## Watertown High School

## 2021-2022 PROGRAM OF STUDIES


#### Abstract

The Watertown Public Schools' policy of nondiscrimination extends to students, staff, the general public, and individuals with whom it does business; No person shall be excluded from or discriminated against in admission to a public school of any town or in obtaining the advantages, privileges, and courses of study of such public school on account of race, color, sex, gender identity, religion, national origin, sexual orientation, disability, pregnancy or pregnancy-related condition. If someone has a complaint or feels that they have been discriminated against because of their race, color, sex, gender identity, religion, national origin, sexual orientation, disability, pregnancy or pregnancy-related condition, their complaint should be registered with the Title IX compliance officer.


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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 have 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
Social Studies 3 full year courses including two years of U.S.
History
Math
Science
Fine and Performing Arts/
Career \& Technical Education
Wellness

World Languages

4 full year courses or equivalent

4 full year courses or equivalent
3 full year courses or equivalent
1 full year course or 2 semester courses from either of these areas

1 semester course each year at WHS
Required: Personal Fitness, Health, Project Adventure \& one choice WHS Wellness class

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 school 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 each of your four years at Watertown High School.
$9^{\text {th }}$ and $10^{\text {th }}$ 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/department coordinator. The school 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 |  |
|  | (Algebra II is a |
|  | minimum |
|  | requirement for |
|  |  |
|  | 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 Universities

According to the Massachusetts Department of Higher Education, in order for a student to be eligible for acceptance into the Massachusetts State University 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 <br> (Reading and Math) | ACT Score |
| :---: | :---: | :---: |
| $2.51-2.99$ | 950 | 20 |


| Weighted Average GPA | Combined SAT Score <br> (Reading and Math) | ACT Score |
| :---: | :---: | :---: |
| $2.41-2.5$ | 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 <br> (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 2025

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

## Sophomores: Class of 2024

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 or equivalent, before being promoted to the junior year and assigned to a junior homeroom.

## Juniors: Class of 2023

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 or equivalent before being promoted to the senior year and assigned to a senior homeroom.

## Seniors: Class of 2022

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.

## 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, unleveled 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 at the mid-point 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 |

Exceeds Standards
Meets Standards
Meets Minimum Competencies
Unsatisfactory, Low pass
Failing
Incomplete
Passing
Satisfactory
Unsatisfactory, Low Pass
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 $\mathrm{B}+$, 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 .1 .5 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: <br> 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: services 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 students 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 <br> (Personal \& Social <br> Development) | $\begin{gathered} \text { Goal \# 4 } \\ \text { (Partnerships) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $9^{\text {th }} \text { Grade }$ <br> Guidance Classes | x |  | x |  |
| $10^{\text {th }}$ Grade Guidance Classes | x | x |  |  |
| $11^{\text {th }}$ Grade Guidance Classes | x | x |  |  |
| $12^{\text {th }}$ Grade Guidance Classes | x | x |  |  |
| Individual Senior Meetings | x | x | x |  |
| Individual Junior Meetings | x | x | x |  |
| Senior Future Planning Night | x |  |  | x |
| College \& Career Fair (all grades) | x | x |  | X |
| Financial Aid Night $\left(11^{\text {th }} \& 12^{\text {th }}\right)$ |  | $\mathrm{x}$ |  | x |
| SATAdministration <br> $\left(11^{\text {th }} \& 12^{\text {th }}\right)$ |  | x |  |  |
| PSAT Administration $\left(10^{\text {th }} \& 11^{\text {th }}\right)$ |  | x |  |  |
| AP <br> Administration <br> $\left(10^{\text {th }}-12^{\text {th }}\right)$ |  | x |  |  |
| Career Chats (all grades) | x | x | x | x |
| Mock Interviews (all grades) | x | x | x | x |
| Application Workshops $\left(12^{\text {th }}\right)$ |  | x |  |  |
| College Representative Chats $\left(11^{\text {th }} \& 12^{\text {th }}\right)$ | x | x |  | x |
| College Visits $\left(11^{\text {th }} \& 12^{\text {th }}\right)$ | x | x |  | x |


|  | Goal \#1 (Academic/ Technical Achievement) | Goal \#2 (Workplace Readiness/Career Planning) | Goal \#3 (Personal \& Social Development) | $\begin{gathered} \text { Goal \# } 4 \\ \text { (Partnerships) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Guidance Night: An Evening of Workshops for Students \& Families (all grades) | x | x | x | x |
| Rotary Student Speaker Program $\left(12^{\text {th }}\right)$ |  | x | x | x |
| RYLA and HOBY (Youth Leadership programs; $10^{\text {th }}$ ) | x |  | x | x |
| WCF Internship Program (all grades) | x |  | x | X |
| Scholarship Opportunities $\left(11^{\text {th }} \& 12^{\text {th }}\right)$ |  |  |  | X |
| Naviance $\left(10^{\text {th }}-12^{\text {th }}\right)$ | x | x | x |  |
| Simply Seniors (newsletter) | x | x | x | x |

## Library Media Services

Library media skills are taught to students in grades 9 through 12 during subject specific classes. Lessons developed by the 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.

- $\quad 9^{\text {th }}$ grade students enroll in an unleveled 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:

- Exploring ELA Practices (10)
- 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. Over the four years, students will develop their analytical and critical thinking skills, improve their writing clarity and organization in all genres, explore their creative expression, and effectively collaborate and communicate with teachers and peers.

## Admission to Honors/AP English Classes

In Grades 10-12, students are advised to seek the counsel of teachers, guidance counselors, and family members before deciding to express interest in Honors or AP-level courses. Choice of level involves:

- aptitude as well as achievement (classwork, grades, testing data)
- teacher recommendation (assessing motivation, work ethic, commitment, citizenship, and interest in English)

Students must meet the following requirements (below). Exceptions will be granted on a case-by-case basis and must be approved by the English Coordinator. Those asking for an exception might be asked to provide additional evidence of their capabilities and readiness for the course and/or take part in an interview with the English Coordinator. If the English Coordinator denies the request and the student wishes to appeal, the principal will make the final determination.
o Students in Level-One Course Seeking Admission to Honors

- Grade A- or better in current level-one course*
- Strong recommendation of current English teacher
o 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
o 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
o 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
*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.


## 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. Beginning in June, students may get the summer reading assignment from their teachers or they can find the list on the Watertown High School website. 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 Courses

## H1030 English 9 Introduction to Literature and Academic Writing, Level 1

This course is designed to introduce incoming Freshman to the rigor and expectations of high school English. Students will build their academic skill-set through reading and thinking critically, writing for both analysis and creative expression, and effectively communicating and collaborating with peers and teachers through discussion and presentations.

## Full Year: 6 credits

## 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 mainstream 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

## Sophomore English Courses

## H1210 English 10, Level 1

This course is an introduction to world literature, including but not limited to thematic topics of cultural beliefs, cultural identity, and coming-of-age. Writing assignments will be focused on literary analysis and students will use this genre of writing to demonstrate an ability to analyze what they have read, use supporting evidence, and organize effectively for an appropriate audience. Reading selections will vary based on both teacher and student choice. Through whole-class, book club, and independent reading, students will read a variety of diverse texts and are expected to participate in collaborative academic discussions and presentations. A short research assignment is required.
Full Year: 6 credits

## 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 mainstream 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

## H1200 Honors English 10

This course is designed for students who have excelled in 9th grade Introduction to Literature and Academic Writing: reading comprehension and analysis, writing clarity and organization, grammar/mechanics, vocabulary, presenting, and collaborating. Themes, some texts, and assignments might be in common with the Level 1 course, but students should be prepared for and be able to keep up with a dramatic increase in difficulty, workload, and pace compared to Level 1 courses. In reading, a deeper level of analysis and discussion will be expected; in writing, students must be able to express their ideas in clear, organized, and lengthy pieces of writing in all genres. Through whole-class, book club, and independent reading, students will read a variety of diverse texts and are expected to participate in collaborative academic discussions and presentations. A research project is required.
Full Year: 6 credits

## Junior English Courses

## H1310 English 11

This course, designed to provide students with an in-depth analysis of literature and language, focuses on the question of what it means to be a North American. The class approaches this question through a range of readings, including poetry, memoirs, plays, novels, and a variety of non-fiction works. Through wholeclass, book club, and independent reading, students will read a variety of diverse texts and will be expected to participate in collaborative academic discussions and presentations. A research paper and memoir are required.

## 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 mainstream 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

## H1300 Honors English 11

(Prerequisite: see above)
This course is designed for highly motivated students who exhibit an interest in the analysis of literature and language and can keep up with a greater workload and accelerated pace. Thematic units will explore a historical survey of American literature, focusing on works from a variety of American authors and examining the question: What does the American Experience look like and how does this experience in all its iterations manifest itself in literature? Through whole-class, independent reading, and/or book clubs, students will read a variety of diverse texts and are expected to participate in collaborative academic discussions and presentations. A research paper and summer reading are required.

## H1400 AP Literature and Composition

(Prerequisite: see 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. As a culminating assessment for the course, students conduct research of primary and secondary source materials in support of an original, student-generated argument. The AP exam will be offered for those who wish to increase their chances of college acceptance, earning college credit, and receiving financial aid based on merit. Summer reading and assignments are required.
Full Year: 6 credits

## Senior English Courses (all students select one yearlong course)

## H1665 English 12: Literature and Film

In this 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, identify them in the films viewed in class, write analytical papers, explore screenwriting, and take part in a director study. Students will also write the Senior Thesis Paper that incorporates secondary sources and follows MLA citation guidelines based on a book and film pairing of their choice. Through whole-class, book club, and independent reading, students will read a variety of diverse texts and are expected to participate in collaborative academic discussions and presentations.

## Full Year: 6 Credits

## 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 mainstream 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

## H1560 Honors Humanities

(Prerequisite: see above)
The Honors Humanities course offers students an opportunity to consider various forms of artistic expression and analyze them critically. Students will examine film, literature, visual arts and philosophy, among other mediums, and explore the many ways artists convey meaning. They will also investigate how artistic techniques contribute to the overall significance of a work. Students will read a variety of diverse texts and be expected to participate in collaborative and academic discussions. Summer reading and a senior thesis paper are required.

## Full Year: 6 credits

## H1330 AP Language and Composition

(Prerequisite: see admission section above)
This course is designed to challenge students' critical thinking and writing skills. Its ultimate goals are to develop good habits of mind and cultivate a disciplined and mature writing style. Students engage in a variety of formal writing tasks, exploring multiple forms and genres in writing. Students will read nonfiction almost exclusively. The course progresses over the first two quarters from an introduction to rhetoric and essays of analysis and argument to a study of synthesis in the third quarter. The AP exam will be offered for those who wish to increase their chances of college acceptance, earning college credit, and receiving financial aid based on merit. A senior thesis paper is required for graduation.
Full Year: 6 credits

## English Department Elective Offerings

## H3615 Exploring ELA Practices

This course is designed to help students strengthen their reading, writing, and thinking skills in English, specifically as these skills relate to the ELA MCAS test. The MCAS test includes readings on many different topics and in many different forms (poetry, prose, fiction, non-fiction, plays, etc.). For this reason, students will read, discuss, and write about a variety of works. Enrollment in the course is limited to 10 th grade students who have not yet taken the $10^{\text {th }}$ 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 both digitally and in print for the benefit of the Watertown High School community. This class will produce content for the Raider Times website and print editions. Students will serve 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 include work outside of school. This course is open to all students. No experience is necessary. It 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: $\mathbf{3}$ 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*



GRADE 11
Choose one:

- AP-English Lit/Comp** $\rightarrow$
- Hon. English 11**
- English 11

GRADE 12
Choose one:

- AP-English Lang/Comp**
- Hon. Humanities**
- English 12: Lit \& Film

*This chart represents the typical course sequences taken by students in English language arts, but students' individual paths may differ based on grades, teacher recommendation, or prior coursework.
**Enrollment in the honors/AP sections requires teacher's approval and a grade requirement. See guidelines above.
${ }^{\dagger}$ Enrollment in Exploring ELA Practices will be required if recommended by a teacher.
${ }^{\wedge}$ Transitional English is limited to English Language Learners only. 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
A course with an $\left(^{*}\right)$ denotes a performance requirement.

## Fine, Applied, and Performing Arts Mission Statement:

As Arts Educators, it is our mission to guide and inspire every student to be active participants in the Arts. We do this through the use of a creative and sequenced curriculum that builds skills, provides opportunities for critical and creative thinking, nurtures the human spirit and celebrates our cultural diversity.

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 critique, 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.

## Music Program

## H7610 Chorus*

Students enrolled in Chorus develop strong vocal technique, ensemble skills, music reading skills and performance etiquette. Students will sing a variety of choral repertoire including songs from different cultures and songs in different languages. Choral students will have the opportunity to perform in parts and will be required to participate in performances including: concerts, school assembles and community events. Chorus is open to all WHS students.
Full Year: 6 credits

## H7510 Concert Band*

Band is an instrumental ensemble of students who perform music from a variety of different cultures and styles (rock, classical, contemporary and jazz). During the academic year, Band performs at athletic events, parades, festivals and concerts. Through rehearsal and performance, students develop instrumental music skills to include: technique, sight reading and ensemble skills. Band is designed to progressively develop musicianship through learning in a supportive community of students.
Full Year: 6 credits

## H7550 Orchestra*

Orchestra is an instrumental music ensemble made up of players of: violin, viola, cello and acoustic bass. Students in orchestra will participate in playing music from varying genres and styles. Orchestra students will be guided in elements of traditional music literacy as well as improvisation and non-traditional musicianship. Students in Orchestra will perform at school events, concerts and community functions. Orchestra is designed to progressively develop musicianship in a supportive community of students.
Full Year: 6 credits

## H7590 Percussion Ensemble*

Percussion Ensemble is an instrumental music class made up of players of standard percussion (snare drum, bass drum, cymbals) as well as mallet percussion (xylophone, marimba). Percussion Ensemble students will be guided in elements of standard repertoire, performance technique, music literacy and nontraditional musicianship. Students in Percussion Ensemble will also participate with Band. School based performances and community events will inspire skill building and community.
Full Year: 6 credits

## H7813 Music Technology and Production I

Music Technology and Production I will enable students to develop musical skills by using digital music technology to create and perform original music. The course will focus on the creation of music using modern digital platforms. Recording, editing, mixing, compressing and looping music will be learned as well as developing skill in the creation of beats and tracks for music creation including Hip Hop and Rock and Pop. The course also explores musical structure, ear-training and analysis of musical composition. No previous experience is required.

## Semester Course: $\mathbf{3}$ credits

## H7833 Music Technology and Production II

(Prerequisite: Successful completion of Music Technology and Production I) This course is a continuation of Music Technology and Production I with an emphasis on writing and arranging original compositions. Students will be guided in creating their own musical portfolio and encouraged to collaborate with other student musicians. Students will further develop composition skills using the keyboard/MIDI workstations. Students will explore the history of music technology and how it is used currently.
Semester Course: $\mathbf{3}$ 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: $\mathbf{3}$ 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: $\mathbf{3}$ credits

## H7870 Collaborative Music Ensemble

Collaborative Music Ensemble offers sophomores, juniors and seniors an opportunity to be peer mentors in a music setting. The class will offer a variety of music activities in an inclusion setting. The 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. This class will also focus on improvised music making experiences and sharing the joy of participating in making music.

## 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: $\mathbf{3}$ 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: $\mathbf{3}$ credits

## H7005 Drawing I

(Suggested Prerequisite: Successful completion of Art I - 2D) 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: $\mathbf{3}$ credits

## H7007 Painting I

(Suggested Prerequisite: Successful completion of Art I - 2D) 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: $\mathbf{3}$ 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: $\mathbf{3}$ credits

## H7325 Honors 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

## 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: $\mathbf{3}$ 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: $\mathbf{3}$ credits

## Drama Program

Note: Once successfully completed, a course may not be repeated for credit.

## H7710 Foundations of Drama

This course is open to enthusiastic students of all levels of skill and experience. Throughout this course, students will experience a variety of approaches to drama and theatre. Improvisation, exploring movement, text and vocal work will help students examine the human condition though the world of performance on the stage.

## Semester Course: 3 credits

## H7702 Acting I

(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: $\mathbf{3}$ credits

## H7712 Acting II - One Semester

(Prerequisite: Successful completion of Acting I) 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 different methods to different genres of dramatic text.

## Semester Course: $\mathbf{3}$ credits

## H7704 Technical Theatre - One Semester

(Prerequisite: Successful completion of Foundations of Drama)
This class provides students with a hands on explorative experience in aspects of the theatre not related to performing on stage. Students will focus on set design and building, prop making, painting and basic stage management skills. Students will have the opportunity to help create the set/props for the High School fall play and spring musical as well as for the Middle School musical.
Semester Course: $\mathbf{3}$ credits

## H7706 Theatre for Social Change - One Semester

(Prerequisite: Successful completion of Foundations of Drama)
Theatre for Social Change explores the social and political roles that theatre has played in history. Students will learn about various social movements by exploring the theatre created in response to those movements. Students will explore how political theatre continues to evolve and activate audiences today. Throughout this course students will have the opportunity to examine the social issues that affect the community and world around us. How has theatre and the arts presented these issues to their audience? Where in our history has theatre created change? How would we as artists use our art as a tool for change in the current world we live in?

## Semester Course: $\mathbf{3}$ credits

## H7708 Playwriting

(Prerequisite: Successful completion of Foundations of Drama) Throughout this class, students will explore the elements of dramatic writing for the stage. We will focus on questions related to creating a script for the stage, what is your voice and vision as a writer? What is the story inside your head that needs to be written? We will spend time reading and responding to the work of all class members. Writing activities will be generated through prompts, theatre exercises and observing dramatic structure. By the end of the semester, students will have created a ten minute play.
Semester Course: 3 credits

## H7709 Directing

(Prerequisite: Successful completion of Foundations of Drama).Throughout this course, students will explore the essential tasks of taking a piece of text from script to stage. Students will participate in a variety of activities, including scene study and review of scene performances that will be responded to and reviewed by each other. Students will use this time to work towards a greater understanding of audience perspective. Through group observation and critique, students will complete in-class assignments as well as a final project at the end of the course.
Semester Course: $\mathbf{3}$ credits

## Career and Technical Education

## 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: $\mathbf{3}$ 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: $\mathbf{3}$ 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, collaborative and social skills, emotional skills, critical thinking 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.

## Seal of Biliteracy

In conjunction with the ESL Department, the World Languages Department offers the Seal of Biliteracy to all juniors and seniors. The Seal of Biliteracy is a nationally and state recognized honor which will be awarded to students who prove their bilingualism. Bilingualism is a critical 21 st century skill that recipients can highlight in college and job applications. Students taking a World Language course as well as students who speak a language other than English at home can qualify.

To qualify for the Seal of Biliteracy, students must demonstrate their proficiency in English by achieving a 240/472 on the MCAS or an overall score of a 4.2 and 3.9 composite literacy score on the ACCESS test for English Learners. Students must also achieve an "intermediate-high" proficiency level in speaking, listening, reading, and writing in a second language.

Students must apply via the World Languages department and take a designated assessment prior to graduation to determine their proficiency.

Watertown High School will maintain a record of all students achieving the Seal of Biliteracy. Students' names will be reported to the Department of Elementary and Secondary Education (DESE) annually.

## 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:
o Teacher recommendation based on oral proficiency and motivation for study at an accelerated level.
o 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.
o To move from a non-honors course to an honors or advanced placement course, a student must obtain a grade of A- or better*
o 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.
o 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.
o 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

## H2779 Arabic V

(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

## 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 at an accelerated pace. 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: $\mathbf{6}$ 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

*This chart represents the typical course sequences taken by students in world languages, but students' individual paths may differ based on grades, teacher recommendation, or prior coursework.
**Some students start a language after $9^{\text {th }}$ grade. In these cases, the above grade labels would be replaced with the headings "First Year of Study," Second Year of Study," etc.
$=$ Although advised to continue with the same language throughout a high school career, students are able to change languages.
${ }^{\wedge}$ 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 Languages Coordinator.

## English as a Secondary Language Program

The English as a Secondary Language (ESL) Program is for English Learners (ELs) 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.

## H2970, H2971, and H2972 Newcomer ESL

These courses are provided for students who have little to no English proficiency. The goal of these courses is to provide students with basic proficiency in listening, speaking, reading and writing.

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Full Year: 6 credits
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H2970Adv, H2971Adv, and H2972Adv Advanced Newcomer ESL
These courses are provided for students who have little to no 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: $\mathbf{6}$ credits

## H2910 and H2911 Beginning ESL

These courses are provided for students with a beginning level of English proficiency. These courses expand 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.
Full Year: 6 credits

H2910Adv, H2911Adv Advanced Beginning ESL
These courses are provided for students with a beginning level of English proficiency. They are 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 Intermediate ESL Strategies

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 assessment taking strategies and formulating written and verbal responses.
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.

## H2945 Newcomer ESL U.S. History

This course is for students with English proficiency at the newcomer level. Map skills and beginninglevel social science vocabulary along with essential concepts of U.S. history are introduced.
Full Year: 6 credits

## H2947 Beginning ESL U.S. History I

This course is for students with 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 primary sources, interpreting visual information and essay writing.
Full Year: 6 credits

## H2920 Intermediate ESL U.S. History I

This course is for students with 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 primary sources, interpreting visual information and essay writing.
Full Year: 6 credits

## H2930 ESL U.S. History II

This course is for students with 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 Newcomer ESL Mathematics

Newcomer Mathematics is a course for students with little to beginning levels of 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 or Transitional Algebra
Full Year: 6 credits

## H2290 Transitional ESL Mathematics

This course is provided for students who have 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 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 ESL 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

## ESL Science

## H4115 Newcomer Science

Newcomer science is a course for students with little to no English proficiency. The course emphasizes foundational scientific concepts, vocabulary, and skills. A principal focus of the course is the preparation of students for entry into Foundations of Biology.
Full Year: 6 credits

## H4140 Foundations of Biology

(Prerequisite: Placement from ESL teacher and Science Curriculum Coordinator.)
This course serves as the introductory high school science course for English Learners (ELs) who anticipate needing two years of biology before mastery. It is the first part of a two-year sequence designed to provide English Learners 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

## H4220 Transitional Biology

(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 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

Social Studies


The social studies curriculum is designed to help students achieve the mission of the high school to develop the skills that characterize good citizenship and develop well-informed, engaged, independent thinking, and responsible members of the community. We strive to develop students' listening, speaking, writing, reasoning, and critical thinking skills within a demanding yet supportive academic environment. Our classes embed collaborative learning, an examination of core beliefs, and historical thinking skills to produce civic-minded citizens of the community, the nation, and the world.

## 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 $\mathrm{AP}_{-}$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 reviews the philosophy of democratic government and explores 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 exploration and colonial periods through the Civil War and Westward Expansion to learn how the earliest inhabitants of our nation developed the ideas of natural rights and democratic representation to craft a new paradigm of government and a new philosophy of human rights. That model is developed through the country's first century to the emergence of a global American presence at the dawn of the 20th Century. Also, students will have the choice of continuing their middle school Civics Action Project or adopting another project to fulfill the state's high school project requirement. This class will also focus on developing students' reading, writing, collaborative, and historical thinking skills and providing individual support to assist students in becoming better historians and more effective communicators.
Full Year: 6 credits

## H5020 Honors United States History I

(Prerequisite: See Criteria for admission)
Foundations of America: The ninth grade course reviews the philosophy of democratic government and explores 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 exploration and colonial periods through the Civil War and Westward Expansion to learn how the earliest inhabitants of our nation developed the ideas of natural rights and democratic representation to craft a new paradigm of government and a new philosophy of human rights. That model is developed through the country's first century to the emergence of a global American presence at the dawn of the 20th Century. Also, students will have the choice of continuing their middle school Civics Action Project or adopting another projects to fulfill the state's high school project requirement. Students admitted to the honors level class are expected to possess good reading, writing, and collaborative skills, 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 the beginning of a global American presence to modern times (1893 to the 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' reading, writing, organizational and historical thinking skills and providing individual support to assist students in becoming better historians 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 the beginning of a global American presence, 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 both 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 to develop strong thesis-based essays. 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: $\mathbf{6}$ 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' reading, writing, collaboration, and historical thinking skills and providing individual support to assist students in becoming better historians 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. This course will not fulfill the graduation requirement for Social Studies unless paired with another Social Studies semester elective.
Semester Course: $\mathbf{3}$ credits

## H5900 Military History (Grades 11, 12)

Students in this course will examine the role of the military and conflict in both the historical and modern world. Students will research and analyze the strategic, technological, cultural, economic, and political influence of warfare and the role of technology in military history. Students will be required to demonstrate an understanding of basic military historiography and the difference between strategic and tactical military planning. The course will also present primary and secondary source information for analysis and students will be required to research and write about appropriate historical topics as well as critique various forms of popular history. This course will not fulfill the graduation requirement for Social Studies unless paired with another Social Studies semester elective.
Semester Course: $\mathbf{3}$ credits

## H5902 The Holocaust and World Genocides (Grades 11, 12)

This semester course will look at the history of the Nazi Holocaust during World War II but also look at examples of genocides in other parts of the world in both historical and contemporary examples. The use
of primary and secondary sources such as monographs, novels, music, photographs, news reports, and scholarly papers will anchor students' studies. Through these sources, students will learn the processes involved in creating a climate conducive to "ethnic cleansing", mass killings, and other atrocities of violence against their fellow humans by looking at the psychological and moral climates created by the perpetrators. This course will not fulfill the graduation requirement for Social Studies unless paired with another Social Studies semester elective

## Semester Course: $\mathbf{3}$ 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

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

| Social Studies Sequence Chart*^+ |  |  |  |
| :---: | :---: | :---: | :---: |
| GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| - US History I | - US History II | Choose one or more: <br> - World History <br> - Psychology^ ${ }^{\wedge}$ <br> - Contemporary World <br> - Military History <br> - Genocide \& Holocaust | Choose one or more: <br> - Psychology <br> - Contemporary World <br> - Civics <br> - Military History <br> - Genocide \& Holocaust |
| - Hon. US History II | - Hon. US History II | Choose one or more: <br> - Hon. World History <br> - Hon. Psychology^ <br> - Hon. American Legal ${ }^{\wedge}$ <br> - Contemporary World <br> - Military History <br> - Genocide \& Holocaust | Choose one or more: <br> - Hon. American Legal <br> - Hon. Psychology <br> - Hon. American Legal <br> - Contemporary World <br> - Military History <br> - Genocide \& Holocaust |
| *This chart represents the taken by students in soc individual paths may differ recommendation, or pri | - AP US History <br> l course sequences s, but students' on grades, teacher work. | Choose one or more: <br> - AP European History <br> - Contemporary World <br> - Military History <br> - Genocide \& Holocaust | Choose one or more: <br> - AP Psychology+ <br> - Contemporary World <br> - Civics <br> - Military History <br> - Genocide \& Holocaust |

${ }^{\wedge}$ These courses are available to juniors on a spaceavailable basis.

+ AP Psychology is limited to 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. Students will regularly collaborate with peers in their investigative pursuits. 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 TI30XS 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.

## Grades 9 and Grade 10: ALGEBRA \& GEOMETRY

## 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

## 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

## H3315 Algebra II A

## ALGEBRA II

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

## 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

## H3300 Honors Algebra II

(Prerequisites: Teacher recommendation and either: completion of Honors Geometry with a grade of Bor 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

## ADVANCED COURSES (BEYOND ALGEBRA II)

## 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

## 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

## H3400 Honors Precalculus

(Prerequisites: Teacher recommendation and either: completion of Algebra II (Honors) with a grade of Bor 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

## STATISTICS

## 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

## CALCULUS

## 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

## 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

## ELECTIVES

## 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

## 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: $\mathbf{3}$ 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 objectoriented 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.



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 Computer 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.

[^0]Career and Technical Education


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 fastchanging society. Students participate in authentic, challenging projects that involve collaboration, technology, creativity, critical thinking, 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.

WHS offers two ways to experience Career and Technical Education:
1.) Vocational/Technical dedicated pathways (also referred to as Chapter 74 Programs) OR
2.) Electives in a traditional high school schedule

## Vocational/Technical Dedicated Pathways

Engineering Technology V/T Pathway (as of September 2020) open to Sophomores Medical Assisting V/T Pathway (beginning September 2022) open to Sophomores

Entrance into a Vocational/Technical Pathway is a three-year commitment that will provide the student with an endorsement on their high school transcript. Each will be run as a cohort program with a limited number of seats. Students begin a Vocational/Technical Pathway in their sophomore year with specified coursework in each of the last three years of high school that results in a reduction of the number of elective slots in their schedule. Massachusetts four-year state colleges and universities waive the twoyear foreign language entrance requirement for Vocational/Technical students.

## Vocational/Technical (Chapter 74) Programs

Chapter 74-approved vocational technical education programs are programs that meet the definition of vocational technical education contained in Massachusetts General Law Chapter 74. Districts apply for program approval to DESE's Office for College, Career, and Technical Education (OCCTE) pursuant to

Chapter 74 and the Vocational Technical Education regulations. Note that all Chapter 74-approved vocational technical education programs meet the Perkins Act definition of career and technical education. Chapter 74 programs are considered by the department to be high quality college and career pathways.

Any freshman who is interested in this three-year program commitment that begins in sophomore year should complete an application (available in guidance) that must include a parent or guardian signature. The Engineering Technology course load will be the equivalent of 2 full-year courses in sophomore year and 3 full-year courses in both junior and senior years.

The capacity of this program is 20 students beginning in sophomore year. In the event that more sophomores apply than are able to be accommodated in the program, students will be selected randomly using a lottery and a waiting list will be created.

The curriculum for the V/T Engineering Technology program is aligned with the Massachusetts Department of Elementary and Secondary Education Vocational Technical Education Framework for Engineering Technology in the Manufacturing, Engineering and Technology Services Occupational Cluster.

## Engineering Technology (Grades 10-12)

This program will use the cohort model with up to 20 students per year. The curriculum for this three-year Chapter 74 CTE program of study is in partnership with Project Lead the Way (PLTW), a nationwide, non-profit organization dedicated to providing students with transformative classroom experiences. Each PLTW Engineering course engages students in interdisciplinary activities like working with a client to design a home, programming electronic devices or robotic arms, or exploring algae as a biofuel source. These activities not only build knowledge and skills in engineering, but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance. The descriptions of each of the courses can be found in the Career and Technical Education electives section of this document.

H6420 \& H6421 Engineering Technology I (Sophomores Only): This consists of two Project Lead the Way (PLTW) units of study: Introduction to Engineering Design (IED) and Principles of Engineering (POE). The descriptions of these courses can be found in Career and Technical Education Engineering Electives.
Equivalent of 2 Full Year Courses: $\mathbf{1 2}$ credits
H6422 Engineering Technology II (Pathway Juniors only): This course consists of three Project Lead the Way (PLTW) units of study: Digital Electronics (DE), Civil Engineering and Architecture (CEA) and Computer Integrated Manufacturing (CIM). The course description for DE is located in the CTE electives and the description for CEA and CIM can be found below.
Equivalent of 3 Full Year Courses: 18 credits
H6423 Civil Engineering and Architecture - CEA - (Honors-weighted course) Not available as an elective. Available ONLY in the Engineering Technology Pathway Program
In Civil Engineering and Architecture (CEA) students are introduced to important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students will progress from completing structured activities to solving open- ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

Through both individual and collaborative team activities, projects, and problems, students will solve problems as they practice common design and development protocols such as project management and peer review. Students will develop skill in engineering calculations, technical representation and documentation of design solutions according to accepted technical standards, and use of current 3D architectural design and modeling software to represent and communicate solutions.
NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.
Full Year: 6 credits

## H6422 Computer Integrated Manufacturing - CIM - (Honors-weighted course)

Not available as an elective. Available ONLY in the Engineering Technology Pathway Program
Manufactured items are part of everyday life, yet few people understand the excitement and innovation that is used to transform ideas into products. This course provides an opportunity for students to recognize many of the exciting career opportunities in the manufacturing industry.

Computer Integrated Manufacturing deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. CAM transforms a digital design into a program that a Computer Numerical Controlled (CNC) mill uses to transform a block of raw material into a product designed by a student. Students learn and apply concepts related to integrating robotic systems such as Automated Guided Vehicles (AGV) and robotic arms into manufacturing systems.

| Vocational/Technical (Chapter 74 Cohort Model) |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Grade 10 | Grade 11 | Grade 12 |
| Engineering Technology | H6420 \& H6421 <br> Engineering <br> Technology I (2 <br> courses) | H6422 Engineering <br> Technology II (3 <br> courses) | H6423 Engineering <br> Technology III (3 <br> courses) |

Throughout the course students learn about manufacturing processes and systems. This course culminates with a capstone project where students design, build, program, and present a manufacturing system model capable of creating a product.
NOTE: Students may purchase college credit for this course with an eligible score on the End of Course exam.
Full Year: 6 credits

H6423 Engineering Technology III (not yet available): This course consists of two Project Lead the Way (PLTW) units of study and 2 one-semester WHS courses: Engineering Design and Development (EDD), Environmental Sustainability (ES), Introduction to Robotics, and Entrepreneurship/Business. The descriptions for EDD and Introduction to Robotics can be found in Career and Technical Education Engineering. The description of ES can be found at pltw.org. The Entrepreneurship/Business course is currently under development.
Equivalent of 2 Full Year and 2 Semester Courses: 18 credits

Below is a side-by-side comparison of the course options for a traditional student vs. a student in a Vocational/Technical Pathway for Sophomore, Junior and Senior years:

| Traditional |  |  | Engineering Technology Pathway |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | FY/Sem | Credits | Course | FY/Sem | Credits |
|  |  |  |  |  |  |
| Grade 10 |  |  | Grade 10 |  |  |
| ELA | FY | 6 | ELA | FY | 6 |
| Math | FY | 6 | Math | FY | 6 |
| Social Studies | FY | 6 | Social Studies | FY | 6 |
| Science | FY | 6 | Science | FY | 6 |
| World Language | FY | 6 | Wellness | Sem | 3 |
| Wellness | Sem | 3 | Elective | Sem | 3 |
| Elective | Sem | 3 | Engng Tech I | FY X 2 | 12 |
| Elective | FY/2 Sem | 6 |  |  |  |
|  |  |  |  |  |  |



| Traditional |  |  | Engineering Technology Pathway |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | FY/Sem | Credits | Course | FY/Sem | Credits |
| Grade 11 |  |  | Grade 11 |  |  |
| ELA | FY | 6 | ELA | FY | 6 |
| Math | FY | 6 | Math | FY | 6 |
| Social Studies | FY | 6 | Social Studies | FY | 6 |
| Science | FY | 6 | Wellness | Sem | 3 |
| World Language | FY | 6 | Elective | Sem | 3 |
| Wellness | Sem | 3 | Engng Tech II | FY X 3 | 18 |
| Elective | Sem | 3 |  |  |  |
| Elective | FY/2 Sem | 6 |  |  |  |
| Grade 12 |  |  | Grade 12 |  |  |
| ELA | FY | 6 | ELA | FY | 6 |
| Math | FY | 6 | Math | FY | 6 |
| World Language | FY | 6 | Wellness | Sem | 3 |
| Wellness | Sem | 3 | Elective | Sem | 3 |
| Elective | Sem | 3 | Elective | FY/2 Sem | 6 |
| Elective | FY/2 Sem | 6 | Engng Tech III (includes 6 credits in Science) | FY X 3 | 18 |
| Elective | FY/2 Sem | 6 |  |  |  |
| Elective | FY/2 Sem | 6 |  |  |  |

Our elective program areas include:

- Marketing/Finance (Business)
- Biotechnology
- Culinary Arts
- Early Education and Care (Modern Family Life)
- Construction Technology
- Design and Visual Communications
- Radio and Television Broadcasting
- Engineering


## Electives (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.


## Certifications Offered: EverFi Financial Literacy

## Biotechnology

This program area introduces students to topics related to careers in biotechnology - using technology based on biology - which harnesses cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet.

## 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.
Certifications Offered: ServSafe, CPR

## Construction Technology

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.

## Design and Visual Communications

Through authentic applications these programs prepare 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 Graphic Design and Graphics II/Web Design.

## Certifications Offered: Adobe Photoshop, Adobe Illustrator

## Radio and Television Broadcasting

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

Radio: 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.

## Certifications Offered: Adobe Premiere

## Engineering/Engineering Technology

This program area reflects the goals and standards of the Engineering Technology portion of the Massachusetts Science and Technology/Engineering Curriculum Frameworks and the Massachusetts Vocational Technical Education 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, openended 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 ${ }^{\text {TM }}$ program provides opportunities to develop highly transferable skills in critical thinking, collaboration and problem-solving, which are relevant for any coursework or career.
Project Lead The Way (PLTW) courses are offered with the option for college credit

## Design and Visual Communication

This program area combines the visual arts and technology to communicate ideas.
Certifications Offered: Adobe PhotoShop, Adobe Premier Pro

## Marketing/Finance/Business

## H6352 Accounting I: Proprietorship

Students will learn accounting practice for a service business organized as a proprietorship, including:

- changes that affect the Accounting Equation
- analyzing transactions into debit and credit parts
- journalizing transactions
- posting to a ledger
- cash control systems
- work sheet and adjusting entries for a service business
- financial statements for a proprietorship
- recording closing entries and preparing a post-closing trial balance for a service business.


## Semester Course: $\mathbf{3}$ credits

## H6354 Accounting II: Merchandising Corporation

(Prerequisite: Successful completion of Accounting I: Proprietorship)
Students will learn accounting practice for a merchandising business organized as a corporation, including:

- accounting for purchases and cash payments
- accounting for sales and cash receipts
- accounting for transactions using a general journal
- preparing payroll records
- accounting for payroll and payroll taxes
- accounting for uncollectible accounts receivable
- preparing adjusting entries and a trial balance
- financial statements and closing entries for a corporation
- analysis of financial statements


## Semester Course: $\mathbf{3}$ credits

## H6356 Accounting III: Adjustments and Valuation

(Prerequisite: Successful completion of Accounting II: Merchandising Corporation)
Students will learn adjustments and valuation for a merchandising corporation, including:

- acquiring capital for growth and development
- accounting for plant assets, depreciation, and intangible assets
- accounting for inventory
- accounting for accruals, deferrals, and reversing entries
- end-of-fiscal period work for a corporation
- accounting for partnerships
- recording international and internet sales


## Semester Course: $\mathbf{3}$ 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 other emerging financial literacy programs. Students complete a variety of worksheets and projects.
Semester Course: $\mathbf{3}$ credits

## Culinary Arts

## 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: $\mathbf{3}$ credits

## H6513 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 ${ }^{\circledR}$ 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 (apple quick bread), 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 learning.

## Semester Course: 3 credits

## Early Education and Care

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). During second semester, 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 $21^{\text {st }}$ 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 preschool, 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

## Design and Visual Communications

See the Course Descriptions for the following in Fine, Applied, and Performing Arts.
H7043 Graphic Design
H7033 Graphics II/Web Design
H7243 Photography - Digital Media I
H7253 Photography - Digital Media II

## Radio and Television Broadcasting

H6358 The Game of Life: The Art of Communication
This course will prepare all students for life by growing as communicators. The skills developed in this course will serve all students' futures whether bound for college, career or service. Students will be encouraged to take communications risks in a safe environment so they may venture beyond their comfort zone in pursuit of skills in presentations, small group, interpersonal, interviewing, resume building, networking, and more. Students will gain the confidence to feel equally empowered to speak to or with groups small and large either with prepared or off-the-cuff (extemporaneous) remarks. Never feel shy or unable to find your words again. Build your future by developing confidence and a skill for life communications.
Semester Course: 3 Credits

## H6963 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

## H6893 Studio Television Broadcasting

(Prerequisite: Satisfactory completion of H6963 Digital Video Making)
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 Television News Production

(Prerequisite: Satisfactory completion of H6963 Digital Video Making)
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

NOTE: The Engineering courses are available as electives to all students except those who choose the Engineering Technology Vocational/Technical pathway.

Students completing a full year Project Lead the Way courses (IED, POE, or DE) are eligible to receive college credit (in some cases it must be purchased) for scoring a 6 or above on the End-of-Course (EoC) assessment combined with a grade of $B$ or above in the course.

H6400 Introduction to Engineering Design - IED - (L1-weighted course)
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 - (L1-weighted course)
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 - (Honors-weighted course)
(Prerequisite: Successful completion of H6400 or H6401)
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 - (AP-weighted course)
(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 - (L1-weighted course)
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: $\mathbf{3}$ credits

## Career and Technical Education Sequence Charts for Electives



GRADE 9

- H6400 Intro to Engineering Design/IED
- H6401 Principles of Engineering/POE
- H6411 Intro to Robotics

GRADE 10

- H6400 Intro to Engineering Design/IED
- H6401 Principles of Engineering/POE
- H6402 Digital Electronics/DE
- H6411 Intro to Robotics

GRADE 11/12

- H4180 Intro to Medical Science
- H4230 Intro to Anatomy \& Physiology


## Marketing/Finance/Business

GRADE 9

GRADE 10

- H6352 Accounting I
- H6354 Accounting II
- H6373 Personal Finance/ Economics

GRADE 11/12

- H6352 Accounting I
- H6354 Accounting II
- H6356 Accounting III
- H6373 Personal Finance/ Economics


## Culinary Arts

GRADE 9


- H6503 Culinary Arts I
- H6513 Culinary Arts II
- H6520 Culinary Arts III

GRADE 9


## Radio \& Television Broadcasting

GRADE 9

- H6963 Digital Video Making
- H6884 Television News

Production

- H6963 Digital Video Making

GRADE 10

- H6963 Digital Video Making
- H6983 Radio Broadcasting
- H6884 Television News Production
- H6893 Studio \& Television Broadcasting
- H6358 The Art of Communication

GRADE 11/12

- H6963 Digital Video Making
- H6983 Radio Broadcasting
- H6884 Television News Production
- H6893 Studio \& Television Broadcasting
- H6985 Advanced Radio/Television Broadcast/Production/ Management Capstone
- H6358 The Art of Communication

and improve health and performance. Students participating in this class will have the opportunity to get CPR/first aid certified.


## Semester Course: $\mathbf{3}$ 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, educated, health-related decisions. Topics include: decision making, goal setting, relationships and social health, mental and emotional health, consumer health, nutrition, substance abuse and prevention, body systems, and sexual health. Students will also learn about physical fitness, and practice various types of physical activity each week throughout the semester.
Semester Course: $\mathbf{3}$ 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.
Semester Course: $\mathbf{3}$ 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 techniques 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, but are not limited to, tennis, badminton, volleyball, floor hockey, speed ball/handball, lacrosse, and/or basketball.

## Semester Course: $\mathbf{3}$ 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, but are not limited to, golf, archery, bocce, and/or lawn games.
Semester Course: $\mathbf{3}$ 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 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 and draw upon their creativity while working in a safe and collaborative manner. Students will be asked to think critically about various scientific phenomena and communicate their thoughts, understanding and research in numerous ways. 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 Massachusetts 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 twelfth grade students: B or higher as final grade in Algebra II Honors or current ninth grade Honors math class. A grade of an Aor higher may be substituted for Level 1 Algebra II or current ninth grade Level 1 math class. If a 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 selfmotivated 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

## H4115 Newcomer Science

Newcomer Science is a course for students with little to no English proficiency. The course emphasizes foundational scientific concepts, vocabulary, and skills. A principal focus of the course is the preparation of students for entry into Foundations of Biology

## Full Year: 6 credits

## H4140 Foundations of Biology

(Prerequisite: Placement from ESL teacher and Science Curriculum Coordinator.)
This course serves as the introductory high school science course for English Learners (ELs) 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

## H4220 Transitional Biology

(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 Learners (ELs)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

## 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. 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. 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

## 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: $\mathbf{3}$ 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 inquirybased 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 in which they need to provide their own transportation; therefore, students must commit to being at the field trip site by 7:30 A.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 (H240).

## Semester Course: $\mathbf{3}$ 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. 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: $\mathbf{3}$ 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: $\mathbf{3}$ 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 $\mathrm{B}+$ or above and grade of $\mathrm{B}+$ 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 firstyear 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 Honors Introduction to Physics or grade of A- or above in Physics with Algebra or Introduction to Physics or a 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 introductory equilibrium reactions. 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, and acid-base theories. 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 physics 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 Physics with Algebra or Introduction to Physics or physics teacher approval. Co-requisite: Minimum of Honors Precalculus or math teacher approval.)
This course provides a systematic 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, $\mathrm{B}+$ 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 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, $\mathrm{B}+$ 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 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 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*
GRADE 9

| Choose one: <br> $\bullet$ Hon. Physics <br> $\bullet$ Physics with Algebra $\rightarrow$Choose one: <br> - Hon. Chemistry <br> - Chemistry <br> Choose one: <br> - Physics with Algebra <br> - Introduction to Physics Choose one: <br> $\bullet$ Chemistry <br> $\bullet$ Biology |
| :--- | :--- | :--- |

## Special Education and Student Support Services

The Watertown High School Special Education and Student Services Department's goal is to enable all students to access the general education curriculum in the least restrictive environment. Watertown High School offers a variety of programs to support students. In the general education and special education classrooms, educators work to develop and improve students' learning and innovation skills in conjunction with the core curriculum. The 4Cs - critical thinking, communication, collaboration, and creativity are considered essential 21st-century skills for students to compete and thrive in work and life after high school and thus are included in both general education and special education classes. Eligibility and selection of the appropriate program for each student are made through the TEAM process. For all students deemed eligible and on an Individual Education Program (I.E.P.), instruction is individualized and considers each student's unique learning style. 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 <br> 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

## H9700 PUSH Academic Support <br> H9701 PUSH Academic Support

PUSH is an academic support/respite class that serves the general education population. Students utilize this time to receive academic, emotional, social and other types of support. The Guidance Department, teachers, school-based clinicians and students themselves refer students to this program.

## Semester Course: $\mathbf{3}$ credits

## H9000 Individual Student Enrichment

This course will be assigned to students who did not meet one or more of the graduation requirements in order to graduate in June. This course is for students who need to take an additional course in order to obtain their diploma and who have been assigned a course outside of Watertown High School.

Quarter Course: $\mathbf{0}$ credits (credits will be awarded for the actual course taken)

## 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 and 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

- English 9 H9411
- English 10 H9412
- English 11 H9413
- English 12 H9414

Mathematics

- Algebra I H9470
- Geometry H9471
- Algebra IIA H9472
- Algebra IIB H9473

History

- US History I H9461
- US History II H9462
- Contemporary World Issues H9463
- Students in Grade 12 participate in general curriculum options.


## Science

- Physics H9483
- Biology H9484
- Chemistry H9482
*Language Based Program offerings are full year in length, each worth six (6) credits.
(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 21 st 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: $\mathbf{6}$ 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.

English

- English 9 H9570
- English 10 H9571
- English 11 H9572
- English 12 H9573

Mathematics

- Algebra I H9574
- Geometry H9578
- Algebra IIA H9472
- Algebra IIB H9473

History

- US History I H9574
- US History II H9575
- World Hist. H9576


## Science

- Biology I H9582
- Biology II H9583
*Integrated Services Program offerings are full year in length, each worth six (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 twoyear 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 | ort Program*^ |  |
| :---: | :---: | :---: | :---: |
| English | Mathematics | History | Science |
| - English 9 H9214 <br> - English 10 H 9215 <br> - English 11 H9216 <br> - English 12 H9217 | - Math 9 H9234 - Math 10 H9235 - Math 11 H9236 - Math 12 H9237 | - History 9 H9224 <br> - History 10 H9235 <br> - History 11 H9226 | - Science 9 H9251 - Biology I H9256 - Biology II H9257 |
| *Learning Support Program offerings are full year in length, each worth six (6) credits. |  |  |  |
| ${ }^{\wedge}$ 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, students 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

## H9243 Vocational Resource

(Prerequisite: Special Education Team Recommendation) [s-ped
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. [isped
Full Year: $\mathbf{6}$ credits; Semester Course: $\mathbf{3}$ 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: $\mathbf{3}$ 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 offerings are full year in length, each worth six (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: $\mathbf{3}$ 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 languagepathologist, 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 languagepathologist, 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 languagepathologist, 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.


[^0]:    * Note that electives are not counted toward the number of math courses required for graduation.

