

WATERTOWN HIGH SCHOOL

2019-2020 PROGRAM OF STUDIES

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Guidance Department

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Watertown High School Mission

The mission of Watertown High School is to produce lifelong learners through examination of human achievements, development of essential skills, and promotion of civic responsibility and ethics. We are committed to a rigorous curriculum designed to foster students' growth as creative and independent thinkers. We will provide a safe and nurturing environment in which students and faculty has the opportunity to realize their potential.

Core Values

- R** We **RESPECT** each other, and we respect ourselves.
- E** We are **EMPOWERED** to grow and pursue our dreams.
- A** We **ACHIEVE** as students and as well-rounded individuals.
- C** We aspire to **CREATE** something new from our knowledge and experiences.
- H** We **HONOR** our rights and responsibilities as members of this community.

School-Wide Learning Expectations

- **Communication:** Communicate effectively (orally and in writing) utilizing multiple technologies and media
- **Creativity:** Solve problems creatively utilizing brainstorming, prototyping and considering nontraditional methods
- **Critical Thinking:** Effectively gather, evaluate, analyze, and synthesize information to develop wonderings and create and test hypotheses
- **Collaboration:** Work in collaboration within teams or groups to develop solutions based on multiple inputs of skills, experiences and knowledge bases. Exercise flexibility, make compromises, and share responsibility in the development of solutions

General Information

Graduation Requirements

All students must demonstrate the following competencies:

Reading/Writing/Speaking Skills demonstrated by successful completion of four years of English courses, which include a written thesis paper, at least six pages in length, and oral presentation and defense of a written thesis/project in any discipline or department.

Self-Assessment • Establishing Goals demonstrated by completion of specific activities for grades 9 - 12 as part of the developmental guidance program.

Problem solving and Respect/Concern for Others demonstrated by completion of community service for a minimum of thirty-six hours.

Computer Literacy demonstrated (at a minimum) by competency in word processing, database and spreadsheet applications within the context of academic courses.

All Students must earn 134 credits

In earning the credits, students are required to successfully complete the following courses in the indicated disciplines:

English	4 full year courses or equivalent
Social Studies	3 full year courses including two years of U.S. History
Math	4 full year courses or equivalent
Science	3 full year courses or equivalent
Fine and Performing Arts/ Career & Technical Education	1 full year course or 2 semester courses from either of these areas
Wellness	1 semester course each year at WHS Required: Personal Fitness, Health, Project Adventure & one choice WHS Wellness class
World Languages	3 full year courses strongly recommended

In addition, all students must pass the Massachusetts Comprehensive Assessment System (MCAS) in Science, and Mathematics and English Language Arts with a passing score on each test.

Accreditation Statement

Watertown High School is accredited by the New England Association of Schools and Colleges Inc. (NEASC), a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Minimum Credit Requirement

Before choosing your subjects for next year, think about your reasons for attending high school and what you would like to do in the future. Have discussions with your counselor and teachers to help you define your goals and plan your program. Your parents should be actively involved in helping select the best possible school program. Teachers and guidance counselors will help by recommending appropriate courses for you. In order to develop a coherent plan, map out the courses you plan to take in of each of your four years at Watertown High School.

9th and 10th graders will be scheduled for 42 credits and all other students must carry at least 36 credits per year ***Students, who have a Support Class or teacher aide position, may not also have a study.*** Once a course has been successfully completed, with the exception of Band, Chorus, String Orchestra, Studio Art, Journalism, or Physical Education, the course may not be repeated for credit.

It is the responsibility of each student to know if he/she is carrying enough credits for graduation. School staff members keep a check on student graduation requirements; however, each student is asked and expected to monitor his/her individual program. All courses are offered subject to enrollment and staffing.

Parental Appeal Procedure for Course Selection

In the event that a student or their parent/guardian does not agree with a teacher's recommendation for course/level for the next academic year, the following procedure is in place:

1. Student and parent/guardian writes note to teacher requesting conversation about recommendation for course selection and/or higher/lower placement. Note should include parent's work and home phone numbers.
2. Teacher speaks with students and calls parent. If placement is not resolved, teacher advises parent to contact department coordinator.
3. Department coordinator and parent converse. If no resolution, parent is advised to contact High School Principal.
4. Principal responds in writing to parent (approval/disapproval/conditions) and copy of letter is sent to guidance counselor/teacher/departement coordinator. The guidance counselor will act as a mediator while the process moves along. The same process will apply for students moving from grade 8 to grade 9.

Choosing Courses for College Admissions

- A. It is important to understand that each college has its own admissions policy. You must check with each college regarding the individual school requirements.
- B. If you plan to go to a four-year college and earn a Bachelor's Degree (BA/BS), we strongly recommend that you consider taking the following courses at Watertown High School:
- English 4 years
 World Languages 3 years, preferably 4
 (Massachusetts public universities require at least 2 years of the same World Language)
- Mathematics 4 years
 (Algebra II is a minimum requirement for all Massachusetts public universities)
- Science 3 years, preferably 4
 Social Studies 3 years, preferably 4
- C. Two-year Community and Junior Colleges have both career and transfer programs. Career Programs prepare students for entrance into semi-professional or technical fields after two years of study. Students in Transfer Programs are prepared to enter their junior year at a four-year college. Entrance into these programs is open to all high school graduates and is more flexible than for four-year schools. Some career programs are quite competitive, however, and require advanced skills and proficiencies. An Associate's Degree is awarded after successful completion of either type of program.

Massachusetts State Colleges

According to the Massachusetts Department of Higher Education, in order for a student to be eligible for acceptance into the Massachusetts State College system as a freshman, all students must:

- Take 17 college preparatory high school courses
- Earn at least a 3.0 grade point average in college preparatory courses **or** meet an SAT/ACT score requirement based on their GPA (see chart below)
- Take the SAT or ACT test

Required SAT or ACT Scores for Freshman Applicants to UMass Undergraduate Campuses

Weighted Average GPA	Combined SAT Score (Reading and Math)	ACT Score
2.51-2.99	950	20
2.41-2.5	990	21
2.31-2.4	1030	22
2.21-2.3	1070	23
2.11-2.2	1110	24
2.0-2.1	1150	25

Required SAT or ACT Scores for Freshman Applicants to State Universities

Weighted Average GPA	Combined SAT Score (Reading and Math)	ACT Score
2.51-2.99	910	19
2.41-2.5	950	20
2.31-2.4	990	21
2.21-2.3	1030	22

2.11-2.2	1070	23
2.0-2.1	1110	24

The academic course requirements for Massachusetts State Colleges are:

- English - 4 courses
- Mathematics - 4 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework, including mathematics during the final year of high school. Students must take and pass Algebra II to be considered for Massachusetts public universities.)
- Sciences - 3 courses (from Natural Science and/or Physical Science and/or Technology/Engineering) including 3 courses with laboratory work.
- Social Sciences - 2 courses (including 1 course in US History)
- World Languages - 2 courses (in a single language)
- Electives - 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

These are **minimum requirements** for admission, and eligibility does not guarantee admission.

Academic Information - Requirements and Eligibility

Credits Required for Promotion and Graduation

Freshmen: Class of 2023

134 credits are required for graduation.

Each freshman student must earn thirty (30) credits to include successful completion of freshman English, before being promoted to the sophomore year and assigned to a sophomore homeroom.

Sophomores: Class of 2022

134 credits are required for graduation.

Each sophomore student must have earned a minimum of sixty (60) credits, to include successful completion of sophomore English, before being promoted to the junior year and assigned to a junior homeroom.

Juniors: Class of 2021

134 credits are required for graduation.

Each junior student must have earned a minimum of ninety-four (94) credits to include successful completion of Junior English before being promoted to the senior year and assigned to a senior homeroom.

Seniors: Class of 2020

134 credits are required for graduation.

Each senior must have earned 134 credits to include successful completion of required subjects in order to participate in the graduation or be awarded a diploma from Watertown High School.

School-to-Career

School-to-Career creates partnerships between schools, businesses and colleges, to help prepare today's students for tomorrow's careers in the fast changing and increasingly competitive global economy.

School-to-Career will combine several elements:

- Career awareness, exploration and counseling services
- A series of courses including all core academic courses that will focus on specific career pathways, including the following:

Radio and Television Broadcasting
Design and Visual Communications
Marketing/Finance
Carpentry
Family & Consumer Studies
Culinary Arts
Programming and Web Development
Biotechnology
Engineering Technology

- Opportunities for internships, job shadowing, mentoring, and on-the-job training for students
- University, college, junior college and technical school programs for extended education and training beyond high school

School-to-Career is for **ALL** students.

- Make informed choices regarding career pursuits and further education.
- Choose the right courses in high school to prepare for a career and use what you learn in school in real work situations.
- Explore the world of work and learn from on-the-job experiences.

Grade Point Average / Decile Standing

Grade point average at Watertown High School is a weighted average which includes Advanced Placement, Honors, Level 1 and Level 2 courses in English, Math, Social Studies, Science, World Language, Art, Computer Science, Health, Physical Education, and all Career and Technical Education courses. Pass/Fail courses, Summer School courses, unlevleed courses and courses taken at institutions other than Watertown High School are not included in the GPA. Virtual High School courses (VHS) are included in GPA using levels L1, Honors, and Advanced Placement.

Decile standing is computed at the end of junior year and after the third term of senior year. The cumulative, weighted GPA is calculated using term grades from each of the four quarters. WHS gives students a standard 4.0 - based GPA. There will not be any conversion of grades from schools other than Watertown High School in the calculation of decile standing. In order to be calculated and reported, students must have attended WHS a minimum of five quarters and have accumulated a minimum of twenty term grades to be eligible for decile standing status. Decile 1 is the highest decile.

The Principal selects the Class Valedictorian and Salutatorian after the **final GPA is calculated following the close of grades for third term of the student's senior year.**

4.0 Grading Scale

A+ 4.3	B+ 3.3	C+ 2.3	D+ 1.3	F 0.0
A 4.0	B 3.0	C 2.0	D 1.0	
A- 3.7	B- 2.7	C- 1.7	D- 0.7	

Progress Report

A student receives a mid-term progress report as of the 5th week of each marking period. An academic standard of Honorable, Satisfactory, Needs to Improve or Unsatisfactory and an attendance report are indicated on this report.

Report Card — Marking

Four times each year a student receives a report card that indicates in letter grades his/her official standing in the courses he/she is taking.

Marks

A+, A, A-	Exceeds Standards
B+, B, B-	Meets Standards
C+, C, C-	Meets Minimum Competencies
D+, D, D-	Unsatisfactory, Low pass
F	Failing
INC	Incomplete
P	Passing
S	Satisfactory
U	Unsatisfactory, Low Pass
W	Withdrew (student withdrew from course)
Z	Student is new to class

In addition, comments are given by each subject teacher to aid in understanding the letter grade.

Report Card Error

Report card errors should be reported to the teacher involved. A grade correction form may be obtained in the Guidance Office and, when signed by the appropriate teacher and the Principal, a grade correction can be made immediately.

Academic Recognition

High Honor Roll

The student must carry a minimum of 30 credits in subjects producing letter grades, A, B, C, D or S, and receive no grade below an A-, except in one subject, which may be a B+, B or B-.

Honor Roll

The student must carry a minimum of 30 credits in subjects producing letter grades, A, B, C, D or S, and receive no grade below B-.

The Honor Roll is announced at the end of each term for those students who have demonstrated high scholastic performance.

Plagiarism

Plagiarism is defined as the act of presenting someone else's words and/or ideas as your own, even if done unintentionally. Any student who quotes directly from any source or makes use of an idea from any source and does not credit the author of that source, who copies part or all of the work of another student, or who allows part or all of his/her work to be copied by another student, will be considered to have plagiarized. Information taken from the Internet or other electronic media without crediting the source is also a form of plagiarism. Students must credit all sources that provide useful information and enclose any word or words directly taken from a source within quotation marks. Failure to do so is a dishonorable act; academic theft in an academic institution is a serious matter and, as such, has serious consequences. A student found guilty of plagiarism may receive a grade of zero on the project, may have his course level lowered, and may also forfeit membership in the National Honor and/or Cum Laude Society. Other consequences, such as a letter of reprimand in the student's file, exclusion from consideration for academic honors, or notations on college recommendations may also follow from an incidence of plagiarism.

Students and faculty should follow guidelines consistent with those of the Modern Language Association (MLA) (such as the *MLA Guide to Documentation*), our single school-wide standard. These guidelines are available from classroom teachers and departments, the school library, as well as on the Watertown High School Library's web page (<http://www.watertown.k12.ma.us/whs/library/lib/citations.html>).

In addition to the above paragraphs, in the World Language classrooms, plagiarism is also defined by:

- using online translating services (such as Google translator)
- Peer editing
 - Appropriate peer editing is helping a peer by pointing out errors (i.e, underlining/circling incorrect tenses, incorrect agreement, incorrect vocabulary, etc.)
 - Peer editing becomes plagiarism when peers point out errors AND make corrections. This is plagiarism because once the errors are corrected, it is no longer your own work.

Level Placements

AP (Advanced Placement) Level Courses

Advanced Placement courses will be significantly more demanding than Honors classes. Students and parents should consider an Advanced Placement class as a college course with the volume of work, depth of ideas, and pace of discussion and assignments equal to what students will find in college or university courses.

Students who take Advanced Placement courses must accept the challenge of very demanding work all year, and are expected to take the AP exam in May as the appropriate conclusion to their efforts. Due to the amount of work required outside of class in these college-level courses, students are strongly encouraged to take no more than three AP courses in a single academic year.

Although each department will have criteria and standards unique to the discipline area, all departments at a minimum, will use the following common criteria:

- Teacher/coordinator recommendation
- B or better in Honors level courses
- Standardized test scores
- Student motivation to accomplish college level work

Honors Level Courses

Honors level courses are designed to provide intensive instruction to students who have demonstrated a strong level of achievement and interest in studying a subject in depth and pursuing individual projects.

Common eligibility criteria for honors course participation in all departments include:

- Teacher/coordinator recommendation
- B or better in comparable level courses; A- or better to move from Level 1 to Honors
- Standardized test scores
- Strong student motivation

To maintain participation eligibility for a future honors course, students must obtain a grade of B or better in the subject area. If a student's grade level drops below a B- during the year, an individual conference with student, parents, and teacher may be scheduled to reconsider placement.

Independent Study

Independent Study is an option for students within each subject area based on the availability and interest of a teacher to voluntarily assume this additional assignment. Student and teacher must complete the independent study application to determine the work to be done and the times they will meet. The Curriculum Coordinator reviews all applications and makes recommendations to the Principal. The Principal determines the number of credits to be earned as well as the course level.

Participants in the program may do some work off campus in such places as public libraries, or colleges, or universities that are willing to assist and, in fact, some work may be done at home. It is assumed that parents and teachers who know the student well will be supportive with written recommendations when asked.

Virtual High School

Online courses are offered for credit through Virtual High School, Inc. Sophomores, Juniors and Seniors in good academic standing are eligible to take electives and AP courses for 1 or 2 semesters. Unlike traditional classes, VHS courses are conducted entirely online through the Internet. Readings, assignments and tests are accessed through a web browser, and class work will be performed at school and at home.

This innovative approach to teaching and learning requires self-motivation and discipline on the part of the student, and teacher recommendations to this effect are required when applying to take a VHS course. For more information and a list of VHS courses offered through Watertown High School, please consult: <http://www.govhs.org>. Applications may be obtained from, and must be returned to, the Guidance office.

Student Classroom/Lab Assistant Program

Students may choose to volunteer their services in various activities around the school rather than attend study periods. They will receive .15 academic credits for each period they volunteer in a semester. The credits earned in this manner are not included as part of the 36 credits per year that students must earn at Watertown High

School. To enroll in this program, students must speak to their guidance counselors. This program may not be available in all curriculum areas. Aide courses are graded as pass/fail.

Community Service

The Community Service Program combines educational experiences beyond the classroom with valuable contributions to social agencies and schools. The placements of students include work in hospitals, mental clinics, workshops and recreation for the developmentally delayed, nursery schools, elementary and junior high schools, nursing homes, and special education and library work in Watertown as well as neighboring communities. In these placements, students may be assigned to individuals, groups or hospital wards. Each student must complete 36 hours of community service to graduate. Community service hours must be approved by the Community Service Coordinator and require forms submitted.

Guidance Program

Mission Statement*

The Watertown High School counselors develop and deliver counseling programs and services that provide all students with the requisite knowledge and skills for success in the academic/technical, workplace readiness, and personal/social domains.

Goal 1: Academic/Technical Achievement:

In order to improve student achievement and promote a commitment to lifelong learning for all students, school counselors will provide programs, classroom-based interventions and group and/or individual counseling that:

- Objective 1:** focus on the development of attitudes, knowledge and skills necessary for success in higher education, the workplace and other post-secondary options.
- Objective 2:** use district/school data to design and deliver counseling programs and services.
- Objective 3:** are informed by participation on school improvement teams and the development of school improvement plans.

Goal 2: Workplace Readiness/Career Planning: *To promote in all students a sense of purpose and an understanding of their unique interests, strengths and limitations, school counselors will provide programs, classroom-based interventions and group and/or individual counseling that:*

- Objective 1:** assist student in making well-informed postsecondary decisions and plans.
- Objective 2:** focus on integrating academic, technical and employability skill development.

Goal 3: Personal and Social Development: *To promote the positive personal and social development of all students within a safe learning environment, school counselors will provide programs, classroom-based interventions and group and/or individual counseling that allow students to:*

- Objective 1:** feel supported and safe at school
- Objective 2:** develop interpersonal skills for positive social interactions
- Objective 3:** understand their personal strengths and challenges.

Goal 4: Partnerships: *To Strengthen and expand home-school-community partnerships so that student*

learning is supported and improved, school counselors will:

Objective 1: facilitate and initiate communication with parents and the community at large.

Objective 2: provide parent education and information opportunities.

Objective 3: act as student advocates and collaborate with teachers, parents and administrators to improve student achievement.

The Watertown High School Guidance Department addresses these goals through a variety of direct and indirect services. The activities listed below are generally delivered in small group settings (Guidance classes or Advisory) and are provided to students each year. Workshops are typically offered in the Career Center and are publicized through student email and newsletters. In addition, counselors are responsible for the on-going monitoring of student progress through progress reports, report cards, attendance records, discipline records, and teacher feedback. Counselors are available to students and parents for individual meetings about academic, social/emotional, and career/college issues throughout the year.

**Based upon the Massachusetts Model for Comprehensive School Counseling Programs*

	Goal #1 (Academic/ Technical Achievement)	Goal #2 (Workplace Readiness/Career Planning)	Goal #3 (Personal & Social Development)	Goal #4 (Partnerships)
9 th Grade Guidance Classes	x		x	
10 th Grade Guidance Classes	x	x		
11 th Grade Guidance Classes	x	x		
12 th Grade Guidance Classes	x	x		
Individual Senior Meetings	x	x	x	
Individual Junior Meetings	x	x	x	
Senior Future Planning Night	x	x		x
Junior Future Planning Night	x	x		x
College & Career Fair (all grades)	x	x		x
Financial Aid Night (11 th & 12 th)		x		x
SAT Administration (11 th & 12 th)		x		
PSAT Administration		x		

(10 th & 11 th)				
AP Administration (10 th -12 th)		x		
Career Chats (all grades)	x	x	x	x
Mock Interviews (all grades)	x	x	x	x
Application Workshops (12 th)		x		
College Representative Chats (11 th & 12 th)	x	x		x
College Visits (11 th & 12 th)	x	x		x
Guidance Night: An Evening of Workshops for Students & Families (all grades)	x	x	x	x
Rotary Student Speaker Program (12 th)		x	x	x
RYLA and HOBY (Youth Leadership programs; 10 th)	x		x	x
WCF Internship Program (all grades)	x		x	x
Scholarship Opportunities (11 th & 12 th)				x
Naviance (10 th -12 th)	x	x	x	
Simply Seniors (newsletter)	x	x	x	x
Just for Juniors (newsletter)	x	x	x	x
Parent Newsletter	x	x	x	
Advisory (9 th -11 th)	x	x	x	x
Course Selection Meetings (9 th -11 th)	x		x	

Interdepartmental Studies (IDS)

IDS has been a part of Watertown High School since 1980. IDS is a WHS student-run organization dedicated to the principles of student democracy, student leadership, and community. IDS members must maintain good standards of behavior and responsibility.

The IDS Commons Room (Room 324) is a place where members can study, do homework, eat lunch with each other, and develop new friendships. IDS is open to all students grades 9 - 12. To participate in IDS, students must obey the rules of IDS and WHS. The primary rule of IDS is that everyone must respect each other.

Library Media Services

Library media skills are taught to students in grades 9 through 12 during subject specific classes. Lessons developed by Department of Libraries and Instructional Technology are designed to ensure that learners advance in their ability to recognize the need for information and the ability to successfully locate, analyze, and use that information. The library program at Watertown High School teaches students information literacy in a program that is designed to also promote intellectual growth and critical thinking. Information literacy objectives are addressed each year of high school. Skills are developed in the freshman year and an advanced level of competency is achieved by the end of the senior year. Through the use of library media materials, a student acquires and strengthens skills in reading, observing, listening and communicating ideas.

The library facility as resource center, stimulates and encourages intellectual activity with a focus on reference and research skills both within the library and online. To this end, first priority is given to teaching the methods and processes of research to groups, with individual assistance given during students' free time. Students are encouraged to come to the library media center at the beginning of their study periods and before and after school to work on school related assignments or select reading material. With the addition of the Fab Lab, there are even more resources and chances for students to think critically, utilize their creativity, communicate and collaborate.

Digital Literacy

Digital Literacy Skills are taught in conjunction with the regular curriculum in the classrooms. The Digital Learning Coach supports teachers and students at WHS to differentiate and personalize learning, using modern resources, tools and devices in the classrooms. Strand 1 of the Massachusetts Digital Literacy and Computer Science Frameworks, Computing and Society, Safety and Security, Ethics and Laws, Interpersonal and Societal Impact are part of the WHS Advisory curriculum, and build on digital literacy skills begun throughout Watertown Public Schools K-8.

Course Offerings

We do our best to ensure that students are able to take the courses that they have requested during the course selection process. If a student believes that there may be a schedule conflict, or that they may not be able to fit in all of the courses that they hope to take, students should meet with their Guidance Counselor as early as possible, to discuss options and plan their course requests.

A final decision to offer any course at Watertown High School is based on student enrollment and budgetary considerations.

Advisory

HA009 Freshman Advisory Course Description

All freshmen are enrolled in the advisory program as part of their transition to the high school. Students meet with the same advisor and student grouping once per cycle throughout the school year. The Freshman Advisory Program is centered on understanding of the core value REACH (Respect, Empower, Achieve, Create, and Honor). Students explore these terms through team-building and other activities that enable them to develop personal definitions. Also students learn about the expectations of the high school and how to set positive academic and personal goals. In addition, students review earlier concepts of bullying and bystander behaviors.

Full Year: 1 credit

HA010 Sophomore Advisory Course Description

The Sophomore Advisory is a continuation of the freshman program and is for all sophomores; students continue with the same student group, peer leaders and Advisor from their freshman year. While sophomores understand the routine and expectations of the high school, they continue to explore the foundation concepts of REACH especially as a way to reach out into the school and wider communities. Throughout the year students engage in problem-solving activities intended to promote cooperation, communication, and reflection. In addition the course provides students with further review of issues of bullying and safety. Advisory groups plan and carry out a community service project in the spring.

Full Year: 1 credit

HA011 Junior Advisory Course Description

Junior advisory is a course for all eleventh grade students to help them plan for their senior year, as well as to start thinking about options after graduation. Senior year can be overwhelming for students trying to meet all of the necessary deadlines and requirements. Junior advisory is designed to explain some of these requirements and allow students to plan and complete as much as possible, so that the senior year will be less stressful. The curriculum is geared to have juniors investigate what they could be preparing in order to be ready for life after high school.

Full Year Course: 1 credit

REACH OUT Mentoring

H9901 REACH OUT Mentoring

REACH OUT Mentoring is for students who are interested in providing mentorship to students at Watertown High School. This could include students who are new to WHS, 9th graders who are struggling in the transition to high school, students who feel isolated, alone or have few friends, and students in our special education or ESL classrooms who need social skills support and experiences. REACH OUT mentors are self-motivated, cooperative, confident and have the ability to connect with others. REACH OUT mentors are open to a variety of activities, willing to take the lead and enjoy being engaged with the WHS community.

Semester Course: 3 credits

English Language Arts

The MISSION of the Watertown High School English Language Arts Department is to motivate students to develop an appreciation for human experience through exposure to literature of all kinds; to encourage them to think independently and analytically; to aid them in strengthening their skills of self-expression, both written and oral; and to assist them in building an understanding of the history and structure of the English language.

All WHS students are required to pass four years of English. Grade 9 students enroll in an unlevleed English class; 10th grade students have college preparatory and honors options; 11th and 12th grade students have college preparatory, honors and AP options; All courses and their respective requirements are described below. In addition to the four year requirement the ELA Department offers two elective courses, MCAS Preparation (10) and Journalism and Community Media (9, 10, 11, and 12). Programs are developed around a core curriculum that leads the student through a gradual progression of study in literature and language. Learners are presented with opportunities tailored to their needs and abilities that will develop their appreciation and understanding of literature, increase their communication skills and assist in their growth as critical thinkers. A student's skills are strengthened by careful study of sentence structure and style, by examination of theme and form in literature and by constant exploration of language. Through guidance and practice, every student should gain confidence and skill in the art of communication.

Prior to choosing the appropriate course level such as AP, Honors, or Level I, students are advised to seek the counsel of teachers, guidance counselors and family members. Choice of level involves a number of criteria: aptitude as well as achievement, teacher recommendation, student motivation, and future planning. While it is true that students from all levels continue their education at two and four-year institutions, those who seek acceptance at competitive four-year institutions should elect the most challenging programs suitable to their abilities. Students who plan to elect Honors or AP courses must exhibit seriousness of purpose and excellent grades in their current levels of study if they expect to receive the necessary recommendations of their teachers.

Admission to Honors/AP English Classes

Students interested in enrolling in honors and AP courses in the English department must possess a strong interest in English, a strong work ethic and commitment to excellence, strong participation and classroom citizenship, and clear evidence of high achievement in prior English coursework. Students must meet the following requirements specific to their current placement:

- o **High-school Students in Level-One Course Seeking Admission to Honors**
 - Grade A- or better in current level-one course*

- Strong recommendation of current English teacher
 - Writing sample (administered and collected in school) as needed
- **Students Currently in an Honors Class Seeking to Continue in Honors**
 - Grade of B or better in current Honors English class*
 - Strong recommendation of their Honors English teacher
 - Writing sample (administered and collected in school) as needed
 - **Students Currently in an Honors Class Seeking to Enroll in AP**
 - Grade of A- or better in current English Honors class*
 - Strong recommendation of current Honors English teacher
 - Writing sample (administered and collected in school) as needed
 - **Students Currently in an AP English Class Seeking to Enroll in Next AP Class**
 - Grade of B or better in current AP English class*
 - Strong recommendation of current AP English teacher
 - Writing sample (administered and collected in school) as needed

**Grades will be calculated based on the average of the first two terms as well as the midyear exam grade. Students whose grades qualify them for consideration after the first two terms need to maintain the required average through the fourth term for final approval of enrollment. Students who do not receive a recommendation by the criteria listed above may set up an appointment with their teacher and the English coordinator to appeal the decision. If after meeting with their teacher and the ELA coordinator, the student wishes to appeal their placement, they may do so to the principal, whose decision is final.*

Summer Reading

Many English courses have a required summer reading component. Summer reading is evaluated in all grades and at all levels during the first term of school in September. Students may get the summer reading assignment from their teachers in June, or they may find the list on the English website beginning in June. Honors and AP students who do not have the summer assignment prepared fully on the first day their English class meets may be moved to level-one classes at the discretion of the teacher and English coordinator.

Freshman English Course

H1030 English 9 Literature and Composition (Unleveled)

The design of the course provides rigor and structure while fostering students' transition to high school reading and writing expectations. The course utilizes the four basic genres of literature: the novel, the short story, drama and poetry. Writing assignments include narration, description, persuasion, exposition, analysis and summary with a focus on essay composition. Readings include *Romeo and Juliet*, *Lord of the Flies*, *To Kill a Mockingbird* and *Oedipus the King*. In addition, students are required to read independently novels of their own choosing. Much attention will be given to both oral and written communication skills. Summer reading is required.

Full Year: 6 credits

Sophomore English Courses

H1200 Honors English 10

(Prerequisite – See admission section above.) Sophomore Honors English will focus on an intensive introductory survey of World Literature. Students will be introduced to a variety of literary time periods as well as reading selections from around the globe. The course may be structured around several essential themes such as Foundations of Cultural Beliefs, Genocide, Intolerance, Coming of Age and Cultural Identities; or may be organized from a geographical standpoint. Readings will be chosen to complement the essential questions

generated by either approach. Writing activities focused on literary analysis will augment the readings and demonstrate learning and understanding. A research project is required. Summer reading is required.

Full Year: 6 credits

H1210 English 10

Sophomore College Prep English is a challenging course of study involving an introductory survey of World Literature. Readings may be based upon a series of thematic units such as Cultural Beliefs, Cultural Identities, and Coming of Age or may be organized from a geographical standpoint. These units will focus on making connections between and among the various elements of a student's knowledge base. Writing assignments focused on literary analysis will supplement the readings and demonstrate an understanding of global issues. A short research assignment is required. Summer reading is required.

Full Year: 6 credits

Junior English Courses

H1400 AP Literature and Composition

(Prerequisite – See admission section above.) Advanced Placement English is a strenuous course of study designed to give self-motivated students a college experience in the areas of literature and composition prior to their graduation from high school. The course is demanding in the amount and variety of assigned reading. In addition, students will be expected to meet the challenges of a writing program that emphasizes close literary analysis. In order to be accepted into the AP junior course, students must have earned an A- or better in their 10th grade honors ELA class. Please refer to the admission guidelines above for additional information. The Curriculum Coordinator reserves the right to approve or deny admittance into this select program. Students who take this course must accept the challenge of very demanding work all year and are expected to take the AP exam in May as the appropriate conclusion to their efforts. As a culminating assessment for the course, students conduct research of primary and secondary source materials in support of an original, student-generated argument. Summer reading and assignments are required.

Full Year: 6 credits

H1300 Honors English 11

(Prerequisite – See admission section above.) Junior Honors English is a course designed for highly motivated students who exhibit an interest in the analysis of literature and language. It will stress thematic units through an historical survey of American literature, focusing on works from the following periods: Puritanism, Reason and Revolution, Romanticism, Realism and Naturalism, the Twenties and Thirties and the Modern Era. The works of Hawthorne, Williams, Fitzgerald, Hurston, Miller, and others will be highlighted. SAT review is included. A research paper and summer reading are required.

Full Year: 6 credits

H1310 English 11

English 1310 is a course designed to provide students with an in-depth analysis of literature and language. Literature is approached chronologically, focusing on the works of major authors from the following literary periods: Puritanism, Reason and Revolution, Romanticism, Realism and Naturalism, the Twenties and Thirties and the Modern Era. Students will complete an SAT review that includes timed writing prompts, reading comprehension strategies, grammatical usage and vocabulary. Readings may include *The Crucible*, *The Red Badge of Courage*, *The Great Gatsby*, *The Adventures of Huckleberry Finn*, *The Color Purple*, *Macbeth*, *Our Town*, and *The Glass Menagerie*. A research paper and summer reading are required.

Full Year: 6 credits

Senior English Courses (all students select one yearlong course)

H1330 AP Language and Composition

(Prerequisite – See admission section above.) This course is designed to challenge student's critical thinking and writing skills. Developing good habits of mind, as well as cultivating a disciplined and mature writing style, are the ultimate goals of the course. Students engage in a variety of formal writing tasks, exploring multiple forms and genres in writing. Students also write informally, maintaining journals, "text says/does" analyses, imitative responses, annotative passages, and self-reflections. Additionally, students are introduced to the concept of visual argument, how to read images with, or in lieu of text, and the effect that graphics and visual images have in American society. Students will study both nonfiction and fiction texts. The course progresses over the first two quarters from an introduction to rhetoric to essays of analysis and argument, and then on to a study of synthesis and visual argument in the third quarter. Interspersed throughout the second and third quarters is preparation for the AP exam. A senior thesis is required.

Full Year: 6 credits

H1560 Honors Humanities

(Prerequisite – See honors admission section above.) The Humanities course offers students an opportunity to consider various forms of artistic expression and analyze them critically. They will examine film, literature, the visual arts and philosophy, among other mediums, exploring the many ways artists convey meaning. Students will also investigate differing artistic techniques to discover how these contribute to the overall significance of a work. Intensely motivated students may apply to take Humanities for honors credit. They should see the Humanities teachers for details. Summer reading is required. A senior thesis is required.

Full Year: 6 credits

H1665 English 12: Literature and Film — English 12 L1 Literature and Film - All Level 1 students will take this yearlong college preparatory course. Students will read texts across a variety of genres and analyze them in comparison to their film version. Students will be introduced to various film terms and techniques, will identify those terms and techniques in the films viewed in class, and will be exposed to an introduction to screenplay writing. Students will also write the Senior Thesis Paper; successful completion of this paper is required. Summer Reading and viewing will be required, as these form the basis for the Senior Thesis Paper. Units may include Dystopia, Horror, Comedy, Musical, Sports, Crime, and Creative Writing.

Transitional English**H1580 Transitional English (Grades 9-12)**

Designed for the student who is ready to leave the ESL program but not yet ready for total immersion into the mainstreamed English curriculum, Transitional English will be offered to all qualified Watertown High School students. This course will emphasize basic skills to increase fluency in written and spoken English. It is also designed to provide students with acculturation experiences to ease the often-difficult transition period. The recommendation for Transitional English is made through the WHS ESL Department.

Full Year: 6 credits

English Department Elective Offerings**H3615 Exploring ELA Practices**

This course provides a review of fundamental skills and concepts required to pass the MCAS examinations in English and mathematics that are required for graduation. Students will increase their reading comprehension and essay composition skills through structured exercises. Enrollment in the course is limited to students who have not yet taken the 10th grade MCAS exam.

Full Year: 3 credits

H1590 Journalism and Community Media L1 (9, 10, 11, 12)

Students in this course will study, create, and publish journalism in all its forms -- digitally and in print -- for the benefit of the Watertown High School community. This class will use both classroom- and computer lab-based settings and focus on producing content for the *Raider Times* website and print editions. Students will serve in leadership roles, as well as reporters, editors, web and page designers, photographers, and artists. All students will work collaboratively and study the tools of journalism, such as interviewing, ethics, research, advertising, marketing, promotion, note-taking, scheduling, and, of course, writing. Course requirements will often times require work outside of school. This course is open to all students. No experience is necessary. This course is an excellent choice for students who want to explore and understand the world around them, and who want to better communicate their voice to a vast audience.

Semester Course: 3 credits

Independent Study

Students who work on the *Word Painter* publication and who would like to receive academic credit for their work should see the advisor of the publication and apply to the Principal for Independent Study credit.

English Language Arts Sequence Chart Grades 9 – 12				
	Grade 9	Grade 10	Grade 11	Grade 12
Required – 6 Credits each year*	English 9	Hon English 10* English 10	AP-English Literature and Composition* Hon English 11* English 11	AP-English Language and Composition* Hon Humanities* English 12: Literature and Film
Required if teacher recommended		Exploring ELA Practices		
Elective with teacher recommendation	Transitional English**	Transitional English **	Transitional English**	Transitional English**

* Enrollment in the honors/AP sections requires teacher's approval and a grade requirement. See guidelines above.

**This class is for ELLs - To register, students must have the recommendation of the ESL instructor and consult with the classroom teacher.

Fine, Applied, and Performing Arts

Music – Drama – Visual Arts

All Fine, Applied, and Performing Arts courses are Level 1, except those that are AP.

Fine, Applied, and Performing Arts Mission Statement:

The arts are an integral part of the human experience and, therefore, an essential component in the education of all people. They have equal value with all other intellectual and creative pursuits and enable us to celebrate and preserve our diverse cultural heritage. Students of the arts actively participate in and experience their learning, using all of their senses while discovering and developing their own unique intelligences and learning styles.

The mission of the Watertown Public Schools Fine Arts Program is to foster creative expression in students by providing the essential skills and knowledge necessary for those who wish to pursue a career in the arts. We also seek to create a sensitivity to and respect for the arts in all students, enhancing the quality of their lives and an understanding of the diversity of human expression in the global village in which we all live.

Music Program

If a student experiences difficulty in fitting Band, Strings, and/or Chorus into his/her schedule, he/she should discuss options with the choral, strings, and/or band director. Once successfully completed, a course, with the exception of Chorus, String Ensemble and Concert Band, may not be repeated for credit.

H7610 Chorus

Students in Chorus have the opportunity to perform three and four parts in a variety of styles. Students are required to participate in all performances including concerts, school assemblies and functions, and community events. Part of the chorus experience will focus on vocal technique and sight reading.

Full Year: 6 credits

H7510 Concert Band

(Prerequisite: Middle School Band experience or approval of band director based on audition) Students have the opportunity to further develop their skills and techniques through the study of standard concert band literature. Students will also develop their skills through small ensemble performance. Students are required to participate in all performances, including day and evening concerts, assemblies, football games and rallies. Each quarter students will prepare and be graded on a piece of music. Students will be expected to perform in small groups, evaluating and critiquing each other's performance. Private study is recommended and encouraged.

Full Year: 6 credits

H7550 String Ensemble

(Prerequisite: Middle School String experience or approval of the string ensemble director based on audition) Students will explore literature from the classical and popular string repertoire while improving individual technical skills and group ensemble performance ability. Students are required to participate in all scheduled day or evening concerts throughout the school year. Students are evaluated on both individual ability and ensemble skills. Private study is strongly encouraged.

Full Year: 6 credits

H7813 Electronic Music

Open to any student interested in learning how to compose music using the electronic keyboard and the computer. Important topics will include the basics of notation, rhythm, scales, melodies, intervals, chords and ear training. Students will also learn about multi-track recording with sampled sounds using the keyboards and the computer. Some experience playing an instrument or singing would be helpful, but is not required.

1st Semester Course: 3 credits

H7833 Electronic Music II

(Prerequisite: Successful completion of Electronic Music I) This course is a continuation of Electronic Music with an emphasis on writing and arranging original compositions. Students will further develop composition skills using the keyboard/MIDI workstations.

2nd Semester Course: 3 credits

H7843 Guitar Workshop I

Students will explore beginning to intermediate guitar playing. This course is for students who want to learn how to play the guitar and students who have already begun playing the guitar. Students will learn both finger style and flat picking styles. The course begins with open chords, note reading and basic strumming. Students will then learn moveable chords, and finger picking. Styles of guitar playing will include the blues, folk, rock and classical. Students will be expected to provide their own guitars and will practice and play during class on a daily basis.

Semester Course: 3 credits

H7853 Guitar Workshop II

(Prerequisite: Successful completion of Guitar Workshop I or permission of instructor)

This course is designed for the intermediate to advanced guitarist and for students who have taken Guitar Workshop I. In this class students will become comfortable playing movable chords over the entire neck. Students will learn to play single notes using alternate picking and will begin to learn how to improvise using major and minor scales. We will explore the process of song writing that will begin in small groups and will conclude by recording songs in Garage Band. Students will be expected to have their own guitar for home practice and will practice and play during class on a daily basis.

Semester Course: 3 credits

H7870 REACH Out Music

Reach Out Music offers sophomores, juniors and seniors an opportunity to be peer mentors in the music setting. The class will offer a variety of music activities in an inclusion setting. The Reach Out Music class will incorporate singing, playing instruments, listening to music and creating music together. This is an opportunity for students to learn and grow together while working on communication skills, leadership skills, and social skills, all while participating in active music making.

Semester Course: 3 credits

Visual Arts Program

Note: Once successfully completed, a course, with the exception of the Studio Art Class, may not be repeated for credit.

H7013 Art I - 2D – Beginning Two-Dimensional Design

This is an introductory drawing and painting class designed to provide students with a strong foundation in two-dimensional art. The elements and principles of design will be explored through hands on activities involving media such as pencil, colored pencil, pen and ink, watercolor and tempera paint. Art History and art criticism will be emphasized along with the creation of original works of art.

Semester Course: 3 credits

Semester Course: 3 credits**H7113 Art I - 3D – Beginning Three-Dimensional Design**

This is an introductory sculpture and crafts course designed to provide students with a strong foundation in three-dimensional art. The basic concepts of form and space will be explored through hands on activities involving media such as plaster, wood, clay, wire, and cardboard. Art History and art criticism will be emphasized along with the creation of original works of art.

Semester Course: 3 credits**H7005 Drawing I**

This is an introductory drawing class designed to provide students with a strong foundation in all approaches to the art of drawing. This includes drawing from observation, perspective drawing, illustration and the use of drawing in the design process. Drawing will be explored through project work involving media such as pencil, colored pencil, ink, pastel and collage. Looking at different styles of drawing, art critique and the creation of original works of art will help students develop their own unique style of drawing.

Semester Course: 3 credits**H7007 Painting I**

This is an introductory painting class designed to provide students with a strong foundation in the art of painting. Media used in this course includes india ink, watercolor and acrylic paint. Topics include the use of composition, color, texture, form and value through still life, landscape, portrait, figure and master reproductions. Observing a variety of art movements throughout world history, class critiques and the creation of original works of art will help students develop their own unique style of visual expression within the painting medium.

Semester Course: 3 credits**H7123 Art II - 3D – Advanced Three- Dimensional Design**

(Prerequisite: Successful completion of Art I-3D) Students will build upon concepts and techniques covered in Art I - 3D through experiences with advanced materials and processes. Emphasis will be placed on individual development using a variety of 3D materials, such as paris craft, foam core, and wood. Class critique as well as the study of Art History will be an important part of this course.

Semester Course: 3 credits**H7320 Studio Art**

(Prerequisite: the successful completion of 3 introductory level art courses and permission of the instructor is required) Studio Art is a course designed for motivated students who have already completed two full years of Art. For students considering a career in visual art or a design related field, this course will help them to develop a portfolio of their work. Projects will be completed in a wide variety of media in both two and three dimensions. Class work will be combined with a significant number of outside assignments. Students may be required to purchase some advanced art supplies. Successful completion of summer home assignments is required prior to enrollment in this course.

Full Year: 6 credits**H7330 AP Studio Art**

(Prerequisite: the successful completion of 3 introductory level art courses and permission of the instructor is required) AP Studio Art is an advanced studio course for college bound and career oriented art students. It is designed for motivated students who wish to pursue a college level course while still in high school. Students will compile a portfolio that will fulfill College Board requirements. For each hour of class time, students will be expected to work an equal amount of time outside of class to complete assignments. Successful completion of specific summer home assignments is required to earn Advanced Placement credit for this course.

Full Year: 6 credits

Note: All photography courses will require students to buy their own black and white film.

H7243 Photography - Digital Media I

Photography Digital Media is the perfect course for the photo enthusiast! Students enrolled in this program will have the opportunity to work with both digital and analog photography processes, learn about the SLR manual camera, create original works of art with Adobe Photoshop, produce full color digital prints as well as Black & White analog prints in a darkroom setting. Students may elect to pursue a certification in Adobe Premiere. Art history and the works of published artists will be explored as they relate to the creation of original works of art.

Semester Course: 3 Credits

H7253 Photography - Digital Media II

(Prerequisite: successful completion of Photography-Digital Media I or permission from the instructor)

Photography - Digital Media II will build upon the technical and artistic concepts covered in Photography - Digital Media I. Emphasis will be placed on the development of a unique analog and digital portfolio that reflects the student's range of technique and personal style. Students will post their photography to online networks, communicate and collaborate with other student photographers and explore interactive media to design personalized web space for online portfolios. Students will produce high quality inkjet prints, examine creative darkroom processes such as solarization, texture screens, multiple exposures and more. Students will be expected to produce and maintain a web based digital photo-journal throughout the duration of this course. Classroom and online critiques of student work and the study of contemporary photography will be an important part of this course.

Semester Course: 3 Credits

Drama Program

Note: Once successfully completed, a course, with the exception of the Studio Art Class, may not be repeated for credit.

H7710 Foundations of Drama

Open to enthusiastic students of all skill and experience levels, Foundations of Drama provides an overview of many areas of theatre and performance. Units include improvisation, introductory actor training and character development, devised work, directing, and design. Students will be introduced to classic and contemporary theatre works through reading assignments and performance coaching, will devise their own short pieces, and will direct each other in short scenes, gaining experience in multiple areas of the performing arts.

Semester Course: 3 Credits

H7702 Advanced Acting

(Prerequisite: Successful completion of Foundations of Drama) Open to students of all experience levels, this course introduces acting techniques and styles from across theatrical literature and provides opportunities for performance and training. Areas of study include Greek tragedy, Shakespeare, audition coaching, and acting styles such as Stanislavsky's, the Method, Meisner, and improv. Throughout the semester, students will perform through monologue and scene study, applying trainings learned to different genres of dramatic text.

Semester Course: 3 Credits

School-To-Career

H7043 Graphic Design

Create exciting and impactful forms of visual communication. Graphic Design exposes students to the interaction of text and image as it relates to the fundamentals of graphic communication. Students will use industry standard Adobe software to create original illustrations, logo designs, album cover art and much more. As part of this, students may elect to pursue a certification in Adobe Premiere. Composition and art history will be considered as it relates to the creation of original works of art.

Semester Course: 3 credits.

H7033 Graphics II/Web Design

(Prerequisite: Any Level I visual arts foundation course, or permission from the instructor)

This course is an introduction to the art of web design. Using industry standard software to generate graphics, animation, and video, students will be challenged to create web pages that are interactive, functional and aesthetic. Students will be responsible for demonstrating their understanding of HTML, and Macromedia Dreamweaver when producing web pages. For the second half of the course, multimedia elements will be introduced and applied to class projects. Students will create storyboards, film, edit, and produce digital videos over the Internet. Students will also explore the art of animation while creating interactive environments for their web projects. More information can be found at <http://www.watertown.k12.ma.us>.

Semester Course: 3 credits

World Languages

The World Languages Department course offerings have been developed to encourage our students to become lifelong learners in today's global society. Along with developing proficiency in a language of the world, students will acquire knowledge of the contributions of diverse cultures while broadening their awareness of themselves and their world.

An extensive program in world languages is open to all students. Recent research indicates that English vocabulary, reading skills; self-concept, cultural enrichment, creativity, communication skills, social skills, emotional skills, and cognitive skills are significantly improved by the study of world languages.

Most colleges give preference to students with extensive preparation in world languages from their secondary school. For all students, whether or not college-bound, some knowledge of world languages is helpful for work and career. Although there is **no world language requirement** for graduation, most colleges and many private colleges have a world language requirement for entering students. **It is highly recommended that two to four years of a high school world language be taken** to prepare for the world language requirement at most colleges and to achieve language proficiency.

Based on current national standards (ACTFL), classes are conducted in the target language for at least 90% of class time. This includes teacher-talk and student-talk time. Also, based on current national standards, the general world language curriculum is focused on developing proficiency in the four skills of language (listening, speaking, reading, writing) as well as in the three modes of communication (interpersonal, presentational, interpretive). In addition to language skills, the curriculum is focused on the promotion of cultural awareness. The World Languages Department encourages international travel and attempts periodically to organize trips to countries where the languages taught are spoken.

World Languages Honors and Advanced Placement Criteria

Honors and Advanced Placement courses are designed to provide a more rigorous curriculum and increased research to students who have demonstrated a high level of achievement in studying world languages in depth.

Eligibility criteria for honors/advanced placement course participation in a world language includes:

- Teacher recommendation based on oral proficiency and motivation for study at an accelerated level.
- To enroll in the honors level of Spanish, Italian, or Arabic II, a grade of A- or better in a first year, non-honors course of the language is required.
- To move from a non-honors course to an honors or advanced placement course, a student must obtain a grade of A- or better*
- To maintain eligibility to participate in honors courses, a student must maintain a grade of B or better. If a student drops below a B during the course of the year, an individual conference may be scheduled to reconsider placement.
- To move from an honors course to an advanced placement course, a student must obtain a grade of B or better. If a student drops below a B during the course of the year, an individual conference may be scheduled to reconsider placement.
- A writing sample and oral interview (administered and collected in school) will take place as needed.

Grades will be calculated based on the average of the first two terms as well as the midyear exam grade. Students whose grades qualify them for consideration after the first two terms need to maintain the required average through the fourth term for final approval of enrollment. **Students who do not receive a recommendation by the criteria listed above may set up an appointment with their teacher and the World Languages Coordinator to appeal the decision.*

Arabic

H2700 Arabic I

This first year course requires no prerequisite. Students begin this course with the assumption of no previous language learning. Students in a level 1 develop their proficiency through comprehensible input from the teacher and authentic resources. This course focuses the most on being able to understand, being able to be understood, and understanding the concept of describing to talk around something that is unfamiliar. Students begin to develop all four skills: listening, speaking, reading, and writing. Although there is particular focus on speaking and listening, students also learn how to read and write in Arabic. Reading and writing skills focus more on letter and sound development and less on comprehension. There is less focus on grammar and accuracy.

Full Year: 6 credits

H2750 Arabic II

(Prerequisite: successful completion of Arabic I or Middle School Arabic)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with a focus on speaking and listening. Reading and writing skills continue to focus on letter and sound development with the addition of comprehension. Students begin developing their ability to speak in sentences and begin to develop creating with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2760 Honors Arabic II

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Arabic I or Middle School Arabic)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with an emphasis on speaking and listening and an added focus on writing. Students are able to read and write in Arabic and develop reading comprehension skills in addition to letter and sound development. Students begin developing their ability to speak and write in sentences and develop their abilities to create with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2765 Arabic III

(Prerequisite: successful completion of Arabic II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and develop their ability to connect their sentences for more in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2770 Honors Arabic III

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Arabic II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing and reading. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and connect their sentences for more in depth thought. Students begin to develop their ability to string sentences together to be able to speak and write in paragraphs of in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2775 Arabic IV

(Prerequisite: successful completion of Arabic III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak and write in strings of sentences and to create with language in order to maintain the target language throughout class. Students are developing their ability to speak in paragraphs of in depth thought. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students begin to analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2776 Honors Arabic IV

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Arabic III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak at the paragraph level and provide in depth thought. They are also able to create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2778 Honors Arabic V

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Arabic IV)

This fifth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak and write at the paragraph level and provide in depth thought on a variety of topics. They are also expected to be able to easily create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

Armenian

H2780 Armenian I

This first year course requires no prerequisite. Students begin this course with the assumption of no previous language learning. Students in a level 1 develop their proficiency through comprehensible input from the teacher and authentic resources. This course focuses the most on being able to understand, being able to be understood, and understanding the concept of describing to talk around something that is unfamiliar. Students begin to develop all four skills: listening, speaking, reading, and writing. Although there is particular focus on speaking and listening, students also learn how to read and write in Armenian. Reading and writing skills focus more on letter and sound development and less on comprehension. There is less focus on grammar and accuracy.

Full Year: 6 credits

H2790 Armenian II

(Prerequisite: successful completion of Armenian I)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with a focus on speaking and listening. Reading and writing skills continue to focus on letter and sound development with the addition of comprehension. Students begin developing their ability to speak in sentences and begin to develop creating with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2860 Armenian Independent Study III

(Prerequisite: proficiency interview with Armenian teacher; Full Year course)

This course is designed for students who are at least intermediate-high students of Armenian. This course is to help improve students' ability to synthesize readings, listening texts as well as produce oral and written language. This course is designed by the students. However, the general course outline will be as follows: each quarter,

students will find, read and listen to authentic Armenian texts in Armenian. Students will then be tasked to summarize, analyze, provide their opinions, persuade, and/or critique the reading/listening through written and oral reports. Each quarter will have a minimum of 2 projects.

Full Year: 6 credits

H2870 Armenian Independent Study IV

(Prerequisite: proficiency interview with Armenian teacher. Successful completion of Armenian III; Full Year Course)

This course is a continuation of Armenian Independent Study III. This course is for students who are at least intermediate-high students of Armenian. Students continue to improve their ability to synthesize readings, listening texts as well as produce oral and written language. This course is designed by the students. However, the general course outline will be as follows: each quarter, students will find, read and listen to authentic Armenian texts in Armenian. Students will then be tasked to summarize, analyze, provide their opinions, persuade, and/or critique the reading/listening through written and oral reports. Each quarter will have a minimum of 2 projects.

Full Year: 6 credits

Italian

H2200 Italian 1

This first year course requires no prerequisite. Students begin this course with the assumption of no previous language learning. Students in a level 1 develop their proficiency through comprehensible input from the teacher and authentic resources. This course focuses the most on being able to understand, being able to be understood, and understanding the concept of describing to talk around something that is unfamiliar. Students begin to develop all four skills: listening, speaking, reading, and writing with a focus on speaking and listening. There is less focus on grammar and accuracy.

Full Year: 6 credits

H2250 Italian II

(Prerequisite: successful completion of Italian I or MS Italian)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with a focus on speaking and listening. Students begin developing their ability to speak in sentences and begin to develop creating with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2240 Honors Italian II

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Italian I or MS Italian)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with an emphasis on speaking and listening and an added focus on writing. Students begin developing their ability to speak and write in sentences and develop their abilities to create with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2300 Italian III

(Prerequisite: successful completion of Italian II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students'

proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and develop their ability to connect their sentences for more in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2310 Honors Italian III

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Italian II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing and reading. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and connect their sentences for more in depth thought. Students begin to develop their ability to string sentences together to be able to speak and write in paragraphs of in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2350 Italian IV

(Prerequisite: successful completion of Italian III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak and write in strings of sentences and to create with language in order to maintain the target language throughout class. Students are developing their ability to speak in paragraphs of in depth thought. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students begin to analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2340 Honors Italian IV

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Italian III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak at the paragraph level and provide in depth thought. They are also able to create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2380 Honors Italian V

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Italian IV)

This fifth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are

expected to speak and write at the paragraph level and provide in depth thought on a variety of topics. They are also expected to be able to easily create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2390 Advanced Placement Italian V

(Prerequisite: see honors/AP criteria above)

(Prerequisite: successful completion of Italian IV)

This fifth year course is a strenuous course designed to give students a college experience in advanced language study. Students continue to develop their proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to discuss, debate, give opinions, understand and retell, persuade, and create with language on a variety of topics and world issues. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students also prepare for and are expected to take the Advanced Placement Exam in May (in order to receive additional college credit). Summer work is required.

Full Year: 6 credits

Spanish

H2400 Spanish 1

This first year course requires no prerequisite. Students begin this course with the assumption of no previous language learning. Students in a level 1 develop their proficiency through comprehensible input from the teacher and authentic resources. This course focuses the most on being able to understand, being able to be understood, and understanding the concept of describing to talk around something that is unfamiliar. Students begin to develop all four skills: listening, speaking, reading, and writing with a focus on speaking and listening. There is less focus on grammar and accuracy.

Full Year: 6 credits

H2450 Spanish II

(Prerequisite: successful completion of Spanish I or Middle School Spanish)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with a focus on speaking and listening. Students begin developing their ability to speak in sentences and begin to develop creating with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2240 Honors Spanish II

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Spanish I or Middle School Spanish)

Students in this course continue to develop their proficiency through comprehensible input from the teacher and authentic resources. This course continues to develop students' proficiency in listening, speaking, reading, and writing with an emphasis on speaking and listening and an added focus on writing. Students begin developing their ability to speak and write in sentences and develop their abilities to create with language. There is more of an emphasis placed on accuracy and grammar, but comprehensibility is the main goal.

Full Year: 6 credits

H2500 Spanish III

(Prerequisite: successful completion of Spanish II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and develop their ability to connect their sentences for more in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2510 Honors Spanish III

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Spanish II)

This third year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing, with an emphasis on speaking and listening and an added focus on writing and reading. Students are expected to speak and write in sentences, create with language in order to maintain the target language throughout class, and connect their sentences for more in depth thought. Students begin to develop their ability to string sentences together to be able to speak and write in paragraphs of in depth thought. Students also begin to develop their understanding of the language system by examining some relevant grammatical structures, which help improve their comprehensibility in more than one tense.

Full Year: 6 credits

H2540 Spanish IV

(Prerequisite: successful completion of Spanish III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak and write in strings of sentences and to create with language in order to maintain the target language throughout class. Students are developing their ability to speak in paragraphs of in depth thought. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students begin to analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2550 Honors Spanish IV

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Spanish III)

This fourth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak at the paragraph level and provide in depth thought. They are also able to create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits

H2580 Honors Spanish V

(Prerequisite: see honors criteria above)

(Prerequisite: successful completion of Spanish IV)

This fifth year course continues to develop students' proficiency through comprehensible input from the teacher and through authentic resources, which includes videos and readings. This course continues to develop students' proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to speak and write at the paragraph level and provide in depth thought on a variety of topics. They are also expected to be able to easily create with language in order to maintain the target language throughout class. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students analyze work and are able to respond to complex ideas giving their own opinions.

Full Year: 6 credits**H2590 Advanced Placement Spanish V**

(Prerequisite: see honors/AP criteria above)

(Prerequisite: successful completion of Spanish IV)

This fifth year course is a strenuous course designed to give students a college experience in advanced language study. Students continue to develop their proficiency in listening, speaking, reading, and writing. These four skills are developed evenly. Students are expected to discuss, debate, give opinions, understand and retell, persuade, and create with language on a variety of topics and world issues. Students have an understanding of the language system through relevant grammatical structures, which help improve their comprehensibility in all tenses. Students also prepare for and are expected to take the Advanced Placement Exam in May (in order to receive additional college credit). Summer work is required.

Full Year: 6 credits

World Languages Sequence Chart			
Grades 9-12			
Grade 9	Grade 10	Grade 11	Grade 12
Arabic I	Arabic II	Arabic III	Arabic IV
Arabic II	Arabic III	Arabic IV	Arabic V
Armenian I	Armenian II	Armenian III	Armenian IV
Italian I	Italian II	Italian III	Italian IV
Italian II	Italian III	Italian IV	Italian V/AP
Spanish I	Spanish II	Spanish III	Spanish IV

Spanish II	Spanish III	Spanish IV	Spanish V/AP
Some students start a language after 9th grade. In these cases, the above grade labels would be replaced with the headings “First Year of Study,” “Second Year of Study,” etc.			
Students are permitted to take more than one language per year.			
Although advised to continue with the same language throughout a high school career, students are able to change languages.			
To change from a non-Honors course to an Honors course, a student must have a grade of A- or better in the preceding year of the language.			
Students who wish to change languages prior to Level IV must meet with the World Language Coordinator.			

English as a Second Language Program

The English as a Second Language (ESL) Program is for English Language Learners (ELLs) whose first language is other than English. The goal of the ESL Program is to provide students with the skills to function successfully in an English speaking environment. ESL classes develop proficiency in speaking, listening, reading and writing in social and academic settings.

ESL English Courses

These courses may be used to meet the English graduation requirement. The length of time and the periods per day in ESL depend upon the English proficiency level of the individual student.

H2971 Newcomer ESL

This course is provided for students who have limited to no English proficiency. The goal of the course is to provide students with basic proficiency in listening, speaking, reading and writing. This class meets three periods per day.

Full Year: 6 credits

H2971Adv Advanced Newcomer ESL

This course is provided for students who have limited English proficiency. It is taught in conjunction with Newcomer ESL for students who have not gained enough proficiency in the language to advance to the next level.

Full Year: 6 credits

H2910 Beginning ESL

This course is provided for students with a beginning level of English proficiency. The course expands upon skills learned in Newcomer ESL and focuses on academic listening, speaking, reading and writing. Students learn to construct a cohesive paragraph and understand modified classic novels. This class meets two periods per day.

Full Year: 6 credits

H2910Adv Advanced Beginning ESL

This course is provided for students with a beginning level of English proficiency. It is taught in conjunction with Beginning ESL for students who have not gained enough proficiency in the language to advance to the next level.

Full Year: 6 credits

H2980 Exploring English Language Development

This course is provided for students with an intermediate level of English proficiency. The course focuses on strengthening literacy skills and further developing students' English language. In addition, this course provides a range of strategies for breaking down the components of test questions and organizing information for maximum success in responding to multiple choice questions, short answer questions and responding to writing prompts.

Full Year: 6 credits

H2900 Intermediate ESL

This course is provided for students with an intermediate level of English proficiency. The course focuses on academic skills to prepare students for mainstream content courses. Students learn to write essays and read and analyze academic texts.

Full Year: 6 credits

H2901 Intermediate ESL II

This course is provided for students with an Intermediate level of English proficiency who have completed H2900 Intermediate ESL. This course focuses on the skills necessary to progress to Advanced ESL and Transitional ESL. Students will continue to refine their skills in reading literary works, writing essays, and presenting their ideas orally.

Full Year: 6 credits

H2890 Advanced ESL

This course is provided for students with an advanced level of English proficiency. The course focuses on the skills necessary for students to transition to mainstream academic courses. Students learn to read classic novels, analyze academic texts and write essays.

Full Year: 6 credits

H2880 Senior ESL Support

This course is provided for seniors with an advanced level of English proficiency. The course is taken in conjunction with the mainstream senior English course. During the first semester, students are provided with strategies and skills to complete the senior thesis project. Academic skills for mainstream courses and college prep are emphasized in the second semester.

Full Year: 6 credits

ESL History and Social Studies

These courses may be used to meet the History and Social Studies graduation requirement.

H2950 Sheltered Beginning U.S. History

This course is for students of limited English proficiency at the beginning level. The course addresses key historical events in the development of the United States through the 1800s. Map skills and beginning-level social studies vocabulary along with essential concepts of U.S. history are introduced.

Full Year: 6 credits

H2945 Sheltered Beginning U.S. History for Newcomers

This course is for students of limited English proficiency at the newcomer level. It is taught in conjunction with Sheltered Beginning US History. Students work from a modified curriculum with the opportunity to participate in class activities.

Full Year: 6 credits**H2947 Sheltered Beginning U.S. History I**

This course is for students of limited English proficiency at the Beginning level. It is part of a two-year U.S. history sequence. The course focuses on the philosophy of democratic governments and the development of the American governmental system. The course addresses the application of the principles of the Founding Documents to events in U.S. history from industrialization in the 1800s through the Civil War and Westward Expansion. Students concentrate on developing skills such as reading textbooks, interpreting visual information and essay writing.

Full Year: 6 credits**H2920 Sheltered Intermediate U.S. History I**

This course is for students of limited English proficiency at the intermediate level. It is part of a two-year U.S. history sequence. The course focuses on the philosophy of democratic governments and the development of the American governmental system. The course addresses the application of the principles of the Founding Documents to events in U.S. history from industrialization in the 1800s through the Civil War and Westward Expansion. Students concentrate on developing skills such as reading textbooks, interpreting visual information and essay writing.

Full Year: 6 credits**H2930 Sheltered U.S. History II**

This course is for students of limited English proficiency at the advanced level. The course addresses the application of the principles of American government through various national and global events from World War I to modern times. Connections are made between important movements in American history and key global concepts. The course emphasizes social history in addition to political and governmental concepts. Selected readings and anthologies are included in the course.

Full Year: 6 credits**ESL Mathematics****H2960 Sheltered Mathematics**

Sheltered Mathematics is a course for students of limited English proficiency. The course emphasizes foundational mathematical concepts and skills. A principal focus of the course is the preparation of students for entry into Algebra I.

Full Year: 6 credits**H2990 Transitional Mathematics**

This course is provided for students who have limited to beginning English proficiency. The course emphasizes foundational mathematical concepts and skills. It will focus on important concepts in Algebra and show how they can be applied to solve a wide variety of types of problems in daily life and in careers.

Full Year: 6 credits**H2991 Transitional Algebra**

This course is provided for students who have limited to beginning English proficiency. This is a full-year introductory algebra course for students who have completed the Transitional Math course but require additional work on topics included in the Sheltered Math curriculum. Review topics include operations using fractions, decimals and integers, order of operations geometry, probability and statistics. Algebra topics include algebraic properties, solving and graphing linear equations, solving linear inequalities, exponent properties, systems of equations, and quadratic functions.

Full Year: 6 Credits

Social Studies

The social studies curriculum is designed to help students achieve the mission of the high school and to succeed as responsible members of society. The social studies department strives to develop independent thinkers who have strong listening, speaking, writing and reasoning skills. It also fosters a healthy attitude toward learning, a refinement of values, an affirmation of community involvement, and a foundation for self-esteem. Instruction and curriculum are designed to assist students in reaching high levels of achievement through creative and critical thinking as well as through civic engagement.

Criteria for Admission to Social Studies Honors and Advanced Placement Courses:

1. To be automatically considered eligible for an Honors-level course, students must have earned a minimum grade of B for the year from their previous Honors-level course or a minimum grade of A- for the year from their previous non-honors course, must have the recommendation of their current Social Studies teacher, and must adhere to any other department or course prerequisites.
2. For AP courses,
 - a. To be automatically considered eligible for admission to an AP, course students must have earned a minimum grade of B for the year from their previous AP-level course or a minimum grade of A- for the year from their previous Honors-level course, must have the recommendation of their current Social Studies teacher, and must adhere to any other department or course requirements.
 - b. Prospective AP students may be required to submit a writing sample as directed by the Social Studies Department. This writing sample will be submitted as part of the course selection process and must be completed prior to the end of that process.
3. Exceptions to this policy will be made on a case-by-case basis by the Department Coordinator in conjunction with a student's current Social Studies teacher.

H5030 United States History I

Foundations of America: The ninth grade course focuses on the philosophy of democratic government and the development of the modern American governmental system (1215-1893). This year is primarily, but not exclusively, a political history but it does include significant social concepts. Students are brought through European and colonial history from the Magna Carta through the U.S. Constitution, the Civil War, and Westward Expansion to learn how the leading thinkers of their times seized on the idea of natural rights to craft a new paradigm of government and new philosophy of human rights. That model is developed through the country's first century to the emergence of an American empire at the dawn of the 20th Century. This class will also focus on developing students' organizational and historical thinking skills and providing individual support to assist students in becoming good historians and effective communicators.

Full Year: 6 credits

H5020 Honors United States History I

(Prerequisite: See Criteria for admission)

Foundations of America: The ninth grade course focuses on the philosophy of democratic government and the development of the modern American governmental system (1215-1893). This year is primarily, but not exclusively, a political history but it does include significant social concepts. Students are brought through

European and colonial history from the Magna Carta through the U.S. Constitution, the Civil War, and Westward Expansion to learn how the leading thinkers of their times seized on the idea of natural rights to craft a new paradigm of government and new philosophy of human rights. That model is developed through the country's first century to the emergence of an American empire at the dawn of the 20th Century.

Students admitted to the honors level class are expected to possess good writing skills and exhibit high academic standards, and a willingness to go beyond the basic requirements of the US History curriculum.

Full Year: 6 credits

H5110 United States History II

Defining America: This course studies the application of the principles of American government to different groups of people through various world and national movements and events, from Westward Expansion and beginning of the American empire to modern times (1893 to present). This year focuses on social as well as significant political and governmental concepts. Curriculum materials include anthologies and selected readings. Students follow major events and movements in American history that support and link those events to important world happenings. This class will also focus on developing students' organizational and historical thinking skills and providing individual support to assist students in becoming better writers and more effective communicators.

Full Year: 6 credits

H5100 Honors United States History II

(Prerequisite: See criteria for admission)

Defining America: this course studies the application of the principles of American government to different groups of people through various world and national movements and events, from Westward Expansion and beginning of the American empire to modern times (1893-present). This year's course focuses on social history but does include significant political and governmental concepts. Curriculum materials include anthologies and selected readings. Students follow major events and movements in American history that support and link those events to important world happenings. Students admitted to the honors level class are expected to possess strong reading and writing skills and exhibit high academic standards and a willingness to go beyond the basic requirement of the US History II curriculum.

Full Year: 6 credits

H5300 AP U.S. History

(Prerequisite: See criteria for admission)

The Advanced Placement Program in United States History is designed to prepare students for college by presenting curriculum and academic challenges that are equivalent to those of an introductory college course. AP US History provides students with the structured writing, analytical skills, and factual knowledge necessary to deal critically with the key issues and movements in United States history. Students will learn to assess historical materials for their relevance to a given interpretive problem as well as for their reliability. They will weigh both evidence and researched interpretations as presented in historical scholarship. Only those students who are highly motivated and have demonstrated very strong reading and writing skills will be considered. Students who take this course must accept the challenge of very demanding work all year and are expected to take the AP exam in May as the appropriate conclusion to their efforts.

Full Year: 6 credits

H5430 World History

This course will focus on the interrelationship of European history with the development of Africa, Asia and the Americas. Indigenous cultures will be addressed. Particular emphasis will be given to political, cultural and social trends that define the modern world (post French Revolution). Each student is expected to engage in critical thinking, expository writing and oral presentations as well as to complete periodic reports and projects. Attention will be given to current worldwide issues using periodicals, media materials and student-based research utilizing

computer technology. This class will also focus on developing students' organizational and historical thinking skills and providing individual support to assist students in becoming better writers and more effective communicators.

Full Year: 6 credits

H5410 Honors World History

(Prerequisite: See criteria for admission)

The Honors program in World History is designed for those highly motivated students who wish to pursue an intensive intermediate college level course. The historical focus of the course will be from the late Middle Ages (European Renaissance) to present day and the curriculum will provide a basis for independent projects, term reports and primary source analysis. Particular attention will be directed to interactions among the people of Asia, Africa, Europe and the Americas, and the cultural diffusion that resulted. Emphasis will be placed on critical thinking, analysis and interpretation of significant historical events, essay writing and in-depth research skills. Students admitted to the honors level class are expected to possess strong reading and writing skills and exhibit high academic standards and a willingness to go beyond the basic requirements of the World History curriculum.

Full Year: 6 credits

H5180 AP European History

(Prerequisite: See criteria for admission)

The Advanced Placement Program in European History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with issues in European history since the ecclesiastical wars of the Middle Ages. This program will prepare students for intermediate and advanced college courses by presenting challenges to them that are equivalent to those of full year introductory college courses. Students will learn to assess historical data with emphasis on major documents and scholarly analyses of European history. Only those students who are highly motivated and have demonstrated strong reading and writing skills will be considered. Students who take this course must accept the challenge of very demanding work all year, and are expected to take the AP exam in May as the appropriate conclusion to their efforts.

Full Year: 6 credits

H5463 Contemporary World (Grades 11, 12)

This semester course will engage students substantively in contemporary world issues. Possible areas of inquiry include, but are not limited to, political, environmental, and social trends that are of current interest. Inquiry will be primarily based on current newspapers, periodicals, and various other written and electronic sources. Students are expected to be willing to engage in oral presentations, expository writing, and critical thinking. Throughout the course, students will choose an area of interest (e.g. health, human rights, environment, education, child issues) and study the work of non-governmental organizations (NGOs) engaged in the issue, eventually using this study to produce a final project which may be service related. Students will have the additional option of participating in the school's Model UN club, participating in regional conferences, and providing assistance to members who are underclassmen.

Semester Course: 3 credits

H5540 Psychology

(Open to juniors and seniors. Seniors given first preference)

Psychology is designed to introduce the college-bound senior to the social and behavioral sciences. The course will focus on such traditional areas of behavioral inquiry as learning, conflict and frustration, personality theory, child development, and abnormal behavior. The course will require outside reading, experiments both in and out of the classroom, and an in-depth research project. This class will also focus on developing students' organizational and social science thinking skills and on providing individual support to assist students in becoming better writers and more effective communicators.

Full Year: 6 credits

H5600 Honors Psychology

(Open to juniors and seniors. Seniors given first preference)

(Prerequisite: See criteria for admission)

The Honors program in Psychology will examine and evaluate the major topics and theories of behavior. Students will study the basics of psychological research, the interaction of physical, psychological and social factors in the human life cycle, and the competing theories of the behavioral sciences. Emphasis will be placed on active learning, original research, observation both in and out of the classroom and problem solving. Students admitted to the honors level class are expected to possess strong reading and writing skills and exhibit high academic standards and a willingness to go beyond the basic requirements of the Psychology curriculum.

Full Year: 6 credits

H5500 AP Psychology

(Seniors Only)

(Prerequisite: See criteria for admission)

The Advanced Placement Program in Psychology is designed to provide students with the analytical skills and knowledge necessary to deal critically with issues in psychology. This program will prepare students for intermediate and advanced college courses by presenting challenges to them that are equivalent to those of full year, introductory college courses. Students will learn to assess competing theories of behavior, applications of psychological research, and the spectrum of human behavior. Only those students who are highly motivated and have demonstrated very strong reading and writing skills will be considered. Students who take this course must accept the challenge of very demanding work all year and are expected to take the AP exam in May as the appropriate conclusion to their efforts.

Full Year: 6 credits

H5800 Honors American Legal System

(Open to juniors and seniors. Seniors given first preference)

This year long course will give students a basic understanding of the American legal systems. Units will include: Introduction to Law, Criminal Law and Juvenile Justice, Tort Law and Civil Liberties and Civil Rights. Each student will pursue individual research on projects that require extensive writing, oral presentation and community interaction. This course is designed for students who are especially interested in the field of law and law enforcement. In addition to class discussions and group projects, the course will include guest speakers, mock trials, field trips, and debates. Excellent attendance is expected in this course due to guest speakers and in-class projects. Students admitted to the honors level are expected to possess strong reading and writing skills and exhibit high academic standards and a willingness to go beyond the basic requirements of the curriculum.

Full Year: 6 credits

H5730 Civics

(Seniors only)

This course is designed to introduce a variety of civic topics through limited research and class discussion to students who will be turning 18 years old. Students will learn how laws and political decisions are made and how these decisions affect their lives. Some areas of study include: citizenship, political science, government, democratic beliefs, elections, and community organizations. Each student will have the opportunity to interact with a number of out-of-school events, such as Massachusetts Student Government Day and the Close Up Washington Program. Students will participate in numerous group projects of personal interest in areas of politics, sociology and current events. This class will also focus on developing students' organizational and social science thinking skills and on providing individual support to assist students in becoming better writers and more effective communicators.

Full Year: 6 credits

Social Studies Sequence Chart Grades 9 – 12			
Grade 9	Grade 10	Grade 11	Grade 12
US History I	US History II	World History	Psychology
		Psychology*	Contemporary World
		Contemporary World	Civics
Honors US History II	Honors US History II	Honors World History	Honors American Legal
		Honors Psychology*	Honors Psychology
		Honors American Legal*	
	AP US History	AP European	AP Psychology

*These courses are available to juniors on a space-available basis.
(AP Psychology is seniors only)

Mathematics

The Watertown High School Math Department strives to bring every student to their mathematical potential by providing a rigorous and comprehensive curriculum complemented by teacher support and technology. Students are offered multiple paths for four years of mathematics, all designed for mathematical success in post-high school programs. Support is available in many forms, including a Math Lab open all periods, as well as access to teachers both before and after school.

Students who study mathematics will exhibit critical and analytical thinking skills in all mathematics courses. Technology will be used to help students solve problems and to strengthen their understanding. Students who plan on going to college should consider taking a mathematics course each year. Honors level courses are designed to provide intensive instruction to students who have demonstrated an outstanding level of achievement and interest in studying mathematics in depth and pursuing individual projects. Prerequisites for some courses are stated in the course descriptions. Refer to the math sequence chart for a graphic view of the courses that may be best for you.

Calculators

Calculators are required for all courses and are the responsibility of the student to purchase. For courses at a level of Algebra II and below, students will need the TI-30XS Multiview. For courses beyond Algebra II, students will need one of the Texas Instruments graphing calculators, either the TI-83+ or one of the TI-84 versions.

H3220 Geometry

This course in plane geometry is the first half of a two-year program. The course focuses on the key topics that provide a strong foundation in the essentials of geometry. Algebraic concepts will be reviewed and reinforced including, algebraic applications as they apply to the real world.

Full Year: 6 credits

H3070 Algebra I

This is the second half of a two-year program. It will focus on important concepts in Algebra and show how they can be applied to solve a wide variety of types of problems in daily life and in careers.

Full Year: 6 credits

H3620 Exploring Mathematical Practices

(Enrollment in the course is limited to sophomore students)

This course is for students who are at risk for struggling with reaching proficiency on the Math MCAS in high school.

Full Year: 3 credits

H3110 Algebra I

This course in Algebra integrates geometry, probability and statistics together with algebra. Pure and applied mathematics are also integrated throughout the course. Topics include the study of real numbers, rational and irrational, the solution of linear and quadratic equations, graphing and equations for lines.

Full Year: 6 credits

H3200 Honors Geometry

(Prerequisites: Teacher recommendation and either: Completion of Honors Algebra I in Grade 8 with a B or better, or completion of Algebra I (3110) with an A and acceptable score on entrance exam required for placement from Grade 8)

This is an accelerated course in plane geometry. Principles of logical reasoning are introduced early. Students develop their deductive reasoning skills throughout the course. Algebraic concepts and skills are interwoven with the geometry. Considerable motivation to do outside study is required.

Full Year: 6 credits

H3210 Geometry

(Prerequisites: Teacher recommendation and either: successful completion of Algebra I (3110), or completion of Grade 8 Math with an A and acceptable score on entrance exam required for placement from Grade 8)

This is a standard course in plane geometry that prepares students for college entrance exams. Four dimensions of understanding are emphasized: skill in drawing, visualizing, and following algorithms; understanding of properties, mathematical relationships and proofs; using geometric ideas in real situations, and representing geometric concepts with coordinates, networks or other diagrams.

Full Year: 6 credits

H3300 Honors Algebra II

(Prerequisites: Teacher recommendation and either: completion of Honors Geometry with a grade of B- or better, or completion of Geometry L1 with a grade of A)

This is an accelerated course in algebra. It moves quickly to topics students have probably not seen before in Algebra I. The course emphasizes the roles of algebra and trigonometry as a foundation for calculus. There are discovery exercises so that students may wrestle with a new concept before it is reinforced by classroom discussion. Reading and writing within the context of mathematics are emphasized in the course.

Full Year: 6 credits

H3310 Algebra II

(Prerequisites: Teacher recommendation and successful completion of Geometry L1)

This is a standard course in Algebra II. Problem solving is introduced early and is integrated throughout the course. Applications of algebra are presented in interesting and varied word problems. Reasoning skills such as analyzing information, making conjectures and giving convincing arguments are developed throughout the course.

Full Year: 6 credits

H3315 Algebra II A

Delving deeper into the work from Algebra I (H3070), students will begin work on Algebra II, including the study of polynomial functions and their different algebraic forms, equations and inequalities, graphing and systems. Division as it relates to rational functions is also covered, as is factoring (through trinomials).

Full Year: 6 credits

H3317 Algebra II B

Continuing from Algebra II A, students will move into the transformations of polynomials, explore complex numbers, solve radical and exponential equations, and study the foundations of trigonometry and statistics.

Full Year: 6 credits

H3400 Honors Precalculus

(Prerequisites: Teacher recommendation and either: completion of Algebra II (Honors) with a grade of B- or better, or completion of Algebra II L1 with a grade of A)

This is a course to prepare college-bound students for a first course in Calculus at the high school level. Students will be asked to complete a summer packet based on Algebra II for this course. Topics in this course include: Function analysis (polynomial, exponential and logarithmic), Trigonometry, Conic sections, Vectors, Polar coordinates and Limits

Full Year: 6 credits

H3410 Precalculus

(Prerequisite: Teacher recommendation and successful completion of Algebra II with a grade of B- or better)

This is a course to prepare college-bound students for a first course in Calculus. Topics in this course include: an extensive review of Algebra II, circular functions and trigonometry, advanced algebra, analytical geometry, matrices and polar coordinates.

Full Year: 6 credits

H3360 Advanced Algebra with Trigonometry

(Prerequisite: Successful completion of Algebra II)

This course is designed to expand on work from Algebra II and prepare students to enter precalculus. Topics will include a review of Algebra II, use of advanced algebra topics to explore logic and problem solving, and a foundation in circular functions and trigonometry.

Full Year: 6 credits

H3450 Topics in Statistics

(Prerequisite: Teacher recommendation and either successful completion of Algebra II, or a B+ in Intermediate Algebra)

This introductory course is designed for seniors who are either interested in taking a fourth year of mathematics but choose not to take precalculus or who have taken precalculus but prefer not to take calculus. Topics studied include descriptive statistics, correlation and linear regression, experimental design, normal distributions,

probability and inferential statistics including confidence intervals and significance tests. Graphing calculators will be used extensively, and students should note that the course will be word-problem intensive.

Full Year: 6 credits

H3460 Honors Statistics

(Prerequisite: Successful completion of Hon Algebra II H with a grade of B or better or Algebra II with a grade of A or A+)

This course is designed for those students who are interested in taking an advanced course in statistics that is not as rigorous as the Advanced Placement course. Topics studied will be those found in a traditional college statistics course with a heavy emphasis on computer and graphing calculator applications. Areas of study include descriptive statistics, data collection and analysis experimental design, linear regression (including residual plots and logarithmic transformations), probability and extensive discussion of inferential statistics using the normal, t, chi-square and F distributions. Students are expected to purchase a TI-83+ or TI-84+ graphing calculator.

Full Year: 6 credits

H3600 AP Statistics

(Prerequisites: Teacher recommendation, excellent writing skills with at least an A- in English L1 or a B or above in English H or AP, and either completion of Precalculus with a grade of B or better, or Algebra II Honors with a grade of A- or better)

This is an advanced course in mathematics. It is recommended for students who are thinking about careers in business, the sciences or social sciences. Substantial technical writing is involved as well as abstract reasoning and problem solving with a high degree of independence. The topics studied will be those in a traditional college statistics course with heavy emphasis on computer and graphing calculator applications. The topics include descriptive statistics, data collection and analysis, experimental design, probability, linear regression, and an extensive discussion of inferential statistics using the normal, t, and chi-square distributions. Students are expected to take the AP Exam in May and are required to purchase a TI83+ or TI-84+ calculator.

Full Year: 6 credits

H3500 AP Calculus AB

(Prerequisite: Completion of Hon Precalculus with B or better and teacher recommendation)

This is an advanced course in mathematics for those students who are planning careers in mathematics, the sciences, engineering, or other college majors which require calculus. Students who take this course must accept the challenge of very demanding work all year, and are expected to take the AP exam in May as the appropriate conclusion to their efforts. Students are required to purchase a TI-83+ or TI-84+ calculator.

Full Year: 6 credits

H3520 Honors Calculus

(Prerequisite: Teacher recommendation and completion of Precalculus with B or better)

This is an advanced course in mathematics for those students who are planning careers in mathematics, the sciences, engineering, business or other college majors which require calculus. Students are required to purchase a TI-83+ or TI-84+ calculator.

Full Year: 6 credits

H3630 Topics in Algebra

This course is a review and enrichment of topics that will be helpful to you as you leave Watertown High School. Topics include linear, quadratic and exponential functions, Geometric applications, function/ polynomial operations and many more high school mathematical topics. Some time will be spent in the first quarter reviewing SAT questions and strategies for the October and November tests. Throughout the year you will work on problem

solving skills and you will be given many open ended question options. It is the goal at the end of this course that you will be independent, creative problem solvers ready to face any math course the future may have for you.

Full Year: 6 credits

H3713 Introduction to Computer Programming I: Games and Cryptography

(Prerequisite: Successful completion of Geometry. Exceptions will be made on a case-by-case basis depending on prior coding experience)

This is a hands-on introductory class. There are some class discussions and lectures on the bigger ideas in programming, and students spend the vast majority of class time coding. Each month, students program their own versions of classic video games, including Mario, Pong, and Space Invaders. The final project is for students to create and then code their own game. The class will include with a unit on cryptography. The class uses a visual programming language called 'Snap!' and is based on a course taught at UC Berkeley.

Semester Course: 3 Credits

H3714 Introduction to Computer Programming II: Python

(Prerequisite: Successful completion of Introduction to Computer Programming I, or permission of instructor based upon prior programming experience.)

This is a hands-on class using the Python programming language. The programming concepts learned in Introduction to Computer Programming I are applied to Python, a high level programming language. Topics will include variables, data types, conditionals, lists functions, loops, input and output, dictionaries, methods and inheritance. The course uses the TEALS Intro to Computer Science Part 2 curriculum from Microsoft.

Semester Course: 3 Credits

H3700 AP Computer Science A

(Prerequisite: Successful completion of Introduction to Computer Science Principles. Exceptions will be made on a case-by-case basis depending on prior coding experience)

AP Computer Science A covers material similar to most collegiate Intro to Computer Science programs. By the end of the course, students should be able to design, implement, and analyze solutions to problems, use and implement commonly used algorithms, use standard data structures, develop and select appropriate algorithms and data structures to solve new problems, write solutions fluently in an object-oriented paradigm, and write, run, test, and debug solutions in the Java programming language, utilizing standard Java library classes and interfaces from the AP Java subset. As a result, students will also be able to read and understand programs consisting of several classes and interacting objects, read and understand a description of the design and development process leading to such a program, and understand the ethical and social implications of computer use. Problem solving and the ability to work independently are both skills that will be called on regularly.

Full Year: 6 credits

Mathematics Sequence Chart

The following chart represents four possible courses for the 9th grade year and the likely courses that will follow from grades 10-12. Note that beginning high school in one of the columns below does not guarantee students will finish in the same column senior year. Our top priority is to place students in the proper course for them from one year to the next based on their assessed performance and level of understanding.

Mathematics Sequence Chart

Grades 9 – 12				
	Sequence One	Sequence Two	Sequence Three	Sequence Four
Grade 9	Geometry	Algebra I	Geometry	Hon Geometry
Grade 10	Algebra I	Geometry	Algebra II	Hon Algebra II
Grade 11	Algebra IIA Or Algebra II (joining Sequence Two)	Algebra II	Precalculus or Advanced Algebra with Trigonometry	Hon Precalculus and AP Statistics (with prerequisites met)
Grade 12	Algebra IIB or Topics in Statistics or Topics in Algebra	Topics in Statistics or Hon Statistics or Advanced Algebra with Trigonometry or Precalculus	Hon Calculus or AP Calculus or Precalculus or Topics in Statistics or Hon Statistics or AP Statistics	Hon Calculus or AP Calculus or Hon Statistics or AP Statistics
Electives*	Introduction to Computer Programming I & II, AP Computer Science			

All courses have prerequisites. You must obtain a recommendation from your current teacher. Please consult your Math teacher or Guidance Counselor if you are uncertain as to which course is best for you.

The H3620 **Exploring Mathematical Practices course** is taken as a second Math class during 10th grade. It does not replace any course in the sequence of required classes.

Introduction to Compute Programming I & II and AP Computer Science are electives and are meant to be taken in conjunction with other math courses, once you have completed Geometry.

Once Algebra II has been successfully completed, many possibilities follow. Students who have not achieved a scaled score of 240 on the MCAS will be required to take Advanced Algebra with Trigonometry and/or College Algebra, and students planning to attend a four-year college following high school are strongly encouraged to take Precalculus.

We recommend, if possible, taking a course in Statistics before graduation. Statistics is occasionally taken as a second course along with Precalculus or Advanced Algebra with Trigonometry.

* Note that electives are not counted toward the number of math courses required for graduation.

Career and Technical Education

Our program areas include:

- **Information Support Services and Networking**
- **Marketing/Finance**
- **Culinary Arts**

- **Early Education and Care**
- **Radio and Television Broadcasting**
- **Engineering**
- **Graphic Design and Visual Communications**
- **Carpentry/Construction Technology.**

These programs give students meaningful, challenging educational experiences to gain the knowledge, skills, competencies, self-confidence and self-esteem to be successful in today's fast-changing society. Students participate in authentic, challenging projects that involve collaboration, technology, creativity, problem-solving, high-level communication, and other career-specific skills.

Be prepared for college and/or further advanced training—take courses in Career and Technical Education! These courses could be your pathway to postsecondary education and careers.

All Career and Technical Education Courses are open to all students.

Marketing/Finance Business

Learn to:

- Manage money, time, and resources
- Set goals and achieve them by organizing time, work, and resources effectively
- Know career options and requirements needed for employment and academic success
- Select and apply technology tools for making personal and business decisions and achieving personal and organizational goals
- Apply critical-thinking skills to function in multiple roles as economically literate citizens, consumers, workers, managers, business owners, and directors of your economic future

Culinary Arts & Early Education and Care

This program area focuses on the core concepts of the Massachusetts Comprehensive Health/Family and consumer Sciences Curriculum Frameworks: Health Literacy/Healthy Self-Management Skills/Health Promotion. In **Culinary Arts I: Chefs**, students will learn how to make healthy, informed food choices using Choose My Plate. **Culinary Arts II: Culinary Essentials** enables students to explain factors associated with a safe food supply (food handling, production, food storage, and preparation techniques). In the Modern Family Life I: **Introduction to Child Development** course, students will be able to describe proper prenatal care and identify types of birth defects.

Carpentry/Construction Technology

Be proactive! Be prepared! Take courses within the Industrial Technology area.

Through authentic applications this program prepares students for college and/or further advanced training in technical fields. Courses stress use of the design process and the application of problem solving skills in the context of each area's real life situations. Courses include Introduction to Construction Technology, Advanced Construction Technology, Construction Technology Capstone, Graphic Design and Graphics II/Web Design.

This program area reflects the goals and standards of the Technology portion of the Massachusetts Science and Technology/Engineering Curriculum Frameworks. Through authentic applications, the Industrial Technology program prepares students for college and/or further advanced training in technical fields. Courses in this area require the use of mathematics and science concepts as applied in real situations. These courses also stress the use of the design process and the application of problem solving skills in the context of each area's real life situations.

Film, Television and Radio Production

Learn about mass communications and about film and video production including editing and shooting videos in the state-of-the-art TV studio.

Radio Broadcasting

Learn about the importance of writing and language choice to paint the “word picture” into storytelling, and advance stories and opinions, without the benefit of pictures. Students will also be introduced to the basics of radio broadcast equipment, editing, and show preparation.

Engineering

This program area reflects the goals and standards of the Engineering portion of the Massachusetts Science and Technology/Engineering Curriculum Frameworks. Courses in this area require the use of mathematics and science concepts as applied in real situations. These courses also stress the use of the design process and the application of problem solving skills in the context of each area's real life situations.

Engineering is more than just another high school engineering program. It is about applying science, technology, engineering and math through a project-based, hands-on approach to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the “right” answer. They learn how to apply STEAM knowledge, skills and habits of mind to make the world a better place through innovation. Even for students who do not plan to pursue engineering after high school, the PLTW Engineering™ program provides opportunities to develop highly transferable skills in critical thinking, collaboration and problem-solving, which are relevant for any coursework or career.

Marketing/Finance/Business

H6323 Computer Applications I

(Meets Computer Literacy Requirement)

Learn the basic skill requirements in today's world using the latest online programs, current business applications and Internet navigation skills. Learn to plan and create publications by applying basic principles of page design and layout concepts, import text and graphics for word processing software to produce advertising flyers and multi-page documents. These are required marketable skills for all students and help to provide the basics for further work in web design, another emerging career field.

Semester Course: 3 credits

H6343 Advanced Computer Applications

(Meets Computer Literacy Requirement)

Learn computer applications the right way painlessly and learn to verify website content when doing internet research. Imagine having a knowledgeable person available to immediately assist you in learning today's most widely used software applications for business and/or personal use. Students will use the computer as a problem-solving tool to develop PowerPoint presentations, create spreadsheets, learn database management, graphics, etc., to apply technology to projects in other classes. Many projects require internet research.

Semester Course: 3 credits

H6350 Accounting I

Students develop an understanding of basic accounting concepts through the accounting cycle for various forms of business. This course focuses on sole proprietorship. Sole proprietorship is essential for entrepreneurs. Concepts include journalizing business transactions, posting to ledger accounts, and preparation of financial statements. Many real world examples will be discussed throughout the course. Students are introduced to the use

of spreadsheets and computerized accounting systems on computers. This course prepares students for managing personal finances and for further study in accounting – the “language” of business.

Full Year: 6 credits

H6380 Accounting II

(Prerequisite: Successful completion of Accounting I)

Accounting II reviews the proprietorship and partnership cycle and goes on to the corporation accounting cycle. In addition to accruals and prepaid expenses, purchases, sales, cash receipts and payments, payroll records, depreciation, and bad debts are studied and discussed. The use of accounting procedures to make decisions about planning, organizing, and allocating resources is emphasized. Students use spreadsheet and accounting software to create and maintain records for a simulated corporation. This course prepares students for further study at the college level.

Full Year: 6 credits

H6373 Personal Finance/Economics

(Meets half year of Math requirement beyond Applied Geometry)

Personal Finance is a comprehensive, financial literacy course designed to assist students in developing core knowledge and skills needed for successful life planning and management. Students will be introduced to a range of financial alternatives and explore basic decisions and strategies necessary to become informed employees, consumers, and citizens. Various topics covered will include planning your career, saving and investing, spending, credit, insurance, and taxes among others. This course utilizes the National Endowment for Financial Education (NEFE) program as well as various projects.

Semester Course: 3 credits

Culinary Arts and Early Education and Care

H6503 Culinary Arts I: Chefs

This course is designed to teach the basics of food preparation, with nutrition as the underlying theme. Using the concept of “building a healthy plate” created by the U.S. Department of Agriculture, students will address real-life issues of a “healthy” plate by learning about the “10 tips to a great plate”. They will learn how to (1) balance calories, (2) enjoy food, but eat less, (3) portion control, (4) foods to eat more often (whole grains, vegetables, fruits, low-fat dairy), (5) how to include more fruits and vegetables into their daily diets, (6) switch to low-fat or fat-free dairy (or soy) products, (7) how to make half their grains whole grains each day, (8) which foods to eat less often (foods high in solid fats, added sugars and salt), (9) learn how to read the nutrition facts panel and (10) drink more water instead of sugary drinks. Readings, student PowerPoint presentations, worksheets from the Guide to Good Food textbook, as well as the use of the ChooseMyPlate.gov website, will be an integral part of the course. Foods to be prepared include quick breads (blueberry muffins, corn bread), yeast breads (whole wheat pizza), and low-fat cookies (pumpkin, chocolate chip). *This course serves as a basis for further study in the Culinary Arts II courses).*

Semester Course: 3 credits

H6513/H6520 Culinary Arts II: Culinary Essentials

(Limited to Sophomores, Juniors and Seniors)

(Prerequisite: Satisfactory completion of H6503 Culinary Arts I: Chefs)

This course offers an introduction and overview of opportunities in the hospitality and food services industry. Students will examine the historical importance of food production/processing and relate it to current industry trends, product development, and marketing/sales. Preparation of more complex and varied food products will provide opportunities for skill mastery and address the nutritional aspects of different cuisines. Students will learn

how nutrition impacts menu planning; be able to describe how companies promote new food products and learn techniques of proper food preparation and the basics of large-scale food service equipment. Students will learn ServSafe® for food handlers. For a fee, they may then choose to take (during class time) the certification test offered by the National Restaurant Association. Readings, PowerPoint presentations and student food demonstrations, worksheets from the Culinary Essentials textbook, as well as the use of the websites cdc.gov, ChooseMyPlate.gov, and LiveBetterAmerica.com will be an integral part of this course. Foods to be prepared include yeast breads (whole wheat bread), pasta (cheese-stuffed shells), quick breads (blueberry coffee cake), and pies (savory and sweet).

As safety and production allow, the Watertown High School cafeteria will be used as a supplemental learning environment. Guest speakers, as well as field trips to local restaurants, may be arranged to supplement classroom assignments. Where appropriate, students will be given the opportunity to participate in the Raider Café at WHS in the spring time as well as internships to master knowledge, skills, and attitudes, which will help them find employment.

H6513 Semester Course: 3 credits

H6520 Full Year: 6 credits

H6600 Modern Family Life I: Introduction to Child Development and Parenting

(Limited to Sophomores, Juniors and Seniors)

(Prerequisite: students may want to take Psychology H5540)

This course is designed for students interested in learning about the care of children, how to become effective parents, and exploring possible career choices in the field of child care. Using the text, The Developing Child, students will be required to read and write on topics of childcare and child development. Study of the child begins with pregnancy and prenatal development and continues with growth from birth to preschool age. Parenting is a major topic of study. HeartSaver® CPR/AED training is part of this course. For a fee, students may choose to become officially certified by the American Heart Association (during class time). Midyear, students will carry their own “babies” to help them experience the work and effort of parenthood. Positive and negative ways children and parents relate will be discussed. Because you cannot separate children from the social issues of the 21st century, child abuse, the battering of women, addiction, divorce and HIV will also be studied. Short research paper topics include child development theorists and birth defects.. Guest speakers, as well as a field trip to Children’s Hospital, may be arranged to supplement classroom assignments. Guest speakers may include our Resource Officer, an obstetrics nurse, a certified nurse midwife, and/or parents of young children.

Full Year: 6 credits

H6600 Modern Family Life II: Early Education and Child Care Exploratory

The course is open to all students in grades 11-12 and will alternately meet at the preschool placement and at the high school.

(Prerequisite: Satisfactory completion of Modern Family Life I)

This course is designed for students interested in going into the career fields of teaching or social work. It is an independent study course that gives the students first-hand experience working with young children at a local pre-school. Students observe and work with the pre-school children. Students spend the entire period at the pre-school. They write a weekly journal about their observations of the social, emotional, intellectual, and physical growth of the children. They also spend one entire day per semester at the pre-school, as well as “special” days (including holiday celebrations, etc.). For the mid-term exam, each student will write a children’s story that will eventually be read to the children at the pre-school. For the final exam, students create a lesson plan and then teach the lesson to the children at the pre-school. Readings and activities from the text “**Working with Young Children**” will help students build from their experiences.

Full Year: 6 credits

Construction Technology

H6223 Construction Technology I

This introductory level course will provide instruction for the proper use of hand tools, portable power tools and stationary woodworking machines. This class will focus on the importance of planning, design and woodshop safety. All students will gain understanding of the Milling Process which transforms raw material into industry standard finish stock. The woodworking industry has undergone many changes, and the students will obtain the training that is necessary for employment in this challenging industry.

Semester Course: 3 credits

H6250 Construction Technology II

(Prerequisite: Successful completion of Construction Technology I)

This course is designed as a continuation of the Construction Technology I course. This advanced level woodworking course will engage all students with industry standard woodworking skills and the achievement of a marketable skill. Emphasis is focused on the safe and productive use of hand, power and stationary tools. Students will fabricate two mandatory projects followed by student selected project(s). Individual student achievement is paramount in this project-based curriculum.

Full Year: 6 credits

Graphic Design and Digital Communications

H7043 Graphic Design

See Course Description in Visual Arts.

H7033 Graphics II/Web Design

See Course Description in Visual Arts.

Film, Television and Radio Production

H6893 Studio and Television Broadcasting

Students with a desire to pursue the Digital Media & Communications field will be responsible for developing and broadcasting a studio television series for airing on WCA-TV. Students in this course will work collaboratively on producing either a round-table talk style show, a game/quiz show, or more, producing multiple shows per semester, presenting entertainment for the world from the perspective of WHS students. The show will allow students to take on the challenges experienced by a real world television station at the local and/or network level. Students will control all aspects of the show series from concept, to creation, from selecting topics for debates, to writing puzzles, and booking guests/contestants. Students can take on the roles of on-air talent, producer, director, or technical and administrative duties. The instructor, acting as Executive Director/Station Manager, will hear student pitches along with student producers, and help guide teams in the production development, planning, and broadcasts. Once shows are complete, the instructor will help to breakdown and evaluate each production, sharing feedback with the class to improve future broadcasts.

Semester Course: 3 credits

H6884 Digital Video Making

Are you passionate about making videos? Are you the member of your friend group that always has their phone or camera in their hand? Have a story to tell? Are you looking to be the next YouTube or social media star? Have you started experimenting with editing via iMovie or Final Cut Pro? In this course, students will learn to tell their stories through video. Students learn how to use professional camera equipment to set up and record interviews, stand ups, B-roll, and more. Students will then learn how to edit their footage using Adobe Premiere. Their final

projects will be shown online and broadcast on WCA-TV. We will also examine pre-production, production, and post-production techniques through a mixture of screenings, discussion, and hands-on exercises.

Semester Course: 3 credits

H6884 Television News Production

(Prerequisite: Satisfactory completion of H6963 Documentary Production)

Ever dream about being a sportscaster? How about a news anchorman/woman? Here is your chance to turn your dream into a reality. The course will examine the range of ways in which TV news is made and produced. Classes will be held in our state-of-the-art TV studio. Students will have hands-on experience using the equipment, writing news programs, editing, and producing a TV news show once a month for the whole school and town to see! In this project based class, you will build upon skills you learned in Documentary Production helping tell the stories of the WHS community as a producer, reporter and anchor on the “Raider News” team.

Semester Course: 3 credits

H6983 Radio Broadcasting

Do you enjoy talking about sports? News? Music? Entertainment? In the era before television, radio served as the major source for information and entertainment. Now, in the modern world of Digital Media & Communications, radio continues to serve as a popular source to engage listeners as they travel from place to place, or while they work on a daily basis. Students will learn about the importance of writing and language choice to paint the “word picture” in their storytelling, and advance stories and opinions, without the benefit of pictures. They will also be introduced to the basics of radio broadcast equipment, editing, and show preparation. Student teams will be responsible for conceptualizing, developing, and creating a radio program to be broadcast on WCAC-Radio and posted to the web as a podcast series.

Semester Course: 3 Credits

H6985 Advanced Radio/Television Broadcast/Production/Management Capstone

(Prerequisite: Student Proposal and advance Instructor Approval Required (JR & SR ONLY))

Students looking to expand their experience in Radio and/or Television can propose a student driven and independently directed pursuit within the digital media program. Students will gain valuable "on the job" work experience managing a multifaceted long term broadcast project, taking responsibility for creating programming that is of the highest quality, substantial in nature, and compelling to viewers of WCA-TV. You will receive helpful feedback from your instructor that will help you grow as a journalist. Students also have the opportunity to focus on exploring the management and development of the WHS on WCA-TV brand. Students also have the option to choose a technical focus and may elect to pursue a certification in Adobe Premiere. Students completing this curriculum will be well-equipped with a portfolio of skills and finished projects to pursue digital media and communications at a two-year or four-year college or university.

Semester only (3 credits) OR Full Year (6 credits), maximum 6 credits.

Engineering

H6400 Introduction to Engineering Design – IED -

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software and use an engineering notebook to document their work. This course is one of two possible prerequisites to specialized engineering courses. Through this course’s practical real-world connections, students will see how science, mathematics, and engineering are part of their everyday life, how society and the environment is impacted by the engineered world, and why it is important for every citizen to be technologically and scientifically literate.

NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.

Full Year 6 Credits

H6401 Principles of Engineering – POE -

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem-solving, research and design while learning strategies for design process documentation, collaboration and presentation. Through this course's practical real-world connections, students will see how science, mathematics, and engineering are part of their everyday life, how society and the environment are impacted by the engineered world, and why it is important for every citizen to be technologically and scientifically literate.

NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.

Full Year 6 Credits

H6402 Digital Electronics – DE –

(Prerequisite: Successful completion of 6400 or 6401)

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits and programmable logic devices.

NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.

Full Year 6 credits

H6405 Engineering Design and Development - EDD -

(Prerequisite: Successful completion of H6400 AND either of H6401 OR H6402)

EDD is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. Students will perform research to select, define, and justify a problem. After carefully defining the design requirements and creating multiple solution approaches, teams of students select an approach, create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process.

NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.

Full Year 6 credits

H6411 Introduction to Robotics

Students will learn the basics of the Python programming language in or to control the movements of a bipedal robot. The robot's brain will be powered by a Raspberry Pi microcontroller, a miniature computer commonly used by aspiring inventors. A variety of sensors will be connected to the Raspberry Pi allowing the robot to interact with the world. Just for fun, once the robots have been born we will make them fight. Time permitting; students will create their own interactive robotic machines to solve specialized problems.

Semester Course 3 credits

**Career and Technical Education Department
Sequence Charts for Grades 9 – 12**

Information Support Services and Networking			
	Grade 9	Grade 10	Grade 11/12

Business/Computer Applications	H6323 Computer Applications	H6323 Computer Applications H6343 Advanced Computer Applications	H6323 Computer Applications H6343 Advanced Computer Applications
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Engineering			
	Grade 9	Grade 10	Grade 11/12
Engineering	H6400 Introduction to Engineering Design H6401 Principles of Engineering H6411 Introduction to Robotics	H6400 Introduction to Engineering Design H6401 Principles of Engineering H6402 Digital Electronics H6411 Introduction to Robotics	H6400 Introduction to Engineering Design H6401 Principles of Engineering H6402 Digital Electronics H6405 Engineering Design and Development Capstone H6411 Introduction to Robotics

Marketing and Finance			
	Grade 9	Grade 10	Grade 11/12
Administrative / Financial		H6360 Accounting I L1 H6373 Personal Finance/ Economics L1	H6360 Accounting I H6380 Accounting II H6373 Personal Finance/ Economics

Culinary Arts			
	Grade 9	Grade 10	Grade 11/12
Hospitality	H6503 Culinary Arts I	H6503 Culinary Arts I H6513 Culinary Arts II	H6503 Culinary Arts I H6513 Culinary Arts II H6520 Culinary Arts II

Early Childhood Education			
	Grade 9	Grade 10	Grade 11/12
Early Education and Care		H6600 Modern Family Life I	H6600 Modern Family Life I H6610 Modern Family

			Life II
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Radio and Television Broadcasting			
	Grade 9	Grade 10	Grade 11/12
Media, Video and Film Production	H6884 Television News Production H6963 Digital Video Making	H6983 Radio Broadcasting H6884 Television News Production H6963 Digital Video Making H6893 Studio and Television Broadcasting	H6983 Radio Broadcasting H6884 Television News Production H6963 Digital Video Making H6893 Studio and Television Broadcasting H6985 Advanced Radio/Television Broadcast/Production/Management Capstone

Carpentry			
	Grade 9	Grade 10	Grade 11/12
Construction Education	H6223 Construction Technology I	H6223 Construction Technology I H6250 Construction Technology II	H6223 Construction Technology I H6250 Construction Technology II H6251 Construction Technology Capstone

Digital Media			
	Grade 9	Grade 10	Grade 11/12
Graphics	H7043 Graphic Design	H7043 Graphic Design	H7043 Graphic Design H7033 Graphics II/Web Design

Wellness

The Wellness curriculum offers students a variety of opportunities to enhance their understanding of social-emotional, physical, and mental health. Courses are designed to address the Massachusetts Comprehensive Health Curriculum Frameworks as well as national standards. The Wellness program

seeks to enhance health literacy by promoting the development of skills and knowledge necessary to make healthy choices throughout life.

H8597 Personal Fitness and Wellness (Required Course)

This course will explore what it means to be physically fit. Students will explore, in depth, the concepts of exercise including an introduction to exercise physiology and kinesiology. Students will learn a variety of exercise training methods and how different types of exercise can impact and improve health and performance. This course will also study the relationship between nutrition and exercise. Students participating in this class will have the opportunity to get CPR/first aid certified.

Semester Course: 3 credits

H8543 Health and Wellness (Required Course)

Students enrolled in the Wellness course will develop the skills necessary to achieve a healthy lifestyle. Students will gain an understanding of the relationship between physical, mental, emotional, and social health. Students will also identify the potential short and long-term effects to a person's lifestyle when unhealthy decisions are made. Wellness will build on skills and concepts taught in previous health classes in order to expand students' knowledge and ensure student readiness to make independent, positive, health-related decisions. Topics include: decision making, relationships and social health, mental and emotional health, consumer health, nutrition, substance abuse and prevention, body systems, and sexual health.

Semester Course: 3 credits

H8563 Project Adventure (Required Course)

Project Adventure is a student-centered course that focuses on team building, cooperation, communication skills, problem solving, critical thinking, and leadership development. The course will involve tasks and activities that challenge students both physically and mentally. Students participating in this unique course will have the opportunity to build on some of the adventure elements from Freshman Physical Education, including high and low elements.

Semester Course: 3 credits

H8598 Net/Wall and Team Sports

This course will introduce students to a variety of mini-unit activities. These activities will teach students how to apply knowledge of concepts, principles, strategies and tactics related to movement and performance. Students will learn, practice and utilize the necessary skills and technique to effectively perform these activities during game situations. Emphasis will also be placed on knowledge of the rules as well as in game participation and strategies for successful outcomes. Activities may include: tennis, badminton, floor hockey, speed ball/hand ball, lacrosse, or basketball.

Semester Course: 3 credits

H8599 Individual Lifetime Activities

This course will introduce students to a variety of multi-unit activities. These activities will teach students the value of physical activity for health, enjoyment, challenge, self-expression and social interaction. Students will learn the basic rules, strategies, skills, and outcomes required to effectively perform these activities. In addition,

students will gain an appreciation of developing essential life skills such as cooperation, team-building, and communication. Students participating in this class will also participate in a CPR/first aid certification opportunity. Activities may include: golf, fencing, archery, and lawn games.

Semester Course: 3 credits

H8200 Reach Out Physical Education

Reach Out Physical Education offers students leadership opportunities and the opportunity to learn from their peers. The class will offer a variety of physical education activities in an inclusion setting. This is an opportunity for students to learn and grow together while working on communication skills, leadership skills, and social skills, all while achieving a healthy and active lifestyle.

Semester Course: 3 credits

Science

In keeping with the need for increased scientific literacy, the Science Department currently offers a variety of courses in physical science, biology, chemistry, and physics. In addition to the grade 9 and 10 programs a number of popular elective science courses are offered for grades 11 and 12 including astronomy, biology, chemistry, anatomy and physiology, physics, earth science and environmental science. It is our goal that students develop an appreciation of the natural world while better understanding the world in which they live. All science courses have laboratory exercises, readings, writing assignments and projects as well as individual and group work. Students are challenged to produce work of high quality while working in a safe and collaborative manner. Good behavior and the ability to follow directions are important aspects of work in the science classroom. Students should select courses that will best satisfy their individual needs and interests while giving consideration to appropriate course level and career plans. Prerequisites have been indicated to assist students in course selection as several courses are offered in a sequence and in many courses there are significant mathematical requirements. The science curriculum has been organized in concert with the Mass. Science Frameworks, the tenets of Project 2061 of the American Association for the Advancement of Science and the Mission Statement of Watertown High School.

Please note that to ensure that each student has a rich and varied science experience at Watertown High School, in order to take more than 2 courses in the same science discipline (i.e. more than 2 biology, more than 2 physics, more than 2 chemistry courses...), students must first garner the approval of the Science Curriculum coordinator

H4000 Introduction to Honors Physics

(Prerequisite for incoming ninth grade students: Acceptable score on **portfolio**; A- end-of-year grade in both math and science, teacher recommendations (math and science), **entrance exam** and permission of the Science Curriculum Coordinator.

Prerequisite for rising tenth eleventh and 12th grade students: **B or higher as final grade in Algebra II Honors or current ninth grade Honors math class. A grade of an A- or higher may be substituted for Level 1 Algebra II or current ninth grade Level 1 math class. If student has not already taken Algebra II, Algebra II Honors is a co-**

requisite for this class. Finally, permission of the Science Curriculum Coordinator after reviewing academic performance in current and past high school science classes.)

This hands-on physics course is designed for students entering WHS with a rigorous application of math (algebra I and trigonometry) at an accelerated pace. Students will explore a wide range of concepts including measurement, motion, forces, energy, momentum, waves, sound, light, electricity, magnetism, electromagnetism, matter, heat and the atom. Students will apply theories and concepts through a variety of laboratories and quarterly projects. This is the first course for students expecting to continue on an advanced-placement track in subsequent years. Successful students will advocate for themselves inside and outside of the classroom, are self-motivated learners and have high expectations for themselves and their peers. It is expected that all students enrolled in this course will take the Physics MCAS exam at the end of the year.

Full Year: 6 credits

H4005 Physics with Algebra (Grade 9)

(Prerequisite: Acceptable score on portfolio, B+ or higher end-of-year grade in both math and science, teacher recommendations (math and science), **entrance exam** and permission of the Science Curriculum Coordinator.)

This hands-on physics course is designed for students entering WHS with a strong application of math (algebra I and trigonometry) where students will be expected to manipulate algebraic equations as well as analyze graphical data while moving at a significant pace. Students will explore a wide range of topics including constant accelerated motion, forces, energy, momentum, waves, sound, light, electricity, magnetism, electromagnetism, matter, heat, and the atom. Students will work to understand the problem solving process, take data and apply theories and concepts in the laboratory setting, and engage in quarterly projects. This course is the first course for students wanting to demonstrate their ability for possible placement into the advanced placement track in subsequent years. Successful students will work to stay current with the course, advocate for themselves both inside and outside the classroom, are self-motivated learners and have high expectations for themselves and their peers. It is expected that all students enrolled in this course will take the Physics MCAS exam at the end of the year.

Full Year: 6 Credits

H4010 Introduction to Physics (Grade 9)

(Prerequisite: Successful completion of Grade 8 Science; placement by middle school science and math teachers and Science Curriculum Coordinator.)

This hands-on course is designed to introduce high school students to the study of physics. Students will explore a wide range of concepts including measurement, motion, forces, energy, momentum, waves, sound, light, electricity, magnetism, electromagnetism, matter, heat and the atom. Students will apply theories and concepts through a variety of laboratories and quarterly projects in addition to reading and writing assignments. This is an MCAS course and students are expected to take the Physics MCAS exam at the end of the year.

Full Year: 6 credits

H4040 Conceptual Physics (Grade 9)

(Prerequisite: Successful completion of Grade 8 Science. Placement by middle school science and math teachers and Science Curriculum Coordinator.)

This hands-on course is designed to introduce high school students to the study of physics. Students will explore a wide range of concepts including measurement, motion, forces, energy, momentum, waves, sound, light, electricity, magnetism, electromagnetism, matter, heat and the atom. This course will be differentiated to meet the needs of students through development of a solid conceptual understanding of physics prior to applying the physics to complex problem solving. This course is geared to developing students' conceptual understanding and eliminating the need for complex mathematical understanding. This is an MCAS course and students are expected to take the Physics MCAS exam at the end of the year.

Full Year: 6 credits

H4140 Foundations of Biology (L2)

(Prerequisite: Placement from ESL teacher and Science Curriculum Coordinator.)

This course serves as the introductory high school science course for English Language Learners (ELLs) who anticipate needing two years of biology before mastery. It is the first part of a two-year sequence designed to provide students with an overview of the living world. Major emphasis is given to cells, genetics, ecology and possibly anatomy and physiology. Projects are conducted to supplement each topic.

Full Year: 6 credits

H4510 AP Biology (Grades 11 and 12)

(Prerequisites: (1) B- or above in Honors Biology AND B- or above in Honors Chemistry OR (2) A- or above in Level 1 Biology AND A- or above in Level Chemistry OR (3) B- or above in Honors Chemistry AND B- or above in an AP class OR (4) Permission from instructor.)

AP Biology is a college level course that prepares students for the College Board AP Biology Exam. This course focuses on the 4 Big Ideas of the AP Biology Curriculum: 1) The process of evolution drives the diversity and unity of life. 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis. 3) Living systems store, retrieve, transmit, and respond to information essential to life processes. 4) Biological systems interact, and these systems and their interactions possess complex properties. Moreover, the course utilizes 8 formal lab experiences in which students are expected to ask their own questions and design experiments to answer these questions. The lab experiences are collaborative in nature and students are expected to share their findings with the rest of the class. Students should be prepared to work through lunch or after school to complete these lab sessions. This curriculum is designed to challenge students to not simply memorize biology facts, but to draw connections between all fields of biology and develop a deep understanding of biological principles. As a college level course, students are expected to be responsible for their participation in the course, both in and out of class. Students should expect to spend 45-60 minutes per day outside of school to succeed in this course. In addition, there is a large summer assignment due prior to the start of the school year.

Full Year: 6 Credits

H4200 Honors Biology (Grades 11 and 12)

(Prerequisite: B- or above in Honors Chemistry or A- or above in Level 1 Chemistry and B or above in Honors math or A- or above in Level 1 math as well as recommendations from current science and math teachers.)

Honors Biology is designed for capable, self-motivated students interested in a challenging, stimulating course about living organisms. The course explores, genetics, cytology, ecology, biochemistry and human biology.

[Students will get hands-on experience with biotechnology such as micropipettes and gel electrophoresis. Students will complete lab investigations, lab reports, group projects, dissections and readings on current science research and discoveries.](#) This course will prepare students for the SAT II in biology and also will have students well prepared for success in AP Biology.

Full Year: 6 credits

H4210 Biology

(Prerequisite: Successful completion of a grade 9 science course.)

This lab course is intended for progressing science students and is designed to engage and interest students in the living world around them. Topics of this course include cellular biology, genetics, evolution, ecology and anatomy and physiology. This course is taught through a variety of engaging activities such as labs and lab reports, dissections, group projects, term projects and readings.

Full Year: 6 credits

H4220 Transitional Biology (L2)

(Prerequisite: Successful completion of Foundations of Biology or placement from ESL teacher and Science Curriculum Coordinator.)

This course is the second part of a two-year sequence designed to provide English Language Learners with an overview of the living world. Major emphasis is given to cells, genetics, evolution and ecology. Project and laboratory work are conducted to supplement each topic.

Full Year: 6 credits

H4230 Introduction to Anatomy and Physiology (Grades 11 and 12)

(Prerequisite: Successful completion of biology with a grade of B or above.)

Anatomy and Physiology is a college preparatory course open to junior and senior students who have successfully completed one year of biology and may be interested in a career in science or health-related fields. The systematic structure and functions of the human body are studied. Concepts are supported by lab activities focused in particular on medical practices. One such lab is the fetal pig dissection that acts as a capstone to the half-year course. Individual projects are stressed, which allow students to explore different disorders, treatments and current/future research in the scientific community. This course is paired with Introduction to Medical Sciences (4180). Students should register for both. This course cannot be taken by students who have already taken Anatomy and Physiology (4240).

Semester Course: 3 credits

H4180 Introduction to Medical Sciences (Grades 11 and 12)

(Prerequisite: Successful completion of biology with a grade of B- or above [or successful completion of Honors or AP Biology](#). No more than five tardies and/or absences per term to student's current first period class.)

[This course is a laboratory science elective developed by Harvard Medical School to introduce high school students to various medical techniques, procedures, and career opportunities. Curriculum for this course is rich in science content embedded in naturalistic simulations that allow learners to engage with material directly through inquiry based learning practices.](#) Throughout the course, students will explore the 11 systems of the human body.. The hands-on experiential learning experience will occur at ProEMS and Mount Auburn Hospital using the case study method to reinforce student understanding of human anatomy and physiology. Throughout the course students will practice inquiry-based learning, decision making, collaboration, problem solving and critical thinking skills. During the hands-on learning experience, students will work in teams like healthcare professionals in the real world. The course will include an experience-based program which includes weekly one-hour trips outside of school; therefore, students must commit to being at school by 7:30A.M. one day a week. This course is paired with Introduction to Anatomy and Physiology (4230). Students should register for both. This course cannot be taken by students who have already taken Anatomy and Physiology (H4240).

Semester Course: 3 credits

H4240 Anatomy and Physiology (Grades 11 and 12)

(Prerequisite: Successful completion of Biology with a grade of B or better.)

Anatomy and Physiology is a college preparatory course open to junior/senior students who have successfully completed one year of biology and may be interested in a career in science or health-related fields. The systematic structure and functions of the human body are studied. Concepts are supported by extensive lab activities, including the fetal pig dissection. Individual and class projects are stressed. This course cannot be taken by students who have already taken Introduction to Anatomy and Physiology (4230) and Introduction to Medical Sciences (4180).

Full Year: 6 credits

H4553 Honors Biotechnology & Genetic Engineering (Fall Semester) (Grades 11 and 12)

(Prerequisite: B- or higher in Biology or successful completion of Honors or AP Biology or permission of instructor.)

This is a project and lab focused course on biotechnology, genetic engineering, and synthetic biology. This course will focus on cutting edge concepts of DNA science: exploring genetics, genomics, bioinformatics, and epigenetics, as well as the ethics of genetic engineering. There will be lab projects involving PCR, bacterial transformation, and the potential to work as a class on a biological design project to design a new living organism through the BioBuilder Biotech program. There may be occasional after school requirements to meet with other BioBuilder students at MIT.

Semester Course: 3 credits

H4563 Complexity (Spring Semester) (Grades 11 and 12)

(Prerequisite: 2 years of science)

What do swarms of bees, soccer games, bacteria cells, the stock market, traffic jams and weather patterns all have in common? They are all complex systems. In a complex system we may be able to understand the behavior of the parts of a system; however, when they interact, the results can be unpredictable. The science of complexity shows that similar rules seem to govern systems that may at first seem completely unrelated. In this hands-on project-based class we will be building a variety of models of complex systems and finding the underlying rules that can be found in each. This class will involve building models using Hexbugs, slime-molds, computers, and each other. This class is tons of fun and will change how you see the world!

Semester Course: 3 credits

H4701 AP Environmental Science (Grade 12)

(Prerequisites: B or above in Honors Chemistry and Honors Biology or A- or above in Level 1 Chemistry and Level 1 Biology. Students must have completed both a Biology class and a Chemistry class prior to enrolling in AP Environmental Science (APES)). -AP Environmental Science is designed for driven, ecologically minded students who are interested in a challenging, college level curriculum. This laboratory course focuses on the biosphere, which includes the interrelationships of both living and nonliving components of the natural world. Students will analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. This course also requires students to be able to perform in-depth laboratory experiments and to subsequently write formal laboratory reports. Students who enroll in this course are expected to take the AP Environmental Science exam in the spring.

Full Year: 6 Credits

H4702 Honors Environmental Science (Grades 11 and 12)

(Prerequisites: B or above in Honors Chemistry or Honors Biology and A- or above in Level 1 Chemistry or Level 1 Biology. Students must have completed both a Biology class and a Chemistry class prior to enrolling in Honors Environmental Science, or have completed one of these classes and be enrolled in the other one of these classes in tandem with this course.)

Honors Environmental Science is designed for motivated students who are interested in exploring how humans interact with the biosphere. The course will incorporate a range of resources, including emerging scientific research and current news events. These sources will focus on issues such as global climate change, public health, environmental justice, species conservation, pollution, as well as political and economic influences on the environment. Students will be expected to participate in a range of projects and discussions that focus on mitigating human impacts on the environment, and increasing awareness about ecological issues. Some projects may include altering or recording everyday habits such as trash generation, or monitoring composting and hydroponic projects. Students who take Honors Environmental Science cannot take AP Environmental Science for credit in future years.

Full Year: 6 Credits

H4450 AP Chemistry

(Prerequisites: Successful completion of Honors Chemistry with a grade of B+ or above and grade of B+ or above in Honors math through Algebra II or Precalculus or grade of A- or above in Level 1 math through Algebra II or Precalculus. *No single term grade for math or science may be below a B- for the current year. Co-requisite: Precalculus, Statistics or Calculus)

AP Chemistry is an intensive survey of topics and laboratory experiences customarily covered in a first-year college inorganic chemistry course. The course provides a review of and builds upon the topics covered in Honors Chemistry with special attention given to all aspects of equilibrium, kinetics, reduction-oxidation reactions and thermodynamics. Laboratory activities focus on the descriptive and quantitative aspects of the topics and many will include guided inquiry. Students who take this course must accept the challenge of very demanding work all year, and are expected to take the AP exam in May as the appropriate conclusion to their efforts. Before school laboratory sessions or laboratory sessions held during the lunch period are a required part of this course. A desire and ability to perform a high level of mathematics is required to succeed in this course.

Full Year: 6 credits

H4300 Honors Chemistry

(Prerequisites: Grade of B or above in grade 9 Honors Physics or grade of A- or above in Level 1 Biology and grade of B or above in Honors math through Geometry or Algebra II or grade of A- or above in Level 1 math through Geometry or Algebra II. *No single term grade for math or science may be below B- for the current year. Co-requisite: Algebra II or Precalculus)

Honors Chemistry is an intensive study of the theoretical and practical aspects of chemistry. Topics include the measurement of matter, atomic structure, quantum theory, periodic properties, energy relationships in reactions, descriptions of reactions at the molecular level, classes of reactions and nuclear chemistry. Laboratory work is an integral part of the course. The desire and ability to do a high level of mathematics will be required to succeed in the course. This course is appropriate for students considering a premedical, science or engineering major in college.

Full Year: 6 credits

H4310 Chemistry

(Prerequisite: Successful completion of Grade 9 physics and/or biology and enrollment in or completion of Algebra II. Current year to date math average of a C+ or above.)

This course is a general survey of topics related to the descriptive, mathematical and theoretical aspects of materials. The course is designed to give the student the skills and concepts necessary for further study after high school. Topics include scientific measurement and problem solving, atomic theory and structure, the quantitative aspects of reactions, the various types of chemical reactions, acid-base theories and nuclear chemistry. Laboratory work and mathematical applications are an integral part of the course.

Full Year: 6 credits

H4320 Applied Chemistry (L2)

(Prerequisite: Successful completion of physics and biology. Successful completion of Algebra I.)

This course is designed to be a hands-on third science course for students who have successfully completed a physical science course (physics or engineering) and biology. The course will cover topics from chemistry, physical science and math. Students are expected to solve simple algebraic problems independently. Topics will focus on common chemicals and related practical applications. Each topic will be explored through class activities, group and individual projects and labs.

Full Year: 6 credits

H4601 AP Physics 1 (Grades 10, 11 and 12)

(Prerequisites: B or higher in Honors Algebra II or A- or higher in Level 1 Algebra II or math teacher approval; B or higher in Honors Introduction to Physics or A- or higher in Level 1 Introduction to Physics or physics teacher approval. Co-requisite: Minimum of Honors Precalculus or math teacher approval.)

This course provides a systemic introduction to the main principles of physics and emphasizes the development of problem-solving ability. Newtonian mechanics (to include kinematics, Newton's Laws of Motion, work, power and energy, linear momentum, circular motion and rotation, oscillations and gravitation), electricity and waves. The course will include a significant amount of time devoted to laboratory investigations which will include student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments and solving problems in a collaborative setting where students correct and monitor their progress toward an academic goal. A quarterly project may be used in lieu of quarterly comprehensive exams. Completion of the course allows the student to take the Advanced Placement Physics 1 exam. This course is the equivalent to a first-semester college course in algebra-based physics.

Full Year: 6 credits

H4603 AP Physics C Mechanics (Grades 11 and 12)

(Prerequisite: B or higher in precalculus, B+ or higher in previous year's science course, or Science Curriculum Coordinator approval. Co-requisite: Calculus.)

Physics C Mechanics is a college level course that covers classical mechanics. The Physics C Mechanics course is equivalent to a one-semester, calculus-based, college-level physics course. These topics are covered in great depth with analytical and mathematical sophistication, including calculus applications. Mechanics is taught for the full year and encompasses kinematics, Newton's laws of motion, work, energy, power, systems of particles, linear momentum, circular motion and rotation, oscillations, and gravitation. This course is suitable for students planning to specialize in a physical science or in engineering at the collegiate level. At the conclusion of this course, students will be prepared to take the AP Physics C mechanics exam. Earning a 3 or higher on the AP Mechanics exam may earn a student 3-4 college credits.

Full Year: 6 credits

H4602 AP Physics C Mechanics and Electricity and Magnetism (Grades 11 and 12)

(Prerequisite: B or higher in precalculus, B+ or higher in previous year's science course.

Co-requisite: AP Calculus.)

Physics C Mechanics and Electricity and Magnetism is a college level course that covers mechanics, classical electricity and magnetism. The Physics C Mechanics and Electricity and Magnetism course is equivalent to two semesters of calculus-based, college-level physics courses. This course is at a considerably faster pace than AP Physics C Mechanics only. The topics are covered in great depth with analytical and mathematical sophistication, including calculus applications. Mechanics is taught in the first semester and encompasses kinematics, Newton's laws of motion, work, energy, power, systems of particles, linear momentum, circular motion and rotation, oscillations, and gravitation. Electricity and magnetism are taught in the second semester and include electrostatics, conductors, capacitors, dielectrics, electric circuits, magnetic fields, and electromagnetism. Laboratory experience is an integral part of this course. This course is suitable for students planning to specialize in a physical science or in engineering at the collegiate level. At the conclusion of this course, students will be prepared to take both the AP Physics C mechanics exam and the AP Physics C electricity and magnetism exam. Earning a 3 or higher on the AP Mechanic and AP Electricity and Magnetism exams may earn a student 3-8 college credits.

Full Year: 6 credits

H4412 Physics Applications

(Prerequisite: Successful completion of two of the three traditional lab-based science courses (physics, chemistry, and biology; B or higher in Algebra II.)

Physics is the study of forces and the motion of objects in the physical world, electricity and energy that lights that world, and ‘Strange’ flavors of quarks. So many of our everyday encounters, such as driving a car, playing a sport, creating music both physically and digitally, make physics one of the most relevant sciences. The theories, laws, and principles of physics can explain and predict the behavior of macroscopic and microscopic objects, but often times this science discipline is viewed as inaccessible to students. Frequently, physics is improperly viewed as a set of equations and variables, or that it is a class meant to be treated like another math class. This couldn’t be further from the truth! While physics does use math to model the physical world, the math is a tool and not the end in physics.

In Physics Applications, we employ an approach to teaching physics through the Modeling Method. This is a very hands-on, project-based, and student-centered course to model different relevant areas in physics today. Instead of relying solely on lectures and textbooks, this will put students in the driver’s seat of their learning. Expectations include:

- Explore scenarios that represent actual events in the physical world.
- Design experiments to test certain conditions or outcomes.
- Develop predictive or explanatory models that can be applied to the physics world.
- Construct their own understanding through experience of the laws of physics.
- Examine cutting edge theories that touch into the realm of quantum mechanics, string theory, and relativity.

Full Year: 6 Credits

H4790 Astronomy (Grade 12)

(Prerequisite: Successful completion of algebra.)

This science elective acquaints students with the observable universe. This course has a math requirement and will require students to manipulate algebraic equations such as Newton’s Law of Gravitation and Kepler’s Laws. Students will learn to distinguish between planets, moons, stars and galaxies. The course will also spend a unit discussing earth science. The fourth term will focus on recent discoveries in the field and students will spend time on a research project at the end of the term.

Full Year: 6 credits

H4785 Earth Science (Grade 12)

(Prerequisite: Successful completion of algebra.)

This science elective serves as an introduction to earth science. Students will perform experiments and data collection in order to analyze certain aspects of the world around us. This course has a math requirement and will require students to manipulate algebraic equations. Topics to be studied include weathering, erosion, and glaciers; plate tectonics, earthquakes, and volcanoes; rocks and minerals; atmosphere, weather, and climate; ocean and freshwater systems; space and astronomy.

Full Year: 6 credits

H9483 Physics (Grade 9)

(Prerequisite: Special Education Team Recommendation.)

The Language Based Physics course is intended for ninth grade students and will prepare them for the MCAS Science & Technology/Engineering Physics Exam. It is a lab-based course that will include the following topics: measurement, motion, forces, energy, momentum, waves, sound, light, electricity, magnetism, electromagnetism, matter, heat, and the atom. The lab element of this class will include frequent laboratory experiments, hands-on activities, and teacher-led demonstrations. Students will be expected to work individually and cooperatively to investigate the course topics through practical applications. Students will develop and expand their conceptual understanding of physics in conjunction with their problem solving and mathematical skills.

Full Year: 6 credits

H9484 Biology (Grade 10)

(Prerequisite: Special Education Team Recommendation.)

The Language Based Biology course is intended for students who have successfully completed the Language Based Physics class. It is a lab-based course that will include the following topics: cellular biology, genetics, evolution, ecology, and anatomy and physiology. The lab element of this class will include frequent laboratory experiments, hands-on activities, and teacher-led demonstrations. Students will be expected to work individually and cooperatively to investigate the course topics through practical applications.

Full Year: 6 credits

H9482 Chemistry (Grade 11)

(Prerequisite: Special Education Team Recommendation.)

The Language Based Chemistry course is intended for students who have successfully completed the Language Based Biology class. It is a lab-based course that will cover topics from chemistry, physical science, and math including a focus on common chemicals and related practical applications. Students will be expected to solve simple algebraic problems independently. The lab element of this class will include frequent laboratory experiments, hands-on activities, and teacher-led demonstrations. Students will be expected to work individually and cooperatively to investigate the course topics through practical applications.

Full Year: 6 credits

H4015 Exploring Scientific Practices

This course provides a review of fundamental skills and concepts required to pass the MCAS examination in science, which is a graduation requirement.

Semester Course: 3 credits

Science Sequence Chart Grades 9 – 12			
Grade 9	Grade 10	Grade 11	Grade 12
Hon. Physics Physics with Algebra	Hon Chemistry Chemistry	AP Biology Hon Biology Biology Hon Environ. Science	AP Physics-1 AP Physics-C AP Chemistry AP Biology AP Environ. Science Hon Environ. Science Physics Applications Astronomy Earth Science Anatomy & Physiology Intro. to Anat. & Phys. and Intro. to Medical Sciences
Physics with Algebra Introduction to Physics	Hon Chemistry Chemistry Biology	Hon Biology Hon Chemistry H Chemistry Anatomy & Physiology	AP Physics-1 AP Physics-C AP Chemistry AP Biology AP Environ. Science Hon Environ. Science Physics Applications Astronomy Earth Science Anatomy & Physiology Intro. to Anat. & Phys. & Intro. to Medical Sciences
Conceptual Physics	Biology	Chemistry Applied Chemistry	Physics Applications Astronomy Earth Science Anatomy & Phys. Intro. to Anat. & Phys. and Intro. to Medical Sciences
Foundations of Biology	Transitional Biology	Chemistry Applied Chemistry	Hon Environ. Science Physics Applications Astronomy

			Earth Science Anat. & Physiology Intro. to Anat. & Phys. and Intro. to Medical Sciences
Transitional Biology	Chemistry Applied Chemistry	Anatomy & Physiology Intro. to Anat. & Physi. and Intro. to Medical Sciences	Hon Environ. Science Physics Applications Astronomy Earth Science
Physics	Biology	Chemistry	Physics Applications Astronomy Earth Science

In special circumstances the Science Coordinator may approve exceptions to the above.

Special Education and Student Support Services

The Watertown Public Schools Special Education Department offers a wide variety of programs. The goal of the Special Education Department is to enable students to access the general education curriculum. For all students deemed eligible, and on an Individual Education Program (I.E.P.), instruction is individualized taking into consideration each child's unique learning style. Programming is developed which allows the student to work to their potential in the least restrictive environment. Selection of the appropriate programs is done through the TEAM process and is based on individual needs as developed in the educational plan. Students who receive special education services work closely with their liaisons to ensure that their individual education program complies with standards based instruction and the curriculum frameworks.

The programs offered within the Special Education Program vary with the needs of the students and are subject to change based on the needs of our students. Our current programs include:

- Academic Support Program
- Inclusion
- Resource Support
- Language Based Instruction
- Integrated Services Program (ISP)
- Learning Support Program (LSP)
- Connections Program
- Learning Experiences Adult Program (LEAP)Related Services

Academic Support

Academic Support offers daily support to students in grades 9 through 12 in all academic areas. It is a Tier 2

intervention, open to any student in need of additional support. Academic Support teachers work in collaboration with students, their teachers, guidance counselors, administration, parents, and others to help students work toward their academic success.

H9703 Academic Support

H9713 Academic Support

The Academic Support course assists students with assignments, homework, projects, test preparation, organization, as well as other essential academic skills for success. The Guidance Department, parents, or other teachers, as well as the Special Education Team usually refer students to this program.

Semester Course: 3 Credits

Inclusion

Inclusion services are provided in the general education setting and monitored by each student's special education liaison. The IEP Team determines the level of inclusion support based on the individual student's needs. Support for instruction in general education classes may be facilitated by an instructional assistant or special education teacher. Accommodations, including IEP accommodations, within the general education classrooms are available to help students' access and understand grade level curricula. They are often provided as part of the general education teacher's regular instruction to support all learners. Collaboration between general education teachers, special education teachers, guidance counselors, administration, therapists, etc. is an important aspect of the inclusion services at WHS.

Resource Support

Resource Support classes offer daily support by a special education teacher and, at times, an instructional assistant to students who have an IEP in all academic areas. Additionally, collaboration with the student, general education teachers, special education teachers, guidance counselors, administration, parents, therapists, etc. is an integral part of the Resource Support class.

H9653 Resource Support (Sem 1)

H9663 Resource Support (Sem 2)

(Prerequisite: Special Education Team Recommendation)

The Resource Support course assists students who have an IEP with assignments, homework, projects, test preparation, as well as other essential academic and social skills for success. Resource Support also provides instructional strategies for literacy skills, organization and study skills to help students with disabilities be successful in their academic and/or specialized classes. Classes may include, but are not limited to, small group or 1:1 instruction.

Semester Course: 3 Credits

Language Based Instruction

Language Based Instruction offers classes, using general education curricula, that are specifically designed to meet the individual learning styles of students who have demonstrated the need for additional reinforcement in the areas of expressive and comprehensive language skills. These classes provide small group instructional support. Language Based classes are offered in English, History, Mathematics and Science.

Language Based Program

	English	Mathematics	History
	English 9 H9411	Algebra I H9470	US History I H9461
	English 10 H9412	Geometry H9471	US History II H9462
	English 11 H9413	Algebra IIA H9XXX	Contemporary World Issues H9463
	English 12 H9414	Algebra IIB H9XXX	Students in Grade 12 participate in general curriculum options.
Length	Full Year	Full Year	Full Year
Credits	6 credits	6 credits	6 credits

H9411 English 9

H9412 English 10

H9413 English 11

H9414 English 12

(Prerequisite: Special Education Team Recommendation)

The Language Based English courses are designed to increase each student's ability to achieve organization and coherence in a sentence, paragraph and composition. Further goals are to increase each student's grasp of standard use of grammar, mechanics and punctuation, and to provide the student with strategies for improving their reading comprehension through direct instruction in active reading strategies and note taking skills. A variety of literature types such as short stories, poetry, and novels are utilized to engage and challenge students. Computer applications/technology are regularly used to augment students' verbal and written language skills as well as to develop 21st century learning expectations.

Full Year: 6 credits

H9470 Algebra I

(Prerequisite: Special Education Team Recommendation)

The Language Based Applied Algebra course will strengthen and extend students' computational skills. Through the investigation of real-world applications, students will create models for equations, solve word problems, assess absolute value and the interplay of positive and negative numbers through the number line, and graph and solve linear equations. In addition, concepts of rational/irrational numbers, exponents, radicals, and factoring will be explored. Problem solving strategies are a significant portion of the course. Students will also review concepts of geometry as applied to algebra. Students are encouraged to think about their world mathematically and make connections between what they learn in the classroom and what exists outside the classroom. Computer applications/technology will be used when appropriate.

Full Year: 6 credits

H9471 Geometry

(Prerequisite: Special Education Team Recommendation)

The Language Based Applied Geometry course will continue to strengthen students' math skills and prepare for the MCAS exam. Through exploration of real-world applications, students will learn about the mathematical properties of angles, polygons, circles, congruence, and 3 dimensional figures. In addition, they will learn to calculate perimeter, area and volume. Students will also review algebraic concepts and the graphing of linear equations. Students are encouraged to think about their world 'geometrically' and mathematically and make connections between what they learn in the classroom and what exists outside the classroom. Computer applications/technology will be used when appropriate. MCAS practice will consist of practice written exams as well as computer application programs.

Full Year: 6 credits

H9472 Algebra II A

(Prerequisite: Special Education Team Recommendation)

Delving deeper into the work from Algebra I (H9470), students will begin work on Algebra II, including the study of polynomial functions and their different algebraic forms, equations and inequalities, graphing and systems. Division as it relates to rational functions is also covered, as is factoring (through trinomials).

Full Year: 6 credits

H9473 Algebra II B

(Prerequisite: Special Education Team Recommendation)

Continuing from Algebra II A, students will move into the transformations of polynomials, explore complex numbers, solve radical and exponential equations, and study the foundations of trigonometry and statistics.

Full Year: 6 credits

H9461 US History I

(Prerequisite: Special Education Team Recommendation)

The Language Based US History I course will focus on Roots of American History through the Civil War. This course begins with lessons examining geography terms (continent, hemisphere, sea level, prairie, peninsula, etc.), different map types such as, political and physical maps, regions and climates of the United States, and tools of history (primary and secondary sources, timelines, and archaeology). Students will cover the American Revolution and the creation of a New Republic with focus on the United States Constitution, Three Branches of Government (Executive, Legislative Judicial), and the Bill of Rights (Amendments).

Full Year: 6 credits

H9462 US History II

(Prerequisite: Special Education Team Recommendation)

The Language Based US History II course will focus on the Reconstruction to the Present. This course begins with Reconstruction, in which the students will discover what happened during the period of Reconstruction; will review the New West by examining the Native Americans of the Great Plains, mining and railroads, and the cattle kingdom. Students will then explore the great immigration at the turn of the 20th century, the impact of manufacturing, the creations of unions, and the rise of the women's and civil rights movements. The course traces how the United States became a modern nation.

Full Year: 6 credits

H9463 Contemporary World Issues

(Prerequisite: Special Education Team Recommendation)

The Language Based Contemporary World Issues is designed to combine history and geography with the study of contemporary issues in America and other nations. The students will also explore the world today using technology and hands on activities.

Full Year: 6 credits

Integrated Services Program (ISP)

The Integrated Services Program (ISP) is designed to service students with emotional disabilities and/or behavioral challenges who have difficulty participating in general education classes with support and accommodations. ISP provides small, structured academic environments that include a behavior management system and emotional support. Students are offered access to clinical staff and respite space as needed. Students can receive content area classes (English, Mathematics, History, or Science) in the ISP program; however, students also have access to general education classes. Recommendations for participation in the general education setting may be made based on student academic, behavioral, and social performance, level of academic understanding, and student readiness. Length of placement in ISP is a Team driven decision and must be approved through a signed Individualized Education Program (IEP) or signed Amendment permitting a least restrictive placement. Additionally, collaboration with the student, general education teachers, special education teachers, guidance counselors, administration, parents, therapists, etc. is an essential part of ISP.

Integrated Service Program

	English	History	Mathematics	Science
	English 9 H9570 English 10 H9571 English 11 H9572 English 12 H9573	US History I H9574 US History II H9575 World History H9576	Algebra I H9577 Geometry H9578 Algebra IIA H9472 Algebra IIB H9473	Biology H9582 Biology II H9583
Length	Full Year	Full Year	Full Year	Full Year
Credits	6 credits	6 credits	6 credits	6 credits

H9570 English 9

H9571 English 10

H9572 English 11

H9573 English 12

(Prerequisite: Special Education Team Recommendation)

The ISP English courses are designed to support a small group of students who have emotional or behavioral challenges to strengthen literacy skills. Students are taught strategies for improving reading comprehension using short stories, poetry, novels, and plays. Additionally, classes include instruction in all steps of the writing process and involve the development of written work of various genres. Computer applications/technology are used to augment each student's verbal and written language.

Full Year: 6 credits

H9576 World History

(Prerequisite: Special Education Team Recommendation)

The ISP World History course is designed to support a small group of students who have emotional or behavioral challenges to increase each student's ability to achieve understanding of the interrelationship of European history with the development of Africa, Asia and the Americas.

Full Year: 6 credits

H9574 US History I

(Prerequisite: Special Education Team Recommendation)

The ISP US History I course is designed to support a small group of students who have emotional or behavioral challenges to increase each student's ability to achieve understanding of the philosophy of democratic government and the development of the modern American governmental system (1215-1868).

Full Year: 6 credits

H9575 US History II

(Prerequisite: Special Education Team Recommendation)

The ISP US History II course is designed to support a small group of students who have emotional or behavioral challenges to increase each student's ability to achieve understanding of the application of the principles of American government to different groups of people and through various world and national movements and events, from the antebellum period to modern times (1830-present). Additionally, students will follow major events and movements in American history (starting in the 1830's) and support and link those events to important world happenings.

Full Year: 6 credits

H9578 Geometry

(Prerequisite: Special Education Team Recommendation)

The ISP Geometry course is designed to support a small group of students who have emotional or behavioral challenges to strengthen students' math skills and prepare for the MCAS exam. Through exploration of real-world applications, students will learn about the mathematical properties of angles, polygons, congruency, quadrilaterals and triangles, and 3 dimensional figures. In addition, they will learn to calculate perimeter, area and volume. Students will also review algebraic concepts and the graphing of linear equations. Students are encouraged to think about their world 'geometrically' and mathematically and make connections between what they learn in the classroom and what exists outside the classroom. Computer applications/technology will be used when appropriate. MCAS practice will consist of practice written exams as well as computer application programs.

Full Year: 6 credits

H9577 Algebra I

(Prerequisite: Special Education Team Recommendation)

The ISP Algebra I course is designed to support a small group of students who have emotional or behavioral challenges to increase each student's ability to strengthen and extend students' computational skills. Through the investigation of real-world applications, students will create models for equations, solve word problems, assess absolute value and the interplay of positive and negative numbers through the number line, and graph and solve linear equations. In addition, concepts of rational/irrational numbers, exponents, radicals, and factoring will be explored. Problem solving strategies are a significant portion of the course. Students will also review concepts of geometry as applied to algebra. Students are encouraged to think about their world mathematically and make connections between what they learn in the classroom and what exists outside the classroom. Computer applications/technology will be used when appropriate.

Full Year: 6 credits

H9472 Algebra II A

(Prerequisite: Special Education Team Recommendation)

Delving deeper into the work from Algebra I (H9577), students will begin work on Algebra II, including the study of polynomial functions and their different algebraic forms, equations and inequalities, graphing and systems. Division as it relates to rational functions is also covered, as is factoring (through trinomials).

Full Year: 6 credits

H9473 Algebra II B

(Prerequisite: Special Education Team Recommendation)

Continuing from Algebra II A, students will move into the transformations of polynomials, explore complex numbers, solve radical and exponential equations, and study the foundations of trigonometry and statistics.

Full Year: 6 credits

H9582 Biology I

(Prerequisite: Special Education Team Recommendation)

This course is designed to support a small group of special education students who have emotional or behavioral challenges and who anticipate needing two years of biology before mastery. It is the first part of a two-year sequence that provides an overview of the living world. Major emphasis is given to cells, genetics, ecology and possibly anatomy and physiology. Projects are conducted to supplement each topic.

Full Year: 6 credits

H9583 Biology II

(Prerequisite: Special Education Team Recommendation)

This course is designed to support special education students who have emotional or behavioral challenges and who anticipate needing two years of biology before mastery. It is the second part of a two-year sequence that provides an overview of the living world. Major emphasis is given to cells, genetics, ecology and possibly anatomy and physiology. Projects are conducted to supplement each topic.

Full Year: 6 credits

Learning Support Program

The Learning Support Program provides daily support by a special education teacher for students identified with significant deficits either cognitively or developmentally and who demonstrate the need for direct teaching in, but not limited to, a small group environment. The Learning Support Program also provides structured academic and social environments that emphasize a clear behavioral component, along with emotional and social support. Students may receive content area (English, Mathematics, History, Science, or Vocational Resource) instruction in a substantially separate classroom in small groups; however, students also have access to general education classes. Recommendations for participation in the general education setting may be made based on student academic, behavioral, and social performance, level of academic understanding, and student readiness. Additionally, Learning Support staff target life skills such as study skills, independence, self-advocacy, goal setting and transitions to postsecondary activities, via curriculum, activities, and projects. Students are provided the opportunity to generalize their skills within the WHS and Watertown community via class projects, school and community jobs, and field trips.

Learning Support Program

	English	History	Mathematics	Science
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	English 9 H9214	History 9 H9224	Math 9 H9234	Science 9 H9251
	English 10 H9215	History 10 H9225	Math 10 H9235	Biology I H9256
	English 11 H9216	History 11 H9226	Math 11 H9236	Biology II H9257
	English 12 H9217		Math 12 H9237	
Length	Full Year	Full Year	Full Year	Full Year
Credits	6 Credits	6 Credits	6 Credits	6 Credits

Recommendations may be made to schedule students in courses that deviate from this chart based on student performance and level of understanding.

English 9 H9214

English 10 H9215

English 11 H9216

English 12 H9217

(Prerequisite: Special Education Team Recommendation)

Learning Support English is a class that focuses on direct/explicit instruction and applied behavior analysis to teach vocabulary development, reading comprehension, and writing. The goal of this class is two-fold as it teaches functional literacy in addition to standards-based curricula. Students within this class receive small group instruction that is highly sequential, visual, and formatted to fit executive functioning needs.

Full Year: 6 credits

H9224 History 9

H9225 History 10

H9226 History 11

(Prerequisite: Special Education Team Recommendation)

Learning Support Social Studies is a class that focuses on direct/explicit instruction to teach pertinent concepts in American History, American Government/Civics, World Geography and Economics as well as Current Events with modifications. The goal of this class is two-fold, as it teaches the standard Social Studies curricula in addition to the skills that are necessary to participate in the democratic process. Students in this class receive small group instruction that is highly sequential, visual, and formatted to fit executive functioning needs.

Full Year: 6 credits

H9234 Math 9

H9235 Math 10

H9236 Math 11

(Prerequisite: Special Education Team Recommendation)

Basic math skills are essential to a person's ability to function in the world. These skills are used in our daily lives (home, community, and workplace). Understanding math can be a vital component to an individual's success and participation in their community. Learning Support Math provides opportunities for students to learn these necessary skills. The Learning Support Math curriculum teaches real-world math skills that help students maintain a bank account, keep a budget and pay bills. The curriculum will also walk students through the process of how to rent an apartment, pay/tip at a restaurant and use math as it relates to cooking and counting calories. The resources and materials utilized are adapted to the needs of individual students in the program. In accordance with applying life-skills math, student will also prepare to pass the 10th grade math MCAS. With thorough review and consistent practice, students will prepare for the math MCAS by completing practice tests and focusing on foundational skills of geometry, algebra and number sense.

Full Year: 6 credits

H9251 Science 9

H9256 Biology 1

Biology 2 H9257

(Prerequisite: Special Education Team Recommendation)

Earth and Space Science: Students in the Earth and Space Science course will learn about concepts in geology, weather, oceans, and astronomy through direct instruction and hands-on labs. The course will also incorporate reading instruction within scientific texts and a peer-mentoring component. Students must be referred and approved by special education staff.

Full Year: 6 credits

Vocational Resource H9243

(Prerequisite: Special Education Team Recommendation)

The Learning Support Resource vocational program offers daily support by a special education teacher and/or an instructional assistant to students in all areas of vocational opportunities. The team decides upon specific curriculum in the area of vocation, which is highly individualized to their student's needs, as well as in school and community outings to demonstrate skills learned in the classroom. These opportunities may include working at the public library, reading buddies with elementary age students, visits to the Brigham House, recycling collection, and/or cafeteria duties.

Full Year: 6 credits

Semester Course: 3 credits

H8503 Applied Health

(Prerequisite: Special Education Team Recommendation)

A special education teacher who will focus on the relationship that exists among physical, mental, and social health will teach the Adaptive Health class. The goal of this class is two-fold as it teaches life skills health in addition to standards-based curricula. Students within this class receive small group instruction that is highly sequential, visual, and formatted to fit executive functioning needs. Topics that may be covered, but not limited to include decision making, self-esteem, relationships, nutrition, consumer health, effects of alcohol, tobacco and drugs; body systems, sex education, CPR and fitness. Through these topics, students will learn that decisions they make affect all areas of health. Students will develop an understanding that by taking responsibility of their own health, it will have positive effects both personally and to others around them.

Semester Course: 3 credits

Connections Program

The Connections Program provides daily support for students identified with a neurodevelopmental disability and who demonstrate the need for direct teaching in, but not limited to, a small group environment. The Connections Program provides small group structured academic and social environments which incorporate principles of Applied Behavioral Analysis (ABA) along with emotional and social support. Students may receive content area (English, Mathematics, History, Science, or Social Pragmatics) instruction in a substantially separate classroom in small group and/or individual setting. Recommendations for participation in the general education setting may be made based on student academic, behavioral, and social performance, level of academic understanding, and student readiness. Additionally, staff implements activities and collect data daily regarding individual student progress based on their Individualized Education Program (IEP) goals.

Connections Program Classes

	English	History	Mathematics	Science
	English 9 H9531 English 10 H9532 English 11 H9533 English 12 H9534	History 9 H9541 History 10 H9542 History 11 H9543 History 12 H9544	Math 9 H9501 Math 10 H9502 Math 11 H9503 Math 12 H9504	Science 9 H9591 Science 10 H9592 Science 11 H9593 Science 12 H9594
Length	Full year	Full year	Full year	Full year
Credits	6 credits	6 credits	6 credits	6 credits

H9557 Resource

(Prerequisite: Special Education Team Recommendation)

The Connections Resource class offers daily support by a special education teacher and/or an instructional assistant to students in all academic areas, social pragmatics, life skills, and behavioral programs. Collaboration with the student, special education teacher, instructional assistant, counselors, related service providers, parents, etc. is an integral part of the Connections Resource class.

Full Year: 6 credits

Semester Course: 3 credits

H9531 English 9

H9532 English 10**H9533 English 11****H9534 English 12**

(Prerequisite: Special Education Team Recommendation)

The Connections Program is intended for students who need significant modifications in academic, behavior, and/or social programs. Students within the Connections Program rely on Applied Behavior Analysis to support them throughout their day. The team decides upon specific curriculum in the area of English, which is highly individualized to their student's needs. Connections students may be within the general inclusion classes with instructional assistant support and case manager supervision, but also might spend time in smaller groups receiving academic and social instruction. Teachers and instructional assistants within the Connections Program receive consultation from a BCBA, speech language-pathologist, augmented communication consultant, counselors, and occupational therapists to create individualized programs to suit the student's needs.

Full Year: 6 credits

H9501 Math 9**H9502 Math 10****H9503 Math 11****H9504 Math 12**

(Prerequisite: Special Education Team Recommendation)

The Connections Program is intended for students who need significant modifications in academic, behavior, and/or social programs. Students within the Connections Program rely on Applied Behavior Analysis to support them throughout their day. The team decides upon specific curriculum in the area of Math, which is highly individualized to their student's needs. Connections students may be within the general inclusion classes with instructional assistant support and case manager supervision, but also might spend time in smaller groups receiving academic and social instruction. Teachers and instructional assistants within the Connections Program receive consultation from a BCBA, counselors, and occupational therapists to create individualized programs to suit the student's needs.

Full Year: 6 credits

H9591 Science 9**H9592 Science 10****H9593 Science 11****H9594 Science 12**

(Prerequisite: Special Education Team Recommendation)

The Connections Program is intended for students who need significant modifications in academic, behavior, and/or social programs. Students within the Connections Program rely on Applied Behavior Analysis to support them throughout their day. The team decides upon specific curriculum in the area of Science, which is highly individualized to their student's needs. Connections students may be within the general inclusion classes with instructional assistant support and case manager supervision, but also might spend time in smaller groups receiving academic and social instruction. Teachers and instructional assistants within the Connections Program receive consultation from a BCBA, speech language-pathologist, reading specialist, counselors, and occupational therapists to create individualized programs to suit the student's needs.

Full Year: 6 credits

H9541 History 9**H9542 History 10**

H9543 History 11

H9544 History 12

(Prerequisite: Special Education Team Recommendation)

The Connections Program is intended for students who need significant modifications in academic, behavior, and/or social programs. Students within the Connections Program rely on Applied Behavior Analysis to support them throughout their day. The team decides upon specific curriculum in the area of History, which is highly individualized to their student's needs. Connections students may be within the general inclusion classes with instructional assistant support and case manager supervision, but also might spend time in smaller groups receiving academic and social instruction. Teachers and instructional assistants within the Connections Program receive consultation from a BCBA, speech language-pathologist, reading specialist, counselors, and occupational therapists to create individualized programs to suit the student's needs.

Full Year: 6 credits

Learning Experiences Adult Program (LEAP) H9562

Developmental Learning Program Ages 18 – 22 years

(Prerequisite: Special Education Team Recommendation)

The Learning Experiences Adult Program, LEAP, is designed to support students with disabilities, who are between the ages of 18-22, and are transitioning from school to adult life. Students who attend LEAP often have substantial and/or multiple disabilities. These may include, but are not limited to, autism spectrum disorder, communication, cognitive, physical, sensory, and/or health disabilities. The program is for students who have completed four years of high school and have not received a diploma. They may or may not be eligible to receive a high school diploma in the future. LEAP uses an individualized approach to determine the transition related skills a student requires and plans the students' schedules and activities based on those needs. Schedules are developed to strengthen students' functional life skills.

Students in LEAP work to build skills related to personal finances, personal management, personal hygiene/self-care, household management, social skills, community involvement, health/safety practices, lifelong learning, and career development. The program combines classroom-based activities with community-based experiences to help students meet their goals. The program is individualized to address each student's goals and objectives and prepare them for transition to adult life.

Related Services

- Counseling
- Occupational Therapy
- Physical Therapy
- Reading Services
- Speech Therapy
- Home/Hospital/Tutorial Instructional Support

Counseling

(Prerequisite: Special Education IEP/504/GET Recommendation)

School counseling provides structured, goal-oriented counseling in response to the identified needs of a student, or group of students. It is offered to assist students in accessing their academic classes. When the identified needs of students are related to concerns outside of the school, counselors will make appropriate referrals or assist

families by referring them to appropriate community-based specialists or agencies. School counseling is not intended to be insight-oriented therapy; but is instead designed to focus on having the student function more effectively during the school day in academic, social and or behavioral areas.

Occupational Therapy

(Prerequisite: Special Education IEP/504 Recommendation)

Occupational Therapy seeks to restore a student's independence in activities of daily living, utilizing assessments and specialized activities. Techniques include upper extremity exercises, homemaking and personal care training, and prosthetic training.

Physical Therapy

(Prerequisite: Special Education IEP/504 Recommendation)

Physical Therapy is directed toward the optimal restoration of a student's functional ability to allow access to the curriculum in an educational setting. Treatment techniques include evaluation, muscle strength and range of motion testing, specific exercises and use of modalities, ambulation and prosthetic training, use of assistive devices, and student and family education and support.

Reading Services

(Prerequisite: Special Education IEP Recommendation)

Reading Services are a component of the Special Education Program that focus on the individual decoding and/or comprehension needs of students who have a diagnosed reading disability with related IEP reading goals.

Speech Therapy

(Prerequisite: Special Education IEP/504 Recommendation)

Speech Therapy is a component of the Special Education Program that focuses on the development of appropriate expressive and receptive skills in an educational setting.

Home/Hospital/Tutorial Instructional Support

Students who are confined to home or hospital due to medical reasons are entitled to tutorial support should they be absent for more than fourteen days. A physician's statement of confinement is required.