceover, and directing (skills valuable and transferable to Film Studies), as well as mask technique and classical verse.

### Acting and Directing (Next offered in 2026-2027. Grades 10-12. (Prereq: Acting Foun or permission from the instructor)

<b>2720F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
<b>272F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>272QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

\* 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.

### Public Speaking and Presentation

<b>2760F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
<b>276F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>276QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

Ⓢ \*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 during the course. No lengthy written papers and memorization required. Honors Public Speaking students prepare one additional project for presentation and feedback.

### Video Studio (Grades 10 - 12)

<b>097F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>097QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

\* 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. This course may be repeated for credit. Students can take Honors Video after completing this course.

### Technical Theatre Studio

<b>2780F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b> (Returning stud. only)
<b>278F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: ACP</b>
<b>278QS</b>	<b>Quarter</b>	<b>Credits: 3</b>	<b>Level: ACP</b>

Ⓞ \* 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 supporting 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. Students can enroll in this course more than once.

### Work-Study in Theatre (Grades 10 - 12)

<b>#</b>	<b>Full Year</b>	<b>Credit:6</b>	<b>Level: P-F</b>
<b>#</b>	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
<b>#</b>	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level: P-F</b>

Work-Study in Theatre provides students with training as a working stagehand or production assistant. Students must possess a Social Security card. Interested students should speak with the Department Chair or Theatre Technical Director in the fall.

## 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 (424S/434S, 425S/435S) 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.

### World History Grade 9

#### World History

<b>411S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4111S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: ACP (SAM)</b>
<b>4112S/414S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
<b>412S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: CP</b>

Ⓞ 9th Grade World History is a survey of the fascinating history of societies from different regions and the significance of connections among them. Students work with a variety of sources as we explore the factors that enabled these societies to thrive, including geography, belief systems, and political organization. Students engage in a project-based exploration of trading states that flourished in both West Africa and East Africa. They study European history from the Middle Ages through the age of absolutism, and they examine political empires within the Islamic world and their cultural achievements. They also learn about the achievements of China and India in the medieval period and the origin of their lasting belief systems. The course closes by examining the impact of global connections on the eve of the modern era. In addition, there are two choice units where students can 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.

## Tenth-Grade History and Social Science

### Modern World History

<b>420S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>421S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4212S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
<b>422S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Modern World History is a survey of world history from the late 18th c. through the 20th century. Students study broad trends in the last 250+ years that have impacted the world, such as industrialization, political revolution, imperialism, world war, genocide, decolonization and globalization. To exemplify each of these trends, students focus on case studies to learn about one event or part of the world in greater detail. Through case studies, students sharpen their historical thinking skills and learn about patterns and questions which could be applied to similar events in other parts of the world or at other times. While doing so, students consider a variety of perspectives. In addition to reading their textbook, students work with primary and secondary sources, maps and charts. Students focus on a special area of interest in their research paper at the end of the year.

### Global Justice : Modern World History (Corequisite: 2240S or 2241S or 2242S Global Justice: World Literature 10)

<b>4240S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4241S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4242S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Global Justice explores world history with connections to world literature in a project-based curriculum focused on social justice, community, and citizenship. 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. Global justice includes collaborative, interdisciplinary projects, as well as more traditional history assignments. The course considers the ways that world history has impacted power structures, justice and how to connect the past to the present in order to become change agents today. If you want to work on community-based solutions and creative assessments, this is a good choice for you. Students focus on a special area of interest in their research paper at the end of the year. Students requesting this course must also select an alternate choice.

### New Media Communities: Modern World History (Corequisite: 2250S or 2251S or 2252S New Media Comm: English 10)

<b>4250S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4251S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4252S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ New Media Communities: Modern 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! Students requesting this course must also select an alternate choice.

## Eleventh-Grade History and Social Science

### AP United States History

<b>430S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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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**

<b>431S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4312S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
<b>432S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

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 Justice : United States History (Corequisite: 2340S or 2341S or 2342S Global Justice: Amer. Literature 11)**

<b>4340S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4341S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4342S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ Focusing on social justice, community and citizenship, as well as interdisciplinary projects and discussions, this course is a continuation of the 10th grade Global Justice course. The Global US History course focuses on the development of American institutions, society, and culture since its foundation; furthermore, there is a strong focus on connecting this history to global events and current events, as well as doing interdisciplinary work with the Global English class. Students read numerous primary and secondary sources, conduct research, engage in group projects and discussions, and write analytical essays. Global Justice classes include all three levels in one classroom, and this course is open to students who were not in the 10th grade program on a space available basis.

### **New Media Communities: United States History (Corequisite: 2350S or 2351S or 2352S New Media Comm.: English 11)**

<b>4350S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4351S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4352S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ The New Media Communities US History course is linked with an English class and offers a project-based curriculum in which students develop media skills to demonstrate an understanding of US History and historical thinking skills.. 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**

AP African-American Studies is open to juniors as well as seniors, space permitting. All of the other following courses are open to seniors only.

These courses will be offered depending on student demand, staffing availability, and scheduling considerations. Students electing these courses must also select an alternate choice.

### **AP African American Studies**

<b>490S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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AP African American Studies examines the diversity of African American experiences through rich and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. The course is organized into 4 thematic units: the Origins of the African Diaspora; freedom, enslavement, and resistance; the practice of freedom; and movements and debates. In each unit, students build interdisciplinary analytical skills working with a wide range of texts and sources, ranging from material objects, art and photography, literature, newspaper and magazine articles, and traditional historical text sources. Three main skills are emphasized in AP African American Studies: the development of disciplinary knowledge, primary and secondary source analysis, and argumentation. The course culminates with a traditional AP exam and an independent research project that must be completed and presented to the teacher by the end of May. The course is open to both seniors and juniors. Please note: it is not recommended that students take AP US history and AP African American Studies at the same time.



## History of Sports in America

<b>4480S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>448S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>4482S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

The growth of sports has had a significant impact on American and world culture. Sports history is not separate from traditional history, but is in fact inextricably linked to the circumstances of the times. In History of Sport in America, students will study major historical events and ideas that have impacted the world of sports. Specifically, the course will use sports as a lens to consider broader societal issues such as racism, sexism, homophobia, nationalism and mental health. This course will also look at the relationship between professional and college sports and the impact of big business and social media on sports. Course materials will include documentaries, broadcasts, and various biographies as well as supplemental readings. Students will complete traditional tests and a research project as well engage in class discussions and personal responses.

## World Religions

<b>4450S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>445S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: ACP</b>

The academic study of world religions is a history of the common human search over time and place to answer big questions: what is truth, goodness, God, the afterlife? How can we understand suffering? How do we understand our purpose on earth? What is the self? How does that self relate to others, or to a divine? What is real? What happens when we die? The different answers to these and other questions have shaped systems of belief that are richly diverse as well as unique cultures and worldviews. Religions studied in this course will include Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, Zoroastrianism, Judaism, Christianity, Islam, and some native worldviews. This is an academic, not devotional study of the world's religions. At no point will you be asked to share your own beliefs in this class unless you choose to, and safe space will be the focus in developing a strong class community. You'll build skills of discourse and dialogue in this class.

## Race, Class, and Gender Identity

<b>4420S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4421S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: ACP</b>
<b>4422S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: CP</b>

Race, Class, and Gender Identity examines complex issues of identity that reveal the diversity of experiences in the United States. Looking at issues such as race, gender identity, sexuality, socioeconomic status, 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 identity, socioeconomic class, sexual orientation, religion and/or immigrant status impact one's life? How do systems work to maintain oppression? How can an 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 difficult 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

<b>4430S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>443S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

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 Ethics in the Modern World, 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.

**AP Human Geography and Sustainability**

<b>4440S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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**Human Geography and Sustainability**

<b>444S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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<b>4442S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Sustainability is an impact-focused course about envisioning and creating a liveable and just future. The flexible and interactive curriculum allows students to engage with social movements, environmental trends, and economic systems in order to understand how to take action. The future offers us opportunities to combat climate change and environmental injustice, to stabilize human populations, to preserve cultural and biological diversity, while promoting livable, community-focused cities. Students will connect with leaders both near and far, from sister schools in Sweden to local activists and political officials. Rather than tests, this course focuses on real-world projects and groupwork, including in the second semester, where students work on action projects that help devise a solution to a problem of their choosing. NOTE: this course can be a strong complement to AP Environmental Science by studying how environmental issues fit into governmental, economic, and cultural systems. Additionally, while this course does not solely focus on preparing for the AP Human Geography exam, teachers will support and offer resources to any students who choose to take the AP exam in May.

**Psychology**

<b>471S</b>	<b>Full Year</b>	<b>Credits:12</b>	<b>Level: ACP</b>
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<b>4712S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Have you ever wondered why people do the things that they do? How could atrocities like the Holocaust happen? Why do teens form cliques? Why are some people shy and other people the “life of the party”? Why do I sometimes get that deja vu feeling? Why do people develop mental disorders and how can they be helped? Can seeing violence on television and in video games make children violent? These are just a few examples of the many different types of questions that psychologists try to answer, and what this course will explore. Psychology is about trying to understand why people do what they do. It’s about understanding human behavior. By studying psychology, we can better understand ourselves, other people and organisms, and their interaction with the world. Topics including memory, intelligence and mental abilities, motivation and emotion, lifespan development, personality, psychological disorders, therapies/treatment, and social psychology will be discussed. Course materials will include a textbook, documentaries, films, as well as supplemental readings. Students will complete traditional tests and research projects as well engage in class discussions and personal responses.

**AP/ACP U.S. Government & Politics**

<b>450S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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<b>4501S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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U.S. Government & Politics provides students with the critical knowledge and skills needed to understand current governmental and political challenges and aims to help students determine how they can play a role in local, state, and federal politics. Major topics covered include the origins of the U.S. government, the creation and structure of the U.S. Constitution, how the federal government works, the evolution of the political parties and political ideologies, and the development and expansion of civil rights and civil liberties. The class also examines local and state politics and encourages students to share their opinions with their classmates. Students will engage in projects and discussions designed to develop a critical perspective on American political institutions and current events. Daily lessons will prepare students taking the course at the AP level for the Advanced Placement exam in May. Students taking the course at the ACP level will have modified assignments and assessments.

**AP/ACP Comparative Government**

<b>460S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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<b>4601S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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Comparative Politics & World Government is a yearlong, mixed level course that explores and systemically compares politics and governments in 6 countries (or “case studies”). These comparisons aim to help students better analyze policy making as well as entertain alternative approaches. There are six case studies at the core of this study: the People’s Republic of China, the United Kingdom, the Islamic Republic of Iran, the United Mexican States, the Republic of Nigeria, and the Russian Federation. The course encourages students to understand the importance of knowing about other peoples, nations, and societies in order to better understand and participate in global political and economic changes. Daily lessons will prepare students taking the course at the AP level for the Advanced Placement exam in Comparative Government offered in May. Students taking the course at the ACP level will have modified assignments and assessments .

## AP European History

<b>440S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>4401S</b>	<b>Full year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

European History is a survey of European political, economic, social, cultural, 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. Daily lessons will prepare students taking the course at the AP level for the Advanced Placement exam in European History offered in May. Students taking the course at the ACP level will have modified assignments and assessments.

## AP Microeconomics

<b>480S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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This course will focus on A.P. Microeconomics, but we will also incorporate some interesting and relevant topics from Macroeconomics. Microeconomics is the “bottom-up” study of the behavior of individuals and firms making decisions regarding the allocation of scarce resources, and the interactions among these individuals and firms. Topics include supply and demand; scarcity and market competition; market inefficiency; and costs, benefits, and marginal analysis. Macroeconomics is a “top-down” study of the behavior of the economy as a whole. For example, how can using interest rates, taxes, and government spending regulate an economy’s growth and stability? A typical class will include a mix of lectures-with-questions, discussions, readings, videos, and small-group review exercises. Typical homework involves readings from the textbook and other primary or secondary sources, followed by a Schoology open-notes quiz that can be retaken as many times as desired. Most assessments match the format used for the AP exam.

## AP Psychology

<b>470S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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Why do people behave the way they do? (Biology? Environment? Culture and society? Individual differences?) 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 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. To fully prepare for the AP exam, students will need to do some independent reading.

## Other Offerings

### Teach Assist History (Grades 11-12)

<b>#</b>	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
<b>#</b>	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
<b>#</b>	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level P-F</b>

Teach Assist History 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 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

### Independent Study in History and Social Science

<b>#</b>	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
<b>#</b>	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
<b>#</b>	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level P-F</b>

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. Interested students should speak with the Department Head in the fall.

# MATHEMATICS

Courses in the Mathematics Department are designed to give students a rich experience in mathematics, and equip students with the mathematical skills and practices to successfully pursue future goals, and to be well informed citizens. Courses emphasize conceptual understanding, skill and concept development, and mathematical practices. Courses follow an integrated curriculum, combining elements algebra and geometry, as well as trigonometry, probability, statistics, and data analysis. Courses at different curriculum levels are offered to address students' various learning styles, skill levels and interests. Students in Newton Public Schools go through a placement process at their respective middle schools. New registrants take a placement test upon registration to designate appropriate placement in courses. 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 conceptual understanding, problem solving skills, and prerequisite content knowledge as determined by previous performance in courses, or, in the case of students new to the school, a placement exam.

Honors courses are appropriate for students who have a high degree of interest in mathematics, have demonstrated exceptional understanding of mathematical concepts and skills, and are able to think abstractly, solve problems, and apply concepts as skills to novel situations, with a high degree of independence. Advanced College Prep courses at the accelerated level (designated with "Acc") are appropriate for students who 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 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

### Foundations of Mathematics (Grade 9)

**641S**

**Full Year**

**Credits: 12**

**Level: CP**

Ⓢ Foundations of Mathematics is a first year course covering pre-algebra and introductory algebra skills. It is geared towards providing a strong foundation for the continued study of algebra and geometry. Topics include a review of operations on signed numbers and fractions, expressions and equations, absolute value, introduction to exponents & roots, graphing linear equations and systems of equations, an introduction to functions, perimeters and area, and plane geometry.

## Math 1

### Math 1 Honors (Grade 9)

**601S**

**Full Year**

**Credits: 12**

**Level: H**

### Math 1 Acc (Grade 9)

**611S**

**Full Year**

**Credits: 12**

**Level: Accelerated**

Ⓢ Math 1 Honors and Math 1 Acc are for students who have shown a high degree of problem solving ability in their 8th grade math courses. It expands on the topics taught in 8th grade and includes topics from Algebra 2 and Geometry such as linear functions, systems of linear equations and inequalities, functions (domain, range, and composition), exponential functions, quadratic equations, sequences, triangle congruence, geometric proof, and statistics.

\* Math 1 Honors and Accelerated classes are offered in a mixed level format. Students enter in ninth grade unlevelled, and designation of level is made prior to the end of term 1, working with students to determine appropriate placement based on interest and demonstrated level of skill and conceptual understanding

**Math 1 (Grade 9)**

<b>621S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>631S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Ⓞ Math 1 extends the study of algebraic and geometric concepts begun in middle school. Topics include linear equations, linear inequalities and interval notation, systems of linear equations and inequalities, parallel and perpendicular lines, introduction to exponents and exponential functions, arithmetic and geometric sequences, This course introduces the concept of functions, function composition, and domain and range. It also includes an introduction to geometry, including basic geometric terms (point, segment, ray, line, triangles, and introduction to triangle congruence). Topics from statistics are also covered, including displays of data, two-way tables, measures of central tendency and center spread, linear regression, and correlation.

\* Math 1 ACP and CP classes are offered in a mixed level format

**Math 2****Topics in Algebra, Geometry, and Statistics (Grade 9-10)**

<b>642S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Ⓞ Topics in Algebra, Geometry, and Statistics continues the study of these subjects begun in Foundations of Mathematics. This course is also recommended for students who complete Math 1 CP 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 Honors (Grade 10) Prerequisite: 611S Math 1 Honors (601S) with an B ave. and teacher recommendation**

<b>602S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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Math 2 Honors completes the study of Geometry and Algebra 2 started in Math 1 Honors and begins a study of Trigonometry. Topics include factoring and quadratic function, similarity, geometric proofs, special right triangles, study of circles, area and volume, rational, exponential, logarithmic and trigonometric expressions and functions, geometric proof, the real and complex number system, higher degree polynomials, probability, and families of functions.

**Math 2 Accelerated (Grade 10)**

<b>612S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: Accelerated</b>
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Math 2 Accelerated continues the study of Algebra 2 and Geometry begun in Math 1. Topics include, factoring and quadratic functions, similarity and right triangle trigonometry, surface area and volume, rational exponents and radical equations, higher degree polynomials, families of functions, polynomial functions, and unit circle trigonometry.

**Math 2 (Grade 10)**

<b>622S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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Math 2 ACP continues the study of Algebra 2 and Geometry begun in Math 1. Topics include factoring and quadratic functions, the real and complex number system, similarity, study of circles, area and volume, rational and irrational functions, and right triangle trigonometry, statistics, geometric proof,, higher degree polynomials, probability, and families of functions.

**Math 2 (Grade 10)**

<b>632S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Math 2 continues the study of algebra, geometry, and statistics begun in Math 1. Topics include exponent rules, polynomial operations, factoring, quadratic functions and graphs, surface area and volume, similarity, coordinate geometry, transformations, polygons, congruence, statistics, and right triangle trigonometry.

**da Vinci Math 2 (Grade 10, Corequisites: 8270S or 8271S or 8272S da Vinci Chemistry and Found. or Explor. level Art class)**

<b>6270S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>6271S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>6272S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ da Vinci 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 an inquiry-based learning environment that introduces them to new material in the context of explorations and discovery, real world application, including science, technology, engineering and art. Students requesting this course must also select an alternate choice.



**Calculus (Grade 12, Prerequisites: 613S Math 3 Acc with a teacher recommendation)**

<b>618S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: Accelerated</b>
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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, logarithmic, and trigonometric functions. This course is open to seniors only.

**Precalculus (Grade 12)**

<b>624S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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Precalculus continues the study of trigonometry begun in Math 3 and includes Precalculus topics. Topics may include functions, polynomials, rationals, sequences, series, probability, limits, derivatives, and matrices. Students completing 623S Math 3 with a strong showing may elect this course. This course is open to seniors only.

**Math 4 (Grade 12)**

<b>634S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>
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Math 4 is a full-year course continuing the study of mathematics begun in Math 3. Topics may include functions, polynomials, rationals, sequences, series, probability, limits, derivatives, and matrices.. This course is often run as a mixed level course with Math 4 ACP. This course is open to seniors only.

\*\* Courses identified as Accelerated were formerly listed as ACP. Rigor and level of expectation remains unchanged.

**Advanced Placement Offerings****AP Calculus BC (Grade 12, Prerequisite: 603S Precalculus Honors with an A and teacher recommendation)**

<b>604S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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AP Calculus BC begins with a brief review of precalculus topics from 603S including functions, limits, continuity, and derivative rules. It then completes the study of derivatives and introduces their applications, integration and its applications, power series, improper integrals, polar, and parametric equations. Additional topics include curve sketching, antiderivatives, differential equations, analyzing functions, advanced integration techniques, volumes of revolution (disc, washer, and shell method), polar and parametric derivatives, series convergence, and Taylor and Maclaurin series. A high degree of problem solving skills, passion for mathematics, and gritty perseverance is expected in this course. Graphing calculators are used extensively in this course. This course is open to students who complete 603 with an A or better assessment average and a teacher recommendation.

**AP Calculus AB (Grades 12, Prerequisite: 613S Precalculus Acc with an A average and teacher recommendation or 603S Precalculus Honors with a C or better )**

<b>608S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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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 required in this course and on the AP exam. This course is open to seniors only.

**AP Statistics (Grades 11 - 12, Prerequisite: 602S Math 2 Honors or 613S Precalculus Acc. with a B or higher and teacher recommendation)**

<b>605S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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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 taking 605S AP Statistics as 11th graders must be concurrently enrolled in another mathematics class.

**Other Offerings****Honors Linear Algebra (Grades 11 - 12, Prerequisite: 603S Precalculus Honors with a B or higher or 613S Math 3 Acc, 614S Precalculus Acc or 602S Math 2 Honors with an A and teacher recommendation)**

<b>606F/SS</b>	<b>Semester</b>	<b>Credits: 6</b>	<b>Level: H</b>
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Honors Linear Algebra is a non-calculus-based introductory linear algebra course that will introduce students to the geometry of linear equations, systems of linear equations, vectors and matrices and their operations, vector spaces, determinants, eigenvalues, eigenvectors, bases and coordinate systems, and matrix factorizations. Students will need a graphing calculator (TI-83/84, or TI-Nspire).

### Mathematics Peer Tutor (Grades 11 - 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	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. Interested students should speak with the Department Head in the fall.

### Teach Assist Mathematics (Grades 10 - 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	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 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

### Independent Study in Mathematics

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level: P-F

Department Head approval required. Interested students should speak with the Department Head in the fall.

## Mathematics: COMPUTER SCIENCE

Computer science 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. All courses are one semester long.

### Introduction to Programming

650F/SS	Semester	Credits: 6	Level: ACP
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Ⓢ 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 classes. There are no prerequisites for this course.

### Computer Science 1 (Grades 10 - 12, Prerequisite: 650F/SS Intro to Programming, or prior program experience and permission of instructor)

651F/SS	Semester	Credits: 6	Level: H
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Computer Science 1 will provide students with a brief introduction to 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.

### Computer Science 2 (Grades 10 - 12, Prerequisite: 651F/SS Computer Science 1)

652F/SS	Semester	Credits: 6	Level: H
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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 team setting.



### **Computer Science 3 (Grades 10 - 12, Prerequisite: 652F/SS Computer Science 2)**

**653F/SS Semester Credits: 6 Level: H**

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 and conventions will also be included.

### **Computer Science 4 (Grades 10 - 12, Prerequisite: 653F/SS Computer Science 3)**

**654F/SS Semester Credits: 6 Level: H**

Computer Science 4 will focus primarily on systems programming. Students will explore fundamental concepts in compilers and assemblers, and the course will culminate with students implementing their own compiler, assembler, and debugger for a simple assembly language. Topics will include memory allocation and management, common uses of stacks and queues, tokens and machine level instructions. The prerequisite for this course is successful completion of 653F/SS.

### **Computer Programming Teaching Assistant (Grades 10-12)**

#	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
#	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
#	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level P-F</b>

Computer Programming Teaching Assistant provides an opportunity for qualified students to assist in Computer Programming classes. See page 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

## **SCIENCE**

The Science Department offers students opportunities 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 that follow 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 requesting science electives must also select an alternate choice. Students may also explore Tech Ed/Engineering electives that afford them the chance to experience applications of science (see page 55).

### **Ninth-Grade Physics**

#### **Physics I**

<b>811S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>812S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Ⓢ Physics I is an introductory physics course for ninth graders. The course emphasizes laboratory investigation, data collection, and analysis through traditional and computer-based methods, critical thinking skills, and algebra-based problem-solving. Teachers will use differentiation to support and challenge all students. Topics include motion and forces, energy and momentum, atomic structure and nuclear reactivity, heat, electricity and magnetism, and waves. Physics I is offered at the CP level, covering all of the core content and skill areas within the MA frameworks, and offered at the ACP level targeting an expanded skill set. This course prepares students for the Introductory Physics MCAS exam.

#### **Physics and Engineering Projects**

<b>813S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>8132S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Ⓢ Physics with 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. Teachers will use differentiation to support and challenge all students. Topics include motion and forces, energy and momentum, atomic structure and nuclear reactivity, heat, electricity and magnetism, and waves. This course is offered at the CP and ACP levels, with the CP level covering all of the core content and skill areas within the MA frameworks, and the ACP level targeting an expanded skill set. This course prepares students for the Introductory Physics MCAS exam.

## da Vinci Program - Science

### da Vinci Science I - Chemistry (Grade 10, Corequisites: 6270S or 6271S or 6272S daVinci Math 2 and and Found. or Explor. level Art class)

<b>8270S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>8271S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>8272S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ da Vinci Science I-Chemistry is a student-driven integrated course with a focus on chemistry and its applications. The science content of this course will be the same as described in 820S/821S/822S, however, students in this multi-leveled course will discover the principles of chemistry through interdisciplinary lessons, interactive exploration, and collaboration in the classroom, laboratory, and the community. Each term will include a student-driven investigation integrating these themes with principles of chemistry, 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. An admission application must be submitted to join the da Vinci program. Speak with your mathematics/science teacher or counselor for more information. Students requesting this course must also select an alternate choice.

### da Vinci Science II - Biology (Grade 11, Corequisites: 6370S or 6371S or 6372S da Vinci Math 3 and 567SS Engineering and Inventing)

<b>8370S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>8371S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>8372S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ da Vinci 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

<b>8470S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>847S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

^ 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.

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

## Chemistry

### Chemistry (Grade 10)

<b>820S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>821S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>822S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

Chemistry I is an introductory course for tenth graders and emphasizes the study of matter and changes in the composition of matter. Students will develop their critical thinking and quantitative reasoning skills through hands-on laboratory and lectures. Topics include phases, atomic structure, periodic table, bonding, reactions, stoichiometry, and additional research topics. This course is a prerequisite for AP Chemistry, Chemistry II, and Organic Chemistry.

## AP Chemistry (Grades 11 - 12)

**840S** **Full Year** **Credits: 12** **Level: H**

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.

## Chemistry II - Introduction to Biochemistry (Grades 11 - 12)

**846S** **Full Year** **Credits: 12** **Level: H**  
**8462S** **Full Year** **Credits: 12** **Level: ACP**

Chemistry II is an elective course open to juniors and seniors who have successfully completed Chemistry I. Biochemistry is the study of chemistry in living organisms. This survey course provides students with an opportunity to study the chemical processes in the human body, within the materials around us, and in the natural environment. Chemistry II explores supplementary chemistry topics to greater depth than explored in the first year chemistry course including: molecular geometry, structure and function, acid-base chemistry, kinetics, thermochemistry, and biochemical pathways. Student centered laboratory work and techniques are emphasized.

## Organic Chemistry

**8490S** **Full Year** **Credits: 12** **Level: H**  
**849S** **Full Year** **Credits: 12** **Level: ACP**

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.

## Biology

### Biology (Grade 11)

**830S** **Full Year** **Credits: 12** **Level: H**  
**831S** **Full Year** **Credits: 12** **Level: ACP**  
**832S** **Full Year** **Credits: 12** **Level: CP**

Biology follows a full year of chemistry, and is a survey of modern biology. Emphasis is placed on functional processes in living organisms in the context of evolution. Laboratory activity expands upon and reinforces the foundational course concepts. Biochemistry, cell and molecular biology, genetics, evolution, human physiology, and introduction to the different biological domains are addressed. The course emphasizes process skills, experimental design, data analysis, and critical thinking, and much of the learning is language based.

### Global Biology (Grade 11, Corequisites: 2340S or 2341S or 2342S Global Justice English 11 and 4340S or 4341S or 4342S Global Justice US History)

**8340S** **Full Year** **Credits: 12** **Level: H**  
**8341S** **Full Year** **Credits: 12** **Level: ACP**  
**8342S** **Full Year** **Credits: 12** **Level: CP**

^ Global Biology 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 830S/831S/832S, however, there will be interdisciplinary lessons and assessments that connect to the 11th grade Global Justice History and English curricula. This course is available only to students who are currently enrolled in the Global Justice Program.

### AP Biology (Grade 12)

**850S** **Full Year** **Credits: 12** **Level: H**

AP Biology is open to students who have successfully completed a full year laboratory based course in biology and in chemistry. This course is an in-depth, lab-based equivalent to an introductory college course, and 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 very helpful for success in this course.

## Neurobiology (Grade 12)

**860S**

**Full Year**

**Credits: 12**

**Level: H**

**8601S**

**Full Year**

**Credits: 12**

**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 Electives

### Physics II (Grade 11 - 12)

**841S**

**Full Year**

**Credits: 12**

**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 10 - 12)

**842F/SS**

**Half Year**

**Credits: 6**

**Level: ACP**

**8422S**

**Half Year**

**Credits: 6**

**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 real world electronics, developing and mastering basic circuitry to support the concepts in physics. Building upon 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)

**843S**

**Full Year**

**Credits: 12**

**Level: ACP**

**8432S**

**Full Year**

**Credits: 12**

**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 is offered at the ACP or CP level. Students should be comfortable with algebra, and do not need to be musicians or to be proficient in music theory.

### AP Physics C Mechanics (Grade 12)

**870S**

**Full Year**

**Credits: 12**

**Level: H**

AP Physics C Mechanics is open to students who are enrolled in or have already taken 604S AP Calculus BC or 608S AP Calculus AB.. 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.

### AP Physics C - Mechanics and Electricity & Magnetism (Grade 12)

**880S**

**Full Year**

**Credits: 12**

**Level: H**

AP Physics C is open to students who are enrolled in or have already taken 604S AP Calculus BC.. 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.

### **Modern Physics (Grades 10 -12)**

**875F/SS Semester Credits: 6 Level: N**

Modern Physics is a class for students who have completed 811S or 812S or 813S 9th Grade Physics and are currently enrolled or have completed 602S Math 2 H or 613S Precalculus. The course will focus on Special Relativity, including: Galilean Relativity, Ether Theory and the Michelson-Morley Experiment, length contraction and time dilation, Lorentz transformations, spacetime diagrams, “paradoxes” of Special Relativity, four-vectors, relativistic mechanics & dynamics. The class is designed for students who are curious about looking into the breakthroughs in physics that have happened in the past 120 years.

### **Other Science Offerings for Grades 11 and 12**

#### **Astronomy and Earth Science (Grade 12)**

**851S Full Year Credits: 12 Level: ACP**  
**8512S Full Year Credits: 12 Level: CP**

Astronomy and Earth Science is an elective course introducing basic concepts of astronomy and earth science. Students will make observations of processes that occur on Earth and apply these observations and inferences to the rest of the universe. Earth science topics include meteorology, oceanography, geology, and paleontology. Topics covered in astronomy include solar system objects, exoplanets, stars, cosmology, and astrophysics. The course is available to seniors who have completed physics, biology, and chemistry, and will draw heavily on content from all these courses, especially physics.

#### **AP Environmental Science (Grade 12)**

**8550S Full Year Credits: 12 Level: H**

AP Environmental Science covers 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 full year of Biology and Chemistry. Students will be required to review problems using dimensional analysis and may be asked to study environmental laws over the summer. This highly accessible course offers students the opportunity to experience an AP Science class that is geared to a broader range of students.

#### **Science of the Senses (grade 12)**

**856F/SS Half Year Credits: 6 Level: ACP**  
**8562F/SS Half Year Credits: 6 Level: CP**

Science of the Senses is an interdisciplinary science elective course that will explore how our bodies receive and process information in the physical world. Students will investigate the physics (e.g. optics, sound waves) and chemistry (e.g. odorants, salts, sugars) involved with stimuli for touch, smell, taste, vision, hearing, and balance as well as the specialized organs that receive information for each of these senses. The course will briefly introduce the basic physiology of how relevant neural signals are processed and common disorders for each sense. Through experiential learning, students will gain a deeper understanding of how we perceive the physical world.

#### **Sustainable Agriculture & Food Systems (Grades 10 - 12)**

**506F/SS Semester Credits: 6 Level: ACP**

Offered through the Family and Consumer Sciences department – see F&CS for description.

#### **Marine Biology (Grade 12)**

**861S Full Year Credits: 12 Level: ACP**  
**8612S Full Year Credits: 12 Level: CP**

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, Prerequisite: enrolled in Global Justice program)**

<b>8620S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>8621S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>8622S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

^ Students will investigate the effects of climate change and globalization on marine ecosystems. Global Marine Biology 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 444S Global Sustainability. Scheduling priority is given to students previously enrolled in the Global Justice Program.

**Biotechnology (Grade 12)**

<b>8710S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
<b>871S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>

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.

**Anatomy and Physiology (Grade 12)**

<b>881S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>882S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: CP</b>

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 dissections, stressing the importance of observational skills. Physiology will be reinforced through a variety of measurement techniques.

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

<b>890S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: P-F</b>
<b>890F/SS</b>	<b>Semester 1</b>	<b>Credits: 6</b>	<b>Level: P-F</b>

Ⓞ 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. The course can be taken for a semester or for a full year.

**Biology Concepts and Skills (Grades 10-12)**

<b>892S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: P-F</b>
<b>892F/SS</b>	<b>Semester 1</b>	<b>Credits: 6</b>	<b>Level: P-F</b>

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)**

<b>#</b>	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
<b>#</b>	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
<b>#</b>	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level: P-F</b>

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. Interested students should speak with the Department Head in the fall.

**Science Teaching Assistant (Grades 11 - 12)**

<b>#</b>	<b>Full Year</b>	<b>Credit: 6</b>	<b>Level: P-F</b>
<b>#</b>	<b>Semester</b>	<b>Credit: 3</b>	<b>Level: P-F</b>
<b>#</b>	<b>Quarter</b>	<b>Credit: 1.5</b>	<b>Level: P-F</b>

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 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

### Independent Study in Science (Grade 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	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. Interested students should speak with the Department Head in the fall.

## TECHNICAL EDUCATION & ENGINEERING

### Drafting

#### Architecture I

551F/SS	Semester	Credits: 6	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.

#### Architecture II (Prerequisite: 551F/SS Architecture I)

552F/SS	Semester	Credits: 6	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.

#### CAD and 3D Modeling

553F/SS	Semester	Credits: 6	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 drafting, CAD and printing objects. Students will use our 3D printer to render their designs.

### Graphic Communications

#### Graphic Design I

578F/SS	Semester	Credits: 6	Level: ACP
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⑨ \* Graphic Design I covers all aspects of graphic design. Students will use various design software, Photoshop, Illustrator, Acrobat, 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 digital color/bw printers.

#### Graphic Design II (Prerequisite: 578F/SS Graphic Design I)

579F/SS	Semester	Credits: 6	Level: ACP
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⑨ \* Graphic Design II is a continuation of Graphic Design I, and 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.

## 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 138 Credits for Certificate

#### Engineering Certificate Electives - 24 Credits

561F/SS	Freshman Engineering	6 credits
562F/SS	Engineering I	6 credits
563F/SS	Engineering II	6 credits
564S	Engineering III	12 credits
567F/SS	da Vinci Eng. & Invent.	6 credits

#### Math - 48 Credits

601S/611S/621S/631S	Math 1	12 credits each
602S/612S/622S/632S	Math 2	12 credits each
6270S/6271S/6272S	da Vinci Math 2	12 credits each
603S/613S/623S/633S	Precalculus	12 credits each
6370S/6371S/6372S	da Vinci Math 3	12 credits each
604S/ 608S/605S/614S /615S/635S/618S 624S/634S		12 credits each

#### General Technology Electives - 18 Credits

551F/SS	Architecture I	6 credits
552F/SS	Architecture II	6 credits
553F/SS	CAD and 3D Modeling	6 credits
565F/SS	Robotics I	6 credits
566F/SS	Robotics II	6 credits
578SF/SS	Graphic Design I	6 credits
579F/SS	Graphic Design II	6 credits
581F/SS	Woodworking I	6 credits
582F/SS	Woodworking II	6 credits

#### Science - 48 Credits

811S/812S/ 813S/8132S	Physics	12 credits
820S/821S/822S	Chemistry	12 credits
8270S/8271S/8272S	da Vinci Chem.	12 credits
830S/831S/832S	Biology	12 credits
8370S/8371S/8372S	da Vinci Biology	12 credits
840S	AP Chemistry	12 credits
850S	AP Biology	12 credits
870S	AP Physics C	12 credits
880S	AP Physics E&M	12 credits
841S	Physics II	12 credits
843S/8432S	Physics & Music	12 credits
871S/8710S	Biotechnology	12 credits
847S/8470S	da Vinci Capstone	12 credits

Within general electives, no more than 6 credits in computer science from:

650F/SS	Intro to Programming	6 credits
651F/SS	Computer Science 1	6 credits
652F/SS	Computer Science 2	6 credits

#### Freshman Engineering

**561F/SS**

**Semester**

**Credits: 6**

**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)

**562F/SS**

**Semester**

**Credits: 6**

**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. In this class the students will learn extensively about structural engineering concepts along with Onshape, metalworking, woodworking, electrical circuits and material science areas. Most 3-D designs will be made in Onshape for simulation purposes.

#### Engineering II (Grades 10 - 12, Prerequisite: 562F/SS Engineering I)

**563F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

\* Engineering II is designed to expand upon the many forms of engineering learned in Engineering 1. The students will design and develop working electronic circuits and continue their work in wood and metal fabrication. The students will build and test various project demonstrating their understanding of different materials. Projects will include electronic games, candlestick holders and solar ovens.

#### Engineering III (Grades 11 - 12, Prerequisite: 562F/SS Engineering I and 563F/SS Engineering II)

**5640S**

**Full Year**

**Credits: 12**

**Level: H**

\* Engineering III will afford the opportunity to engage in a year-long in-depth **capstone** investigation of Engineering by sustaining a year-long student-driven build that incorporates the content mastered in Engineering 1+2 and other Tech Ed. classes. 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 have completed certificate requirements and are actively pursuing an Engineering Certificate.

### **Robotics I (Grades 9 - 12)**

**565F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

ⓐ \* 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 bump, ultrasonic, and temperature sensors 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.

### **Robotics II (Grades 9 - 12, Prerequisite: 565F/SS Robotics I)**

**566F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

ⓐ \* Robotics II is a continuation of Robotics I. The projects will get more complicated with the addition of new sensors and programming techniques.

### **da Vinci Program: Engineering and Inventing (Grade 11, Corequisites: 6370S or 6371S or 6372S da Vinci Math 3 and 8370S or 8371S or 8372S da Vinci Biology)**

**567SS**

**Semester 2**

**Credits: 6**

**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.

## **Woodworking**

### **Woodworking I**

**581F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

ⓐ \* 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.

### **Woodworking II (Prerequisite: 581F/SS Woodworking I)**

**582F/SS**

**Semester**

**Credits: 6**

**Level: ACP**

ⓐ \* 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**

### **Graphics Work-Study (Prerequisite: approval from instructor)**

**#**

**Full Year**

**Credit: 6**

**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 school profile to graduation programs. Election of this course is subject to the approval of the instructor and department head. Interested students should speak with the Department Head in the fall.

### **Maintenance Work-Study (Prerequisite: 581F/SS Woodworking I and approval from instructor)**

**#**

**Full Year**

**Credit: 6**

**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. Interested students should speak with the Department Head in the fall.

### **Independent Study in Technical Education (Prerequisite: approval from instructor)**

**#**

**Semester**

**Credit: 3**

**Level: P-F**

Election of Independent Study in Technical Education is subject to the approval of the instructor and department head. Independent Study is only offered when level 1 and 2 classes have been completed. Interested students should speak with the Department Head in the fall.

# WELLNESS

The Wellness Department is pleased to offer a progressive and sequential education to Newton South students. This curriculum aligns with key learning objectives From the 2023 Comprehensive Health and Physical Education State 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 15 credits(5 courses) in Wellness in order to graduate. 9th grade students are enrolled in two core Wellness classes. 10th, 11th, and 12th grade students are required to complete one elective Wellness course each year, three total, to meet graduation requirements. The Wellness Department recommends that students take one class from three out of the following four categories: Adventure Leadership, Group Dynamics, Personal Fitness, and Stress Management. No student can take the same course a second time.

## 9th Grade Core Requirements

771QS Ninth-Grade Wellness  
772QS Ninth-Grade Health

## 10th,11th, and 12th Electives (must take 3, one each year)

Adventure Leadership	Group Dynamics	Personal Fitness	Stress Management
774QS Climbing the E.L.M. Tree	776QS Play 4 Life	778QS Healthy Heart	780QS Brain Train
775QS Expanding Horizons	777QS Around The World In 80 Days	779QS Well U	781QS Yo-Co
		502QS Sports Nutrition	

## NINTH GRADE CORE COURSES

### Ninth-Grade Wellness - Exploring Wellness (7 Dimensions of Wellness)

771QS

Quarter

Credits: 3

Level: N

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, 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

### Ninth-Grade Health - Sexuality and Health

772QS

Quarter

Credits: 3

Level: N

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. 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 infections, sexual orientation, harassment and violence prevention, and the practice of peer refusal skills.

SEL Competency: Self-Awareness

## WELLNESS CATEGORIES & COURSES

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

### Adventure Leadership

### **Climbing the E.L.M. Tree (Grades 10 - 12) (High Ropes Challenge Course)**

**774QS**

**Quarter 1 or 4**

**Credits: 3**

**Level: N**

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. This course uses low and high elements on the challenge course.

SEL Competency: Responsible Decision Making

### **Expanding Horizons (Grades 10 - 12) (Team Building Activities)**

**775QS**

**Quarter 2 or 3**

**Credits: 3**

**Level: N**

This course helps students expand and fine-tune their leadership skills by participating in a variety of creative, non-traditional games and challenges for their mind and body! Take a healthy risk and step out of your comfort zone. Challenge yourself and your classmates to develop interpersonal, communication, and leadership skills to solve problems in a group setting. This course uses low and high elements on the challenge course.

SEL Competency: Responsible Decision Making,

## **Group Dynamics**

### **Play 4 Life (Grades 10 - 12)**

**776QS**

**Quarter 1 or 4**

**Credits: 3**

**Level: N**

"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

### **Around The World In 80 Days (Grades 10 - 12)**

**777QS**

**Quarter 2 or 3**

**Credits: 3**

**Level: N**

What is Sepak Takraw? How do you play KorfBall? 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. Around the World 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

## **Personal Fitness**

### **Healthy Heart (Grades 10 - 12)**

**778QS**

**Quarter**

**Credits: 3**

**Level: N**

Your heart beats around 100,000 times a day, pumping blood around your body to deliver oxygen and nutrients, while taking away waste products. Don't you want to keep it healthy?? Healthy Heart provides you the opportunity to explore ways to prevent cardiovascular disease through physical activity, healthy heart nutrition, and training to learn the skills of CPR/AED to respond to emergency situations (AHA certification option with a small fee).

SEL Competency: Self-Management

### **Well U (Grades 10 - 12)**

**779QS**

**Quarter 1-4**

**Credits: 3**

**Level: N**

Well U 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, functional fitness foundations 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. This course provides training to learn the skills of CPR/AED to prepare students to respond to emergency situations (AHA certification option with a small fee).

SEL Competency: Self-Management

## **Sports Nutrition (Grades 10 - 12, Grade 9 if space available)**

**502QS**

**Quarter 1-4**

**Credits: 3**

**Level: ACP**

Ⓢ \* Sports Nutrition is a hands-on cooking class where students participate in weekly cooking labs to prepare healthy meals and snacks. The course explores how to make healthy choices for any lifestyle, and how adolescents can optimize athletic performance through diet. The focus is on promoting a healthy balance of foods, as well as a healthy relationship with food. Students learn through class discussion, projects and working collaboratively with their peers to prepare nutrient-dense recipes. 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 10, 11 and 12.

SEL Competency: Self-Management

## **Stress Management**

### **Brain Train (Grades 10 - 12)**

**780QS**

**Quarter 1 or 4**

**Credits: 3**

**Level: N**

Brain Train is a self/stress management course designed to cultivate self-awareness and personal growth by enhancing skills to manage the demands of school and life. To better manage individual stress levels, students will learn the causes and effects of stress, how the brain handles stress, and how stress impacts our wellness. We explore and practice various techniques that can train the brain and body to de-stress: time management skills, breathing techniques, progressive muscle relaxation, mindfulness, meditation, guided imagery, restorative yoga, yoga nidra, etc. Participation with an open mind is beneficial for the course.

SEL Competency: Self-Management

### **Yo-Co (Grades 10 - 12)**

**781QS**

**Quarter 2 or 3**

**Credits: 3**

**Level: N**

Yoga Length & Core Strength! Take this stress management and lifelong wellness course to learn these forms of physical and mental fitness to relieve stress, and maintain a healthy and balanced lifestyle. We will learn about stress and how to manage it with yoga poses, breathing techniques and core exercises. This course combines the physical and mental aspects of yoga's full-body/mind lengthening and stretching, with core exercises for stability, strength and balance. SEL Competency: Self-Management

## **WORLD LANGUAGE**

The World Language Department proposes sequential programs in Chinese, French, Latin, Russian, and Spanish. We strongly recommend that students consider their high school study of language part of a long-term commitment to become proficient in at least one language other than English. The primary objective of all World Language courses is communicative and cultural 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 offered.

A variety of multi-modal learning activities across our World Language courses foster progress along the ACTFL communicative proficiency continuum\* as students expand their functional vocabulary and repertoire of lexical structures. Growth is measured through a wide variety of performance and achievement-based assessments that demonstrate student ability to understand, speak, read and write another language in a thematic context. During the fall of their senior year, students are invited to demonstrate their level of proficiency on nationally normed assessments with the potential to earn a Massachusetts State Seal of Biliteracy. The State Seal was created in 2017 to provide evidence to universities and workplaces of high level proficiency in a language other than English, a skill deemed critical in our 21st century.

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 (please refer to page 7 for a description of international opportunities). The Jennifer Price Global Education Leadership Fund (GELF) exists to provide scholarship support to make this feasible for all students.

*\*Communicative proficiency refers to the types of tasks a student is able to accomplish with a language in an unrehearsed, real world context. An overview of proficiency guidelines by the American Council of Teachers of Foreign Languages can be found on the ACTFL website.*

## World Language Courses Available to Students in Grade 9

### 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.

- 311AS Novice French 1
- 341S Chinese 1
- 351S Latin 1
- 361S Russian 1
- 381AS Novice Spanish 1

## World Language Courses for Grades 9, 10, 11, and 12

### 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.

#### Chinese 1 (Grades 9 - 12)

**341S**

**Full Year**

**Credits: 12**

**Level: ACP**

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 an increasing understanding of the Chinese people, their history, and civilization. This course may be an appropriate choice for students with a middle school foundation who have not yet solidified their skills at the novice-mid level.

#### Chinese 2 (Grades 9 - 12)

**342S**

**Full Year**

**Credits: 12**

**Level: ACP**

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.

### **Chinese 3 (Grades 10- 12)**

**343S**

**Full Year**

**Credits: 12**

**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.

### **Chinese 4 (Grades 10- 12)**

**344S**

**Full Year**

**Credits: 12**

**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.

### **Chinese 5 (Grades 10 -12)**

**345S**

**Full Year**

**Credits: 12**

**Level: ACP**

Chinese 5 is the senior course and the culmination of the ACP sequence. While still a textbook-base 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 committed to their study of Chinese. It requires sophisticated linguistic skills and the capacity to work independently. The sequence culminates in the AP Chinese Language and Culture course.

### **Chinese 3 (Grades 10 -12)**

**3430S**

**Full Year**

**Credits: 12**

**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.

### **Chinese 4 (Grades 10 -12)**

**3440S**

**Full Year**

**Credits: 12**

**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.

### **Chinese 5 (Grades 10 -12)**

**3450S**

**Full Year**

**Credits: 12**

**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.

### **AP Chinese Language and Culture (Grades 10 -12)**

**346S**

**Full Year**

**Credits: 12**

**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 a variety of textbooks, readers and authentic materials, including print, audio, and video to develop communication skills in French and to investigate the cultures of the French-speaking world. Students have many opportunities to speak, read, write and listen to French in a variety of communicative contexts. The complexity of communicative tasks increases as students acquire skills and competency. The 3121-3151 SAM (Stretch, Aim, Motivate!) sequence provides targeted support and additional scaffolding to students in the ACP classroom who have not yet reached the entry-level proficiency target for a given course. While the thematic content of the ACP and SAM course is the same, assessments in SAM courses are modified accordingly.

**Novice French 1 (Grades 9 -12)**

<b>311AS</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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Ⓞ 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.

**Novice French 2 (Grades 10 -12)**

<b>311BS</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
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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. While continuing to delve into topics concerning daily life, students refine the linguistic skills necessary to readily communicate needs, preferences and interests. Upon successful completion of this course, students are prepared for 312S Intermediate French 2.

**Intermediate French 2 (Grades 9 -12)**

<b>312S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>3121S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP (SAM)</b>

Ⓞ Intermediate French 2 uses a textbook and a novella as well as numerous authentic sources. French 2 highlights 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 (Grades 10 -12)**

<b>313S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>3131S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP (SAM)</b>

French 3 uses a textbook and a variety of authentic texts to explore themes such as responsibilities at home and to the community, care of the environment, 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 (Grades 10 -12)**

<b>314S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>3141S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP (SAM)</b>

French 4 uses a textbook and a wide variety of authentic texts, videos and film 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 (Grades 10 -12)**

<b>315S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP</b>
<b>3151S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: ACP (SAM)</b>

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 explore several 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 enthusiastically committed to 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.

**French 3H (Grades 10 -12)**

<b>303S</b>	<b>Full Year</b>	<b>Credits: 12</b>	<b>Level: H</b>
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Providing a structural foundation at an intensive pace, French 3H offers an overview of French history up to World War II and a look at art from Europe, West Africa and Haiti. In addition to exploring various authentic texts and films, students also read a short novel.

**French 4H (Grades 10 -12)****304S****Full Year****Credits: 12****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. Themes include family and community, contemporary life, love and friendship, beauty and aesthetics, identity and the search for self. This course prepares students for the AP French Language course with a targeted proficiency goal of Intermediate High.

**AP French Language (Grades 10 -12)****305S****Full Year****Credits: 12****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 Classical inheritance. Accordingly, the relevance of Latin to the English language and to our lives today 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.

**Latin 1 (Grades 9 -12)****351S****Full Year****Credits: 12****Level: ACP**

Ⓣ Latin 1 is an introductory course that 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, culture, history, art, and the lives of both elite and marginalized people in ancient Roman society are explored through Latin readings, inscriptions, and supplemental English texts.

**Latin 2 (Grades 10 -12)****352S****Full Year****Credits: 12****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. Students will begin reading longer texts that range from modern takes on myths to more “traditional” renderings of passages by ancient authors. Accompanying this more mature encounter with the Latin language is a more intellectual study of Roman culture and history.

**Latin 3 (Grades 10 -12)****3530S****Full Year****Credits: 12****Level: H****353S****Full Year****Credits: 12****Level: ACP**

Latin 3 is for students who have successfully completed Latin 2. Students complete their review of essential Latin grammar and vocabulary linked to more complex grammatical structures. Students continue to read a variety of texts from throughout the centuries. Latin 3 H is for students who have completed Latin 2 with extraordinary success, and enrollment is guided by teacher recommendation. Students enrolled at the honors level are expected to read a great deal more extensively, and to translate more exactly.



## Latin 4 (Grades 10 -12)

**3540S**

**Full Year**

**Credits: 12**

**Level: H**

**354S**

**Full Year**

**Credits: 12**

**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 experts at scanning dactylic hexameters 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 in the honors sequence are expected to read a great deal more extensively than their peers registered at the ACP level, and to translate more exactly.

## Latin 5

**3550S**

**Full Year**

**Credits: 12**

**Level: H**

**355S**

**Full Year**

**Credits: 12**

**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.

### Russian 1 (Grades 9 - 12)

**361S**

**Full Year**

**Credits: 12**

**Level: ACP**

Ⓞ 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 362S Russian 2.

### Russian 2 (Grades 9 - 12)

**362S**

**Full Year**

**Credits: 12**

**Level: ACP**

Ⓞ 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 (Grades 10 - 12)

**363S**

**Full Year**

**Credits: 12**

**Level: ACP**

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.

### Russian 4 (Grades 11 - 12)

**364S**

**Full Year**

**Credits: 12**

**Level: ACP**

Russian 4 forms the culminating course in the sequence with a 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, Zoshchenko, and Aitmatov.

## 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 from 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. NOTE that in the event that enrollment is not sufficient to run individual sections, course sections may be combined with other classes.

### **Novice Spanish 1 (Grades 10 - 12)**

**391S**

**Full Year**

**Credits: 12**

**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.

### **Novice Spanish 2 (Grades 10 - 12)**

**392S**

**Full Year**

**Credits: 12**

**Level: CP**

Novice Spanish 2 is designed for students who have completed a first year novice course at the high school level. A particular 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.

### **Spanish 3 (Grades 10 - 12)**

**393S**

**Full Year**

**Credits: 12**

**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.

### **Spanish 4 (Grades 10 - 12)**

**394S**

**Full Year**

**Credits: 12**

**Level: CP**

### **Spanish 5 (Grades 10 - 12)**

**395S**

**Full Year**

**Credits: 12**

**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 broaden their communicative competency in Spanish. Through these thematic units, students make comparisons with and connections to their own lives.

The 381-385 Advanced College Preparatory program emphasizes proficiency-based instruction and uses a variety of textbooks, readers and authentic materials, including print, audio, and video to develop communication skills in Spanish and to investigate the cultures of the Spanish-speaking world. Students have many opportunities to speak, read, write and listen to Spanish in a variety of communicative contexts. The complexity of communicative tasks increases as students acquire skills and competency. The 3821-3841 SAM (Stretch, Aim, Motivate!) sequence provides targeted support and additional scaffolding to students in the ACP classroom who have not yet reached the entry level proficiency target for a given course. While the thematic content of the ACP and SAM course is the same, assessments in SAM courses are modified accordingly.

### **Novice Spanish 1 (Grades 9 - 12)**

**381AS**

**Full Year**

**Credits: 12**

**Level: ACP**

Ⓢ 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.

### **Novice Spanish 2 (Grades 9 - 12)**

**381BS**

**Full Year**

**Credits: 12**

**Level: ACP**

Ⓢ Novice Spanish 2 is the appropriate course for students who have completed the study of 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 382S Intermediate Spanish 2.

### **Intermediate Spanish 2 (Grades 10 - 12)**

**382S**

**Full Year**

**Credits: 12**

**Level: ACP**

**3821S**

**Full Year**

**Credits: 12**

**Level: ACP (SAM)**

Intermediate Spanish 2 is an appropriate course for students who have successfully completed the middle school sequence in Spanish, have completed the Novice Spanish 1 / Novice Spanish 2 sequence at the high school, or have demonstrated readiness via a placement assessment. 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 (Grades 10 - 12)**

**383S**

**Full Year**

**Credits: 12**

**Level: ACP**

**3831S**

**Full Year**

**Credits: 12**

**Level: ACP (SAM)**

Spanish 3 is an intermediate level course that 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.

### **Spanish 4 (Grades 10 - 12)**

**384S**

**Full Year**

**Credits: 12**

**Level: ACP**

Spanish 4 is an upper-level intermediate 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.

### **Spanish 5 (Grades 10 - 12)**

**385S**

**Full Year**

**Credits: 12**

**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 enthusiastically committed to 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.

### **Spanish 3H (Grades 10 - 12)**

**373S**

**Full Year**

**Credits: 12**

**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.

### **Spanish 4H (Grades 10 - 12)**

**374S**

**Full Year**

**Credits: 12**

**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.

### **AP Spanish Language**

**375S**

**Full Year**

**Credits: 12**

**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**

### **World Language Peer Tutor (Grades 10 - 12)**

**#**

**Full Year**

**Credit: 6**

**Level: P-F**

**#**

**Semester**

**Credit: 3**

**Level: P-F**

**#**

**Quarter**

**Credit: 1.5**

**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 WIN block or meet one on one with students during a regularly-scheduled block. Interested students should speak with the Department Head in the fall.

### **World Language Teaching Assistant (Grades 10 - 12)**

**#**

**Full Year**

**Credit: 6**

**Level: P-F**

**#**

**Semester**

**Credit: 3**

**Level: P-F**

**#**

**Quarter**

**Credit: 1.5**

**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 68 for details on the role and expectations of teaching assistants. Interested students should speak with the Department Head in the fall.

### **Independent Study in World Language (Grades 10 - 12)**

**#**

**Full Year**

**Credit: 6**

**Level: P-F**

**#**

**Semester**

**Credit: 3**

**Level: P-F**

**#**

**Quarter**

**Credit: 1.5**

**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. Interested students should speak with the Department Head in the fall.

# ALL SCHOOL OPPORTUNITIES

## Teaching Assistant (Grades 10 - 12, with permission from instructor)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level: P-F

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. Students will need to complete a Teaching Assistant Application. Interested students should speak to the appropriate Department Head in the fall.

## Teaching Assistant Instructional Technology (Grades 10 - 12, with permission from instructor)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level: P-F

The IT Teaching Assistant course gives students the opportunity to support a variety of instructional technology projects at Newton South High School. Students will develop instructional materials to support the use of classroom technology tools, including Chromebooks, Google Workspace, Schoology, and more. By working collaboratively, students will build confidence and develop problem-solving skills, while providing a valuable service to other students and teachers. Students will practice digital citizenship by using social media and blogging tools. This program empowers students to be in charge of their own learning, and enables students to share their learning with the broader community. Students can choose to enroll in this course from 1-3 blocks per week each term. Interested students should speak to Mr. Hammel in the library.

## Office Assistant (Grade 10 - 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	Level: P-F

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. Interested students should speak with their Dean in the fall.

## Library Service (Grades 10-12)

#	Full Year	Credits: 6	Level: P-F
#	Semester	Credits: 3	Level: P-F
#	Quarter	Credits: 1.5	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. Interested students should speak with the librarians in the fall.

## Bilingual Academic Peer Education (Grades 11 - 12)

#	Full Year	Credit: 6	Level: P-F
#	Semester	Credit: 3	Level: P-F
#	Quarter	Credit: 1.5	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 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.

## Leadership in Social Justice (Grades 10 - 12)

903QS	Quarter 2	Credits: 3	Level: N
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Leadership for Social Justice 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 actively engage in candid conversations around the complexities of their identities (race, ethnicity,

gender, nationality, religion, etc). With the goal of fostering a welcoming and inclusive community, the final class assignment will be for students to facilitate activities and conversations in 9th grade history classes about identity and implicit bias. Class enrollment is determined through nomination and invitation. Students who are interested in this class should see their guidance counselor, dean, or history teacher.

### **One to One Mentoring (Grades 11 - 12)**

**904S**

**Full Year**

**Credits: 12**

**Level: N**

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 Schools. 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 the 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. Students have class 1 block per week and meet with their mentee 1x per week.

### **METCO Advisory (Grade 9)**

**906FS**

**Semester 1**

**Credits: 1**

**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.

### **W.I.S.E. Senior Project/Internship Program (Grade 12)**

**910SS**

**Semester 2**

**Credits: 6 - 12**

**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. Students may be eligible to be released from some classes during Quarter 4 to devote time to the WISE experience. The number of classes students are released from 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. Students will receive 9 credits for each released class. The class meets 1 block per week during Quarters 3 & 4, with students completing project/internship during Quarter 4. 6 credits are given for a part-time project/internship and 12 credits for a full-time internship.

### **Peer Tutoring (Grade 10 - 12)**

**996F/SS**

**Semester**

**Credits: 3**

**Level: P-F**

**996QS**

**Quarter**

**Credits: 1.5**

**Level: P-F**

Peer Tutoring is a great opportunity for students to hone their skills as a communicator and to help out a student who struggles in a subject. Students 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. Students who excel in any specific classes and are comfortable working one-on-one with a younger student should consider applying. Teacher recommendation for the tutoring subject(s) is a requirement. There is also a mandatory two-block training during the school day in late September. Students can pick up a copy of the Peer Tutor Recommendation Form outside Room 1312 or from guidance counselors. On the Peer Tutor Recommendation Form students can also indicate their interest in creating short, helpful videos (Khan Academy style) about key skills and content in 9th and 10th grade courses. Please contact Ms. Leslie at [lesliee@newton.k12.ma.us](mailto:lesliee@newton.k12.ma.us) with questions.

## 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 must 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 their parents/guardians, 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

2291S	Full Year	Credits: 12	Level: ACP
2292S	Full Year	Credits: 12	Level: CP

### Junior English

2391S	Full Year	Credits: 12	Level: ACP
2392S	Full Year	Credits: 12	Level: CP

### World History II (Grade 10)

4291S	Full Year	Credits: 12	Level: ACP
4292S	Full Year	Credits: 12	Level: CP

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

4391S	Full Year	Credits: 12	Level: ACP
4392S	Full Year	Credits: 12	Level: CP

### Academic Study (Grade 10)

933CRS	Full Year	Credits: 12	Level: P-F
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### Academic Study (Grade 11)

943CRS	Full Year	Credits: 12	Level: P-F
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### Academic Study (Grade 12)

953CRS	Full Year	Credits: 12	Level: P-F
	Full Year	Credits: 12	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/Page/3887>

## 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. 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. 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. Additionally, students who participate in CTE programs develop an individual Career Plan designed to help them make informed choices, now and for their futures. Upon graduation, students will be prepared to pursue a four or two-year college education, a technical training institute, apprenticeships, and/or enter the workforce. In addition to their high school diploma, students who complete a three-year CTE Major program receive 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  
Carpentry  
Culinary Arts  
Drafting  
Early Education & Care  
Graphic Communications

**CTE Non-Chapter 74:**

TV Media Arts

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 the first period departs South at 8:20. If a student typically takes a bus to South, the student may not arrive in time for this 8:20 bus and will need to make their own arrangements to either get to South in time for the 8:20 bus or to get to North for first class at 9:00. Transportation, although provided, does require a little extra effort, but it is a small price to pay in comparison to the benefits!

**EXPLORATORY PROGRAM - Exploratory meets three 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 three 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 6 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 9 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](http://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, counselor and CTE Director at the time of course registration. More detailed inform about the Chapter 74 CTE programs is located on-line in the Opportunities Book for Newton North High School.

<p>Courses Listed in this column are State approved and regulated Chapter 74 Programs. They are all located at Newton North High School.</p>	<p>Courses listed in this column are electives that are housed at South that provide a similar experience to the CTE Exploratory Programs located at North (see the column to the left).</p>
<p><b>Automotive Technology</b> - CIP CODE: 470604 880 Exploratory Automotive Technology Periods per week: 3 Semester 2 Credits:6 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>There is no Automotive Technology elective available at Newton South.</p>
<p><b>Carpentry</b> - CIP CODE: 460201 <b>887 Exploratory Carpentry</b> Periods per week: 3 Semester 2 Credits: 6 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><b>581F/SS Woodworking I</b> Periods per week: 3 Semester 1/2 Credits 6 Level: ACP</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>
<p>Newton North High School</p>	<p>Newton South High School</p>
<p><b>Culinary Arts - CIP CODE: 120503</b> <b>902 Exploratory Culinary Arts</b> Periods per week: 3 Semester 2 Credits: 6 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><b>507F/SS Culinary Arts Exploratory</b> Periods/week: 3 Semester 1 or 2 Credits: 6 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><b>Drafting - CIP CODE: 151301</b>  <b>5911 Exploratory Drafting</b>  Periods per week: 3 Semester 2 Credits: 6 Level: ACP</p> <p>Exploratory students learn to draft exciting 3 dimensional 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><b>551F/SS Architecture I</b>  Periods/week: 3 Semester 1 or 2 Credits: 6 Level: ACP</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>Newton North High School</p>	<p>Newton South High School</p>
<p><b>Early Education and Care - CIP CODE: 131210</b>  <b>894 Exploratory Child Development</b>  Periods per week: 3 Semester 2 Credits: 6 Level: ACP</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><b>521F/S Child Development</b>  Periods/week: 3 Semester 1 or 2 Credits: 6 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 prerequisite.</p>
<p><b>Graphic Communications - CIP CODE: 100301</b>  <b>932 Exploratory Graphic Communications</b>  Periods/week: 3 Semester 2 Credits: 6 Level: ACP</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><b>578F/SS Graphic Design</b>  Periods/week: 3 Semester 1 or 2 Credits: 6 Level: ACP</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>

**Television & Video Production - CIP CODE: 090701**

**173 Exploratory TV Media Arts**

Periods/week: 3 Semester 2 Credits: 6 Level: ACP  
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.

**0970F/SS Video Studio**

Periods/week: 3 Semester 1 or 2 Credits: 6 Level: ACP/H  
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.

# At Newton South, we...







