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Guidance Department

617-926-7736

Guidance Secretary	Ms. Pat Conway	Ext. 6601
Guidance Counselor	Dr. Katja Baker	Ext. 6603
Guidance Counselor	Ms. Jaimie Leonard	Ext. 6604
Guidance Counselor	Ms. Linda Dudley	Ext. 6602
Guidance Counselor	Ms. Kim Osborne	Ext. 6605
Director of Guidance and Assessment, K-12	Dr. Barbara Gortych	Ext. 6606
Special Ed. Coordinator	Dr. Arlene Shinker	Ext. 6555

WATERTOWN HIGH SCHOOL MISSION

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

Graduation Requirements

All students must demonstrate the following competencies.

Reading/Writing/Speaking Skills demonstrated by completion of a written thesis paper, at least six pages in length, in the student's senior English class.

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

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

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

All Students must earn 134 credits

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

English	4 yearlong courses, or equivalent
Social Studies	3 yearlong courses (including two years of U.S. History)
Math	3 yearlong courses, or equivalent
Science	3 yearlong courses, or equivalent
Fine and Performing Arts/ Career & Technical Education	1 yearlong course or 2 semester courses from either of these areas
Physical Education	3 semester courses
Wellness	1 semester course in Grade 9
Foreign Languages	4 yearlong courses, strongly recommended

In addition, students must pass the Massachusetts Comprehensive Assessment System (MCAS) in both Mathematics, English Language Arts and Science with a score of 240 or higher in each

Accreditation Statement

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

Minimum Credit Requirement

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

All students must carry at least 36 credits per year although 42 are recommended and must satisfy all graduation requirements (see listing on page 1). 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 or Studio Art, 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 Override Procedure for Course Selection

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

1. Parent 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 calls parent. If placement is not resolved, teacher advises parent to contact department head.
3. Department head and parent converse. If no resolution, parent is advised to contact High School Headmaster.
4. Headmaster writes letter to parent (approval/disapproval/conditions) and copy of letter is sent to guidance counselor/teacher/department head.

The guidance counselor will act as a mediator while the process moves along. The same process will apply for students moving from grade 8 to grade 9.

Choosing Courses for College Admissions

- A. It is important to understand that each college has its own admissions policy. You must check with each college regarding the individual school requirements.
- B. If you plan to go to a four-year college and earn a Bachelor's Degree (BA/BS), we strongly recommend that you consider taking the following courses at Watertown High School:

English	4 years
Foreign Languages	3 years, preferably 4
Mathematics	3 years, preferably 4
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 semiprofessional or technical fields after two years of study. Students in Transfer Programs are prepared to enter their junior year at a four-year college. Entrance into these programs is open to all high school graduates and is more flexible than for four-year schools. Some career programs are quite competitive, however, and require advanced skills and proficiencies. An Associate's Degree is awarded after successful completion of either type of program.

MASSACHUSETTS STATE COLLEGES

According to the Massachusetts Higher Education Coordinating Council, for acceptance into the Massachusetts State College system as a freshman, all students must:

- Take 16 college preparatory high school courses
- Earn at least a “B-minus” to “B” grade point average in college preparatory courses, and
- Take the SAT or ACT test

The academic course requirements for Massachusetts State Colleges are:

- English - 4 courses
- Mathematics- 3 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework)
- Sciences - 3 courses (including 2 courses with laboratory work)
- Social Sciences - 2 courses (including 1 course in US History)
- Foreign Languages - 2 courses (in a single language)
- Electives - 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

Academic Information - Requirements and Eligibility

Credits Required for Promotion and Graduation

Freshmen: Class of 2012

134 credits are required for graduation.

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

Sophomores: Class of 2011

134 credits are required for graduation.

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

Juniors: Class of 2010

134 credits are required for graduation.

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

Seniors: Class of 2009

134 credits are required for graduation.

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

School-to-Career

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

School-to-Career will combine several elements:

- Career awareness, exploration and counseling services
- A series of courses, including all core academic courses, that will focus on specific “career pathways”. Watertown’s School-to-Career Partnership has implemented six career strands:

Financial Services (banking, insurance, investing, accounting, etc.)
Health and Hospitals
Public and Human Services
Food Service/Hospitality
Graphic Design/Web Design
Technology (CAD, Computer Repair/Maintenance, Engineering)

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

School-to-Career is for ALL students.

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

Rank in Class

Rank in Class at Watertown High School is a weighted ranking which includes Advanced Placement, Honors, Level 1 and Level 2 courses in the areas of English, Math, Social Studies, Science, Foreign Language, the Arts, Accounting and Computer Repair. Summer School courses and unlevleed courses are not included in the rank. In order to be ranked students must have attended WHS a minimum of five quarters and have accumulated a minimum of twenty term grades eligible for Rank in Class inclusion. Rank in class is computed at the middle and end of Junior year and at the middle of Senior year. WHS gives students a standard 4.0 - based GPA.

Progress Report

A student receives a mid-term progress report at the 5th week of each marking period. An academic standard of high passing, passing, barely passing or failing 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-	Superior
B+, B, B-	Above Average
C+, C, C-	Average
D+, D, D-	Unsatisfactory, Low pass
F	Failing
INC	Incomplete
EX	Medical (cannot participate due to medical condition)
N	No Grade (grade could not be determined)
S	Satisfactory
U	Unsatisfactory, Low Pass
W	Withdrew (student withdrew from course)

Comments Used

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. Usually, a teacher can correct an incorrect grade at the next marking period. However, a grade correction form may be obtained in the Guidance Office and, when signed by the appropriate teacher and the headmaster, a grade can be changed immediately.

Academic Recognition

High Honor Roll

The student must carry a minimum of 30 credits in subjects producing letter grades, A, B, C, D or S, and receive no grade below an A-, except in one subject, which may be a B+, B or B-. An F in any other course would exclude a student from High Honor Roll.

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-. An F in any other course would exclude a student from Honor Roll.

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

Level Placements

AP (Advanced Placement) Level Courses

Advanced Placement courses will be significantly more demanding than Honor 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.

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

- a. Teacher/coordinator recommendation
- b. A- grade or better in Honors level courses
- c. Standardized test scores
- d. 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:

- a. Teacher/coordinator recommendation
- b. B or better in comparable level courses; A- or better to move from Level 1 to Honors
- c. Standardized test scores
- d. 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. All applications are reviewed by the Curriculum Coordinator/Director who makes recommendations to the Headmaster. The Headmaster determines the number of credits to be earned. In most cases Independent Study courses are not leveled, nor are they included in the student's GPA.

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 (B- average or higher) 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 0.5 academic credits for each period they volunteer. 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 be available in all curriculum areas. Aide courses are graded as pass/fail.

Outside School Programs

9500 Transitions to Work Program

(Prerequisite: Referral from Teacher and/or Guidance Counselor, approval of the program's coordinator and the final approval of the Headmaster)

Watertown High School recognizes and acknowledges the necessity for all students to be given the opportunity to gain awareness and understanding of the world of work while developing appropriate work behaviors, social and life skills. A job coach will be provided to assist student transition and the move toward the world of employment. Identification of the students is based upon referrals from teachers and/or guidance counselors' approval of the program's coordinator, and the final approval by the Headmaster. The community-based employers greatly enhance the experiences of all students to develop skills that will lead to more successful transition into the world of work. This program is incorporated into the student's overall schedule and requires 18 to 20 hours of work weekly to earn them 6 credits per year. Requirements may include weekly meetings with the coordinator or job coach; an in-house internship to prepare the student to transition into the work-force; submission of weekly pay stubs; signing out daily on the sheet provided in room 222; quarterly performance evaluations to assess students' progress; a midterm and year-end graded project; development of a program newsletter as part of the student's evaluation.

Full Year

6 credits

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 required forms submitted.

Guidance Program

Mission Statement*

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

Goal 1: Academic/Technical Achievement:

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

Objective 1: focus on the development of attitudes, knowledge and skills necessary for success in higher education, the workplace and other post-secondary options.

Objective 2: use district/school data to design and deliver counseling programs and services.

Objective 3: are informed by participation on school improvement teams and the development of school improvement plans.

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

Objective 1: assist student in making well-informed postsecondary decisions and plans.

Objective 2: focus on integrating academic, technical and employability skill development.

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

Objective 1: feel supported and safe at school

Objective 2: develop interpersonal skills for positive social interactions

Objective 3: understand their personal strengths and challenges.

Goal 4: Partnerships: *To Strengthen and expand home-school-community partnerships so that student learning is supported and improved, school counselors will:*

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

Objective 2: provide parent education and information opportunities.

Objective 4: act as student advocates and collaborate with teachers, parents and administrators to improve student achievement.

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

SELECTED GUIDANCE PROGRAM ACTIVITIES

Grade 9

October, New student orientation classroom meetings
Use IPASS data for monitoring of student grades, attendance, and discipline
Use MCAS data for remedial class assignment, student success plans
Naviance Learning Style Survey
October, Conversation with the Counselors AM Coffee for freshmen and New Parents
March, Course selection classroom presentations
End of year small group meetings
Individual meetings for academic planning
Completion of Freshman Self-Assessment Form

Grade 10

Use IPASS data for monitoring of student grades, attendance, and discipline
Sophomore Planning and Decision-Making Workshops/ February
Naviance Learning Style Program or IDEAS career interest inventory
Conversation with the Counselors AM Coffee for Sophomore Parents
Course selection classroom presentations
Individual meetings for academic planning
Rotary Leadership Program
Mass Star Leadership Program
Coordinate state-mandated MCAS testing
Completion of Sophomore Self-Assessment Form

Grade 11

Use MCAS data for remedial class assignment, student success plans
Use IPASS data for monitoring of student grades, attendance, and discipline
Junior Guidance Seminars in English classes
Naviance for post high school planning
Naviance “Do What You Are” survey
Preliminary Scholastic Assessment Testing (PSAT) interpretation (small group and individual meetings)
SAT registration information
Job Shadowing
Evening Programs - College Fair, Junior Parents’ Night
College representative visits
Course selection classroom presentations
Individual meetings on academic planning
Individual meetings on college and career planning
Completion of Junior Self-Assessment Form

Grade 12

- Classroom meetings on post high school planning
- Introduction to Naviance College Search
- Senior Parents' Night
- Conversation with the Counselors AM Coffee
- Financial Aid Night
- College Fair
- Individual meetings with all seniors regarding future planning
- Monitoring of senior graduation status
- Transcript and graduation requirement review
- Financial aid and scholarship information
- Scholarship Selection Committee
- Test information
- College representative visits
- Military recruiters
- Graduate Feedback Panel
- Completion of Senior Self-Assessment Form

Other Guidance Tasks

Besides working directly with students, the guidance staff is responsible for processing and disseminating a wide range of information to students, parents, teachers and administrators. Some of the tasks which counselors perform include:

- Organizing, coordinating and counseling related to the course selection process
- Schedule changing and advising
- New student registration, scheduling and record updating
- Providing information to 8th graders related to course selection and planning
- Monitoring of credits and reviewing requirements
- Coordinating test registration and administration for PSAT, SAT, ACT, MCAS
- Coordinating disabilities information for College Board testing
- Reviewing report cards and deficiency notices with students of concern
- Facilitating conferences among students, teachers, parents and others
- Coordinating the Advanced Placement program
- Coordinating Educational Team Conferences (ETCs)
- Disseminating financial aid and scholarship information
- Compiling and distributing the Watertown High School Scholarship Booklet
- Coordinating the Watertown High School Scholarship program
- Reviewing and processing college applications
- Writing student appraisals
- Reviewing and disseminating summer program information
- Reviewing and disseminating information about special opportunity programs
- Teaching students to use the Naviance web based program
- Providing information on military options, ROTC, etc.
- Advising on summer school and makeup policies
- Interpreting test results to students
- Referring to and collaborating with in-school and community resources
- Maintaining the Career and College Resource Center
- Participating on the Student Support Team
- Participating on the Crisis Intervention Team
- Coordinating initial requests for special education evaluations
- Attending Special Education meetings

Interdepartmental Studies (IDS)

IDS has been a part of Watertown High School since 1980. IDS is a WHS student-run organization dedicated to the principles of student democracy, student leadership, and community. IDS members attend Town Meetings, and must maintain good standards of behavior and responsibility. Town Meetings meet for one period monthly, and IDS members are excused from their classes to attend it. At Town Meeting, students discuss and vote on proposals put forth by the membership.

At the beginning of each year, five students and two faculty members are elected by the entire membership of IDS to serve on the Leadership Committee. Their work includes planning and running Town Meetings, resolving issues of fairness, and developing proposals to be voted on by the IDS membership.

The IDS Commons Room (Room 324) is a place where members can study, do homework, eat lunch with each other, and develop new friendships. IDS is open to all students grades 9 - 12. To join IDS students must sign a contract agreeing to attend Town meetings, sign up for an IDS job, obey rules of IDS and WHS, and pay \$5.00 annual dues. The primary rule of IDS is that everyone must respect each other.

"IDS has been the most supportive and influential community that I have ever been a part of. I honestly believe that if I had not taken the opportunity to join IDS, these past four years of high school would have been very difficult for me. It was a smart decision to join, as I was able to meet all kinds of people, get involved in all sorts of activities, and really feel that I was doing something good for this school and community."

Cassandra Katsiasficas, Class of 2004

"I found IDS to be a welcoming and safe place to develop as a high school student and into the person I know I'm going to become.

Leigh Downes, Class of 2004" "As an underclassman, I felt that IDS was a great place to make friends with other underclassmen and upperclassmen as well. The ridge that usually exists between upper and underclassmen did not exist in IDS." Amy McCauley, Class of 2003

Library Media Services

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

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

COURSE OFFERINGS

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

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.

The English curriculum at the secondary level offers a required English course each year, as well as two elective courses, MCAS Preparation (10) and Journalism and Community Media (10, 11, and 12). Programs are developed around a core curriculum that leads the student through a gradual progression of study in literature and language. Learners are presented with opportunities tailored to their needs and abilities that will develop their appreciation and understanding of literature, increase their communication skills and assist in their growth as critical thinkers. A student's skills are strengthened by careful study of sentence structure and style, by examination of theme and form in literature and by constant exploration of language. Through guidance and practice, every student should gain confidence and skill in the art of communication.

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

Admission to Honors/AP English Classes

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

- ***Rising 8th Graders Seeking Admission to 9th-grade Honors***
 - Grade of A- or better in 8th-grade English class*
 - Strong recommendation of teacher of 8th-grade English class
 - Writing sample, assessment, or portfolio as required
 - Evidence of strong proficiency in ELA standards as measured by standardized tests
- ***High-school Students in Level-One Course Seeking Admission to Honors***
 - Grade A- or better in current level-one course*
 - Strong recommendation of current English teacher
 - Writing sample (administered and collected in school) as needed
- ***Students Currently in an Honors Class Seeking to Continue in Honors***
 - Grade of B or better in current Honors English class*
 - Strong recommendation of their Honors English teacher
 - Writing sample (administered and collected in school) as needed
- ***Students Currently in an Honors Class Seeking to Enroll in AP***
 - Grade of A- or better in current English Honors class*
 - Strong recommendation of current Honors English teacher
 - Writing sample (administered and collected in school) as needed

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

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

Summer Reading

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

Freshman English Courses

1000 English 9 (H)

(Prerequisite – See admission section above.)

Students who qualify for this Honors class must have a clear mastery of basic skills as well as of those elements essential to the grade-eight program. The Honors course of study is designed to challenge the able student with an accelerated program that combines the core requirements of the freshman year with enrichment activities in literature and composition. Student writing assignments will focus on six genres: narration, description, persuasion, exposition, analysis and summary. The grade nine Honors program requires students to be self-motivated and capable of working independently. Objective-test data, student classroom performance, and teacher recommendation are the guidelines used to determine eligibility for this course. Possible readings include *Oedipus The King*, *A Separate Peace*, *Romeo and Juliet*, and *Great Expectations*. Summer reading is required.

Full Year

6 credits

1010 English 9 (L1)

English 1010 is the preferred course of study for the majority of our grade-nine students. It exposes them to the four basic genres - the novel, the short story, drama and poetry. Writing assignments will include narration, description, persuasion, exposition, analysis, and summary with a focus on essay composition. Possible readings include *Romeo and Juliet*, *After the First Death*, *To Kill a Mockingbird* and *Oedipus the King*. In addition, students are required to complete independent novels of their choice. Much attention will be given to both oral and written communication skills. Summer reading is required.

Full Year

6 credits

Sophomore English Courses

1200 English 10 (H)

(Prerequisite – See admission section above.)

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

focused on literary analysis will augment the readings and demonstrate learning and understanding. A research project is required. Summer reading is required.

Full Year **6 credits**

1210 English 10 (L1)

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

Full Year **6 credits**

Junior English Courses

1320 AP English 11 (AP Language and Composition)

(Prerequisite – See admission section above.)

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

Full Year **6 credits**

1300 English 11 (H)

(Prerequisite – See admission section above.)

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

Full Year **6 credits**

1310 English 11 (L1)

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

Full Year **6 credits**

7813 Electronic Music

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

1st Semester **3 credits**

7833 Electronic Music II

A continuation of Electronic Music with an emphasis on writing and arranging original compositions. Students will further develop composition skills using the keyboard/MIDI workstations.

2nd Semester **3 credits**

7843 Guitar Workshop I L1

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 **3 credits**

7853 Guitar Workshop II L1

(Prerequisite: Guitar 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 on a multi-track tape recorder. Students will be expected to have their own guitar for home practice and will practice and play during class on a daily basis.

Semester **3 credits**

Drama Program (Not offered in 2011-2012)**7703 Introduction to Theatre L1**

Students are introduced to the basics of acting including theatre games, pantomime, improvisation, scene study, and ensemble work. Scripted scenes from one-act comedies and drama will be performed in class. Students will learn to evaluate their classmates' acting skills in order to improve their own. The class will culminate in a field trip to a theatre production.

Semester **3 credits**

7763 Speech/Communications L1

This class is for you if you are thinking of becoming a television or radio broadcaster, journalist, politician, actor, salesperson, teacher or psychologist. The goal is for you to learn to speak comfortably in front of any audience. Working in a group and with partners you will participate in storytelling, interviewing, stand-up comedy, formal/political speaking, and a panel discussion. Using theatre skills, you will deliver speeches on a variety of topics.

Semester **3 credits**

7753 Technical Theatre L1

This course offers practical training in design, construction, and preparation of sets, lighting, sound, and costuming for the school's dramatic productions. Students will learn stage technology and will design all aspects of the show for scripts that are selected. In addition, selected students will have the opportunity to run the lighting system for other school events.

Semester **3 credits**

7713 Intermediate Theatre II L1

Emphasis in this course will be on an advanced level of character development and the creation of complex and believable characters through integration of physical, vocal, and emotional choices by actors. Character behavior will be developed through recall of emotional experience and observation of the external world. Students will also analyze characteristic features of the theater in different historical periods, cultures and genres. As a final project, students will choose a character from a classic work of drama to analyze, prepare and perform before the class.

Prerequisite for the course is successful completion of Introduction to Theater or permission of the instructor.

Semester **3 credits**

7723 Directing L1

(Prerequisite: successful completion of both Introduction to Theater and Intermediate Theater II, or permission of the instructor)

After an introduction to the techniques and art of directing for the stage, students will select small scenes from original and scripted materials. Students will research the historical period, genre and playwright of chosen scenes, then analyze characters and determine casting requirements. In preparation for public performance of the scenes, student-directors will analyze character motivations and determine how these influence the visual configurations and use of the acting space. Student-directors will then learn and apply the wide varieties of communication of their vision of the scenes to the actors. Students must complete this course before being considered for assignment as director for the student play festival or as assistant director for a main stage production.

Semester **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.

7013 Art I - 2D (Beginning Two-Dimensional Design) L1

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 **3 credits**

7023 Art II - 2D (Advanced Two-Dimensional Design) L1

(Prerequisite: Successful completion of Art I- 2D)

Students will build upon concepts and techniques covered in Art I-2D through experiences with advanced materials and processes. Emphasis will be placed on individual development using a variety of media such as pastel, charcoal, conte crayon and acrylic or oil paint. Class critique as well as the study of Art History will be an important part of this course.

Semester **3 credits**

7113 Art I - 3D (Beginning Three-Dimensional Design) L1

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 **3 credits**

7123 Art II - 3D (Advanced Three- Dimensional Design) L1

(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 **3 credits**

7320 Studio Art L1

(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**

7330 Advanced Placement Studio Art

(Prerequisite: the successful completion of 3 introductory level art courses and permission of the instructor is required)

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

Full Year **6 credits**

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

7243 Photography - Digital Media I

Photography-Digital Media I is a comprehensive course designed to introduce students to the art of analog black & white photography, digital photography, digital photo manipulation with Adobe Photoshop, web networking and the creation of online digital portfolios. Students will learn how to operate a manual 35 mm single-lens reflex & digital SLR camera, develop negatives and prints, color manage, edit and format digital photos and produce high quality inkjet color prints. Students will post their photography to online networks, communicate and collaborate with other student photographers. This program will explore interactive media to design personalized web space for online portfolios. Other topics include photography history, examination of photography artists, stylistic genres and composition.

Semester **3 Credits**

7253 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

3 Credits

SCHOOL-TO-CAREER

1590 Journalism and Community Media L1 (10,11, 12)

Students in this new course will study, create, and publish journalism and public-relations content and digital media for the benefit of the Watertown High School community. Co-taught by a journalism and media-arts teacher, this class will use both classroom- and lab-based settings and will focus on key elements of media law and the ethical production and use of news, feature, sports, and editorial stories; photographs and photo illustrations; non-profit public relations materials; and digital and print media and technology. All students will join together to study law, ethics, and certain other topics, and they will also have the opportunity to self-select targeted production areas like journalistic writing and editorship, photography and graphic communication in journalism and public relations, digital technologies for journalism and community media, and so on. Students in this class will also work in job-specific journalism production teams to publish both print and digital versions of the *Raider Times*, and some students will research and produce digital promotional material for groups in the school community. This course is an excellent choice for writers, artists, leaders, designers, and thinkers who want to learn about journalistic writing and production and/or digital visual communication in journalism and public relations. Students who enroll need to exhibit the maturity, self-direction, leadership skills, and collaborative skills to produce publications and media for the use and benefit of the school community.

Full Year

6 Credits

7043 Design L1

This course will introduce students to the basic concepts of graphic design on the computer. Hands on activities utilizing a variety of traditional graphic media will be combined with computer instruction and lab time. Desktop publishing software and graphic and photographic editing programs will be used to scan, import, generate, process and combine images and text.

To see examples of graphic design and other visual art projects created by WHS students, please visit the following URL: www.watertown.k12.ma.us/dept/fapa/index.html

Graphic Design Definition: The practice or profession of designing print or electronic forms of visual information, as for an advertisement, publication, or website.

Semester

3 Credits

7033/6323 Introduction to Web Design L1

(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 story boards, 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 at <http://www.watertown.k12.ma.us>.

Semester

3 credits

Foreign Languages

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

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

Most colleges give preference to students with extensive preparation in foreign languages from their secondary school. For all students, whether or not college-bound, some knowledge of foreign languages is helpful for work and career. Most colleges and many private colleges now have a foreign language requirement. It is highly recommended that five years of a high school foreign language be taken to prepare for the foreign language requirement at most colleges and to achieve language proficiency.

The method used in all foreign language courses is a four-skills approach. Attention is given to listening, speaking, reading, and writing the foreign language. Of equal importance with the outcomes for linguistic understanding is the emphasis on those outcomes that reflect an understanding of the culture of other people and other lands. When possible, classes are conducted in the target language.

The staff recognizes the benefit of cultural and career oriented guest speakers. Whenever possible, classes will take advantage of the multilingual Boston area through field trips. The Foreign Language Department encourages international travel and attempts periodically to organize trips and student exchanges to countries where the languages taught are spoken.

All students are required to take an open-ended writing assessment at level III of their foreign language study and an assessment of their speaking skill is required at level IV.

A minimum enrollment of ten (10) students is required to offer classes in years II, III, IV, V, and AP.

Foreign Languages Honors Criteria

These courses are designed to provide a more rigorous curriculum and increased research to students who have demonstrated a high level of achievement in studying foreign languages in depth. Eligibility criteria for honors course participation in a foreign languages includes:

- a. Teacher recommendation for oral proficiency and motivation for study at an accelerated level.
- b. For French, Spanish, and Italian **II** Honors: a grade of A- or better in first year, **Level 1** course of the language.
- c. To maintain eligibility to participate in honors courses, 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.

French

2000 French I (L1)

The first year course includes work in all phases of language learning: speaking, reading, writing and listening. Work in both the language and computer laboratories is part of each student's experience. Offering of this course is based on student enrollment of at least twelve (12) students.

Full Year **6 credits**

2050 French II (L1)

2040 French II (H)

(Prerequisite: Completion of French I L1 with at least a C. For honors credit, see criteria above.)

The second year course extends work in all phases of language learning with a greater emphasis on proficiency in reading and writing. Audiovisual materials used in the language laboratory are coordinated with the grammatical structures and reading from the classroom. With the permission of a student's French I teacher, a student may take this course for honors credit.

Full Year **6 credits**

2100 French III (L1)

(Prerequisite: Completion of French II L1 with at least a C)

Basic grammatical structures are reviewed. Reading assignments are given to develop facility in reading. Comprehension of spoken French is fostered by listening to recordings of a variety of native voices in the language laboratory, along with viewing videos and plays. An open-ended writing assessment is given to all students in the Spring.

Full Year **6 credits**

2110 French III (H)

(Prerequisite: See Honors criteria above)

This course is designed for students who have shown exceptional interest and proficiency in French II. There is great emphasis on the four language skills. An open-ended writing assessment is given to all students in the spring. This is the second course in the sequence, which leads to French Advanced Placement in the fifth year.

Full Year **6 credits**

2150 French IV (L1)

(Prerequisite: Completion of French III L1 with at least a C)

This course is designed to help students acquire greater facility in the four basic skills. Readings pertaining to culture, history and geography are presented. Audiovisual materials and the internet are used in the laboratory. An assessment of the students' oral skills is given at mid-year.

Full Year **6 credits**

2140 French IV (H)

(Prerequisite: See Honors criteria above)

Literary selections and films are studied to increase proficiency. Written and oral reports are required. An assessment of the students' oral skills is given at mid-year. The work of the course equips the student with an excellent background to pursue advanced language study in college. This is the third course in the sequence which leads to French Advanced Placement in the fifth year.

Full Year **6 credits**

2180 French V (H)

(Prerequisite: See Honors criteria above)

Students continue to become more proficient in listening, speaking, reading and writing in French in preparation for post high school college level work. Language acquisition at this level will include units on current events, history, culture, fables, legends, poetry, music, art and film. Work in both the language and computer laboratories is part of each student's experience. Most colleges now have a foreign language requirement. Students will be well prepared to take the placement tests to determine their level of ability. Summer reading is required.

Full Year **6 credits**

2190 French AP

Advanced Placement French is a strenuous course of study designed to give self-motivated students a college experience in advanced language study. This course is demanding in the amount and variety of material covered. To be accepted into this AP program, students must have earned a B+ or better in French IV (H) and plan to take the AP French examination offered by the College Board. The Curriculum Coordinator reserves the right to approve or deny admittance into this program. Summer reading is required.

Full Year **6 credits**

Italian**2200 Italian I (L1)**

The first year course includes work in all phases of language learning: listening speaking, reading, and writing. Work in both the foreign language and computer laboratories is a part of each student's experience. Offering of this course is based on student enrollment of at least twelve (12) students.

Full Year **6 credits**

2250 Italian II (L1)

(Prerequisite: Successful completion of Italian I with at least a C)

This course continues the work of Italian I with more reading and writing. Audiovisual materials used the language laboratory are coordinated with the grammatical structures and reading in the classroom.

Full Year **6 credits**

2440 Italian II (H)

(Prerequisite: See Honors criteria above.) This course continues the work of Italian I with more intensive reading and writing. Audiovisual materials used in the language laboratory are coordinated with the grammatical structures and reading in the classroom. This is the first course in the sequence which leads to Italian Advanced Placement in the fifth year.

Full Year **6 credits**

2300 Italian III (L1)

(Prerequisite: Successful completion of Italian II with at least a C)

This course is designed for students who have shown exceptional interest and proficiency in Italian II. Reading assignments are given to develop facility in reading. Comprehension of spoken Italian is fostered by hearing a variety of native voices on audio recordings used in the language laboratory, along with videos and plays. An open-ended writing assessment is given to all students in the spring.

Full Year **6 credits**

2310 Italian III (H)

(Prerequisite: See Honors criteria above)

Basic grammatical structures are reviewed. Reading assignments are given to develop facility in reading. Comprehension of spoken Italian is fostered by hearing a variety of native voices on audio recordings used in the language laboratory, along with videos and plays. An open-ended writing assessment is given to all students in the spring. This is the second course in the sequence, which leads to Italian Advanced Placement in the fifth year.

Full Year **6 credits**

2350 Italian IV (L1)

(Prerequisite: Completion of Italian III (L1) with at least a C)

This course is designed to help students acquire greater facility in the four basic skills. Readings pertaining to culture, history and geography are presented. Audiovisual materials and the internet are used in the laboratory. An assessment of the students' oral skills is given at mid-year.

Full Year **6 credits**

2340 Italian IV (H)

(Prerequisite: See Honors criteria above)

Literary selections and films are studied to increase proficiency. Written and oral reports are required. An assessment of the students' oral skills is given at mid-year. The course equips the student with an excellent background to pursue advanced language study in college. This is the third course in the sequence which leads to Italian Advanced Placement in the fifth year.

Summer reading is required.

Full Year **6 credits**

2380 Italian V (H)

(Prerequisite: See Honors criteria above)

In the Italian V Honors course students continue to become more proficient in listening, speaking, reading and writing in Italian in preparation for post high school college level work. Language acquisition at this level will include units on current events, history, culture, fables, legends, poetry, music, art and film. Work in both the language and computer laboratories is part of each student's experience. Summer reading is required.

Full Year **6 credits**

Spanish**2400 Spanish I (L1)**

The first year course includes work in all phases of language learning: speaking, reading, writing, and listening. Work in both the language and computer laboratories is a part of each student's experience.

Full Year **6 credits**

2450 Spanish II (L1)

(Prerequisite: Successful completion of Spanish I with at least a C)

This course is a continuation of Spanish I with more reading and writing. Audiovisual materials used in the language laboratory are coordinated with the grammatical structures and readings in the classroom.

Full Year **6 credits**

2240 Spanish II (H)

(Prerequisite: See Honors criteria above.)

This course continues the work of Spanish I with more intensive reading and writing. Audiovisual materials used in the language laboratory are coordinated with the grammatical structures and reading in the classroom. This is the first course in the sequence, which leads to Spanish Advanced Placement in the fifth year.

Full Year **6 credits**

2500 Spanish III (L1)

(Prerequisite: Completion of Spanish II with at least a C)

Basic grammatical structures are reviewed. Reading assignments are given to develop facility in reading. Comprehension of spoken Spanish is fostered by a variety of native voices on audio recordings used in the language laboratory along with videos and plays. An open-ended writing assessment is given to all students in the spring.

Full Year **6 credits**

2510 Spanish III (H)

(Prerequisite: See Honors criteria above.)

This course is designed for students who have shown exceptional interest and proficiency in Spanish II. There is great emphasis on fluency in oral presentations and accuracy in the written language. An open-ended writing assessment is given to all students in the spring. This is the first course in the sequence and leads to Spanish Advanced Placement in the fifth year.

Full Year **6 credits**

2540 Spanish IV (L1)

(Prerequisite: Completion of Spanish III (L1) with at least a C)

This course is designed to help students acquire greater facility in the four basic skills. Readings pertaining to culture, history and geography are presented. Audiovisual materials and the internet are used in the laboratory. An assessment of the students' oral skills is given at mid-year.

Full Year **6 credits**

2550 Spanish IV (H)

(Prerequisite: Please see Honors criteria above)

This course continues the accelerated work begun in Spanish III Honors. Literary selections and films are studied to increase proficiency. Written and oral reports are required. An assessment of the students' oral skills is given at mid-year. This is the third course in the sequence which leads to Spanish Advanced Placement in the fifth year. Summer reading is required.

Full Year **6 credits**

2570 Spanish V (L1)

(Prerequisite: Completion of Spanish IV (L1) with at least a C)

This course is designed to continue to help students acquire greater facility in Spanish language and literature. Work in both the language and computer laboratories is part of each student's experience.

Full Year **6 credits**

2580 Spanish V (H)

(Prerequisite: See Honors criteria above.)

In the Spanish V Honors course students continue to become more proficient in listening, speaking, reading and writing in Spanish in preparation for post high school college level work.

Language acquisition at this level will include units on current events, history, culture, fables, legends, poetry, music, art and film. Work in both the language and computer laboratories is part of each student's experience. Summer reading is required.

Full Year **6 credits**

2590 Spanish AP

Advanced Placement Spanish is a strenuous course of study designed to give self-motivated students a college experience in advanced language study. This course is demanding in the amount and variety of material covered. To be accepted into this AP program in the senior year, students must have earned a B+ or better grade in Spanish IV (H) and plan to take the AP Spanish examination offered by the College Board. The Curriculum Director reserves the right to approve or deny admittance into this program. Summer reading is required.

Full Year **6 credits**

Armenian

2780 Armenian Language and Culture I (L1)

Both the Armenian language and civilization are taught in this course. Intensive work covers all phases of language learning: listening, speaking, reading and writing. Students are sent to the computer lab to work on written skills. Offering of this course is based on student enrollment of at least twelve students.

Full Year **6 credits**

2790 Armenian Language and Culture II (L1)

(Prerequisite: Completion of Armenian I with at least a C or an evaluation of the student's ability by the teacher)

This course is a continuation of the Armenian Language and Culture I. Students are expected to present oral reports in history, art and culture. Personal interviews are conducted in order to perpetuate oral history. Work in the computer lab continues to develop the written language.

Full Year **6 credits**

2860 Armenian Language and Culture III (L1)

(Prerequisite: Completion of Armenian II with at least a C or an evaluation of the student's ability by the teacher)

Students become more proficient in listening, speaking, reading and writing in Armenian. They develop a greater understanding of poetry, legends, music, art and history. Work in the computer lab remains an important element of this course.

Full Year **6 credits**

FOREIGN LANGUAGE SEQUENCE CHART FOR GRADES 9 – 12

<u>GRADE 9</u>	<u>GRADE 10</u>	<u>GRADE 11</u>	<u>GRADE 12</u>
Armenian I (L1)	Armenian II (L1)	Armenian III (L1)	
French I (L1)	French II (L1/H) French III (L1) French III (H)	French III (L1/H) French IV (L1) French IV (H)	French IV (L1/H) French V (H) French AP
Italian I (L1) Italian II (L1) Italian II (H) Italian III (L1/H)	Italian II (L1/H) Italian III (L1) Italian III (H) Italian IV (L1/H)	Italian III (L1/H) Italian IV (L1) Italian IV (H) Italian V (H)	Italian IV (L1/H) Italian V (H) Italian V (H) TBA
Spanish I (L1) Spanish II (L1) Spanish II (H) Spanish III (L1) Spanish III (H)	Spanish II (L1/H) Spanish III (L1) Spanish III (H) Spanish IV (L1) Spanish IV (H)	Spanish III (L1/H) Spanish IV (L1) Spanish IV (H) Spanish V (H) Spanish AP	Spanish IV (L1/H) Spanish V (H) Spanish AP TBA TBA

To change from a Level I course to an Honors course, a student must have a grade of A- or better in the preceding year of the language.

English Language Learner Program

The English Language Learner (ELL) Program is provided for students whose first language is other than English and who require assistance in learning the English language. The goal of the ELL Program is to provide students with the skills to function successfully in an English speaking environment. ELL classes develop proficiency in speaking, listening, reading and writing in social and academic settings.

ELL English

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.

2870 Newcomer ELL Full Year 6 credits

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

2910 Beginning ELL Full Year 6 Credits

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

2860 Intermediate ELL MCAS Prep Full Year 6 credits

This course is provided for students with an intermediate level of English proficiency. The course focuses on test taking skills for MCAS, with an emphasis on multiple choice questions, short answer questions and written composition.

2900 Intermediate ELL Full Year 6 Credits

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.

2890 Advanced ELL Full Year 6 Credits

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.

2880 Senior Advanced ELL Full Year 6 Credits

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 are emphasized in the second semester.

History and Social Studies

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

2950 Sheltered Beginning U.S. History

This course is for students of limited English proficiency at the beginning level. The course addresses key historical events in the development of the United States through the 1800s. Map

skills and beginning-level social studies vocabulary along with essential concepts of U.S. history are introduced.

Full Year 6 Credits

2920 Sheltered Intermediate U.S. History I

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

Full Year 6 Credits

2940 Sheltered Advanced U.S. History 1

This course is for students of limited English proficiency at the advanced 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 a textbook, interpreting visual information and essay writing. The students will gain the skills necessary to join a mainstream history classroom at the completion of this course.

Full Year 6 Credits

2930 Sheltered U.S. History II

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

Full Year 6 Credits

ESL Mathematics

2960 Sheltered Mathematics

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

Full Year 6 Credits

Social Studies

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

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

1. To be 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 Level 1 course and must adhere to any other department or course prerequisites.
2.
 - (a) To be considered eligible for admission to an AP course, students must have earned a minimum grade of B for the year from their previous AP-level course or a minimum grade of A- for the year from their previous Honors-level course and must adhere to any other department or course requirements.
 - (b) To be considered for an AP course, students must complete a writing sample as directed by the social studies department. This writing sample will be submitted prior to the end of the course selection period.
3. Students must complete summer reading in honors and advanced placement courses. All assigned reading will be evaluated during the first few weeks of school in September.
4. Exceptions to this policy will be made by the Department Coordinator in conjunction with a student's current Social Studies Department teacher.

5010 United States History I (L1)

Foundations of America: The ninth grade course focuses on the philosophy of democratic government and the development of the modern American governmental system (1215-1868). This year is primarily, but not exclusively, a political history but it does include significant social concepts. Students are brought through European and colonial history from the Magna Carta through the U.S. Constitution and aspects of the Civil War to learn how the leading thinkers of their times seized on the idea of natural rights to craft a new paradigm of government and new philosophy of human rights. That model is developed through the country's first century to its final major change to national supremacy following the Civil War.

Full Year

6 credits

5000 United States History I (H)

(Prerequisite: See Criteria for admission)

Foundations of America: The ninth grade course focuses on the philosophy of democratic government and the development of the modern American governmental system (1215-1868). This year is primarily, but not exclusively, a political history but it does include significant social concepts. Students are brought through European and colonial history from the Magna Carta through the U.S. Constitution and aspects of the Civil War to learn how the leading thinkers of their times seized on the idea of natural rights to craft a new paradigm of government and new philosophy of human rights. That model is developed through the country's first century to its final major change to national supremacy following the Civil War. Students admitted to the honors level class are expected to exhibit good writing skills, high academic standards, and a willingness to go beyond the basic requirements of the US History curriculum.

Full Year **6 credits**

5110 United States History II (L1)

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 antebellum period to modern times (1830-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 (starting in the 1830's) and support and link those events to important world happenings.

Full Year **6 credits**

5100 United States History II (H)

(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 antebellum period to modern times (1830-present). This year 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 (starting in the 1830's) and support and link those events to important world happenings. Students admitted to the honors level class are expected to exhibit good writing skills, high academic standards, and a willingness to go beyond the basic requirement of the US History II curriculum.

Full Year **6 credits**

5300 U.S. History AP

(Prerequisite: See criteria for admission)

The Advanced Placement Program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. 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 materials for their relevance to a given interpretive problem as well as for their reliability. Students will weigh both evidence and researched interpretations as presented in historical scholarship. Only those students who have outstanding academic records will be considered as applicants. 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**

5430 World History (L1)

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.

Full Year **6 credits**

5410 World History (H)

(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.

Full Year **6 credits**

5180 European History AP

(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 have outstanding academic records will be considered as applicants. 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**

5450 Contemporary Global Studies (L1)

(Prerequisite: Successful completion of, or concurrent enrollment in, World History or AP European History.)

This one 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, 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.

One Semester **3 credits**

5360 Economics

This is not your typical economics and finance course. Understand and apply the concepts of basic economics and their effects on the global economy. Learn how the fundamentals of a free

enterprise system influence your personal financial decisions. Gain financial independence, the skills and knowledge needed to take control of your finances and avoid financial trouble in the future.

Full Year **6 credits**

5540 Psychology (L1) (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.

Full Year **6 credits**

5600 Psychology (H) (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.

Full Year **6 credits**

5500 Psychology AP (Seniors Only)

(Prerequisite: See criteria for admission)

The Advanced Placement Program in Psychology is designed to provide students with the analytical skills and factual 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 have outstanding academic records will be considered as applicants. 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**

5840 The American Legal System (L1) (Seniors given first preference)

This year long course will give students a basic understanding of the American legal system. Units will include: Introduction to Law, Criminal Law and Juvenile Justice, Tort Law and Civil Liberties, and Civil Rights. In addition to class discussions and group projects, the course will include guest speakers, mock trials, field trips, debates, and research work. Excellent attendance is expected in this course due to guest speakers and in-class projects.

Full Year **6 credits**

5800 The American Legal System (H) (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.

Full Year **6 credits**

5710 Civics (L1) (Seniors only)

This new 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.

Full Year **6 credits**

5700 Civics (H) (Seniors only)

This new course is designed to introduce a variety of civic topics to students who will be turning 18 years old and want to learn how decisions are made that affect them. Some areas of study include: citizenship, political science, government on the local, state and national levels, democratic beliefs, elections, and community organizations. Each student will interact with a number of out-of-school opportunities, such as Massachusetts Student Government Day, the Close Up Washington Program, and various town-wide governmental activities. Students will complete summer reading, conduct research, and be part of numerous group projects of personal interest in the areas of politics, sociology and current events.

Full Year **6 credits**

5190 Asian History (H) (Seniors given first preference)

(Prerequisite: See Criteria for admission)

This course will focus on the political, cultural and social trends that define east and south Asia. Although the ancient course of Asian historical events will be introduced, particular emphasis will be given to the study of contemporary history in China, Japan, Korea, India and parts of southeast Asia. Guest speakers will address a variety of topics of emerging interest in the 21st century. Each student is expected to engage in critical thinking, expository writing and oral presentation. Essay writing and in-depth research skills will be a primary focus.

Full Year **6 credits**

**2010-2011 Social Studies Sequence Chart
Grades 9 - 12**

<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
	US History AP	European History AP	European History AP Psychology AP
US History I H	US History II H	World History H	Psychology H Am. Legal H Civics H Asian History H
US History I L 1	US History II L 1	World History L1 Economics L 1	Psychology L1 Economics L1

Mathematics

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

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

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

3070 Applied Algebra I (L2)

This is the first 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. A principal focus of the course will be the preparation of the student for the MCAS examination. The follow-up course will be Applied Geometry.

Full Year **6 credits**

3220 Applied Geometry (L2)

This course in plane geometry is the second half of a two-year program. The course focuses on the key topics that provide a strong foundation in the essentials of geometry. However, algebraic concepts from 3070 will be reviewed and reinforced. These concepts will include algebraic applications as they apply to the real world. A principal focus of the course will be the preparation of the student for the MCAS examination.

Full Year **6 credits**

3610 MCAS Preparation (10) (Unleveled)

(Enrollment in the course is limited to Sophomore students)

This course provides a review of fundamental skills and concepts required to pass the MCAS examinations in English and mathematics which are required for graduation. Students will spend equal amounts of course time in mathematics and English preparation.

Full Year **6 credits**

3620 MCAS Preparation - Math Only (Unleveled)

(Enrollment in the course is limited to Sophomore students)

This course is for students who have not passed the Math MCAS in grade 8 but are proficient in MCAS English Language Arts.

Full Year

3 credits

3110 Algebra I (L1)

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**

3200 Geometry (H)

(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**

3210 Geometry (L1)

(Prerequisites: Teacher recommendation and either: successful completion of Algebra I L1 (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**

3300 Algebra II (H)

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

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

Full Year **6 credits**

3310 Algebra II (L1)

(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**

3130 Intermediate Algebra (L2)

(Prerequisite: Successful completion of two years of Applied Algebra/Geometry or the equivalent)

This course will help the student develop proficiency in algebra. It will show students how algebra can be used as a modeling language for real life situations. Students will be constantly using and reviewing their problem solving skills.

Full Year **6 credits**

3400 Pre-Calculus (H)

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

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

Full Year **6 credits**

3410 Pre-Calculus (L1)

(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**

3360 Advanced Algebra with Trigonometry (L1)

(Prerequisite: Successful completion of Algebra II)

This course is designed to expand on work from Algebra II and prepare students to enter pre-calculus. 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**

3450 Topics in Statistics (L1)

(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 pre-calculus or who have taken pre-calculus 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**

3460 Statistics (H)

(Prerequisite: Successful completion of Pre-Calculus with a grade of B or better)

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 (AP) 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**

3500 Calculus AP

(Prerequisite: Completion of Pre-Calculus Honors 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**

3530 Calculus AP BC

(Prerequisite: Completion of Pre-Calculus Honors 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. There will be an extensive summer assignment that must be complete by the first day of class, and students are required to purchase a TI-83+ or TI-84+ calculator.

Full Year **6 credits**

3250 Calculus (H)

(Prerequisite: Teacher recommendation and completion of Pre-Calculus 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**

3600 Statistics AP

(Prerequisites: Teacher recommendation, excellent writing skills, and either: completion of Pre-Calculus 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. 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 TI-83+ or TI-84+ calculator.

Full Year **6 credits**

H3630 College Algebra

This course is a review and enrichment of topics that will be helpful to you as you leave Watertown high school. Topics include linear, quadratic and exponential functions, Geometric applications, function/polynomial operations and many more high school mathematical topics. Some time will be spent in the first quarter reviewing SAT questions and strategies for the October and November tests. Throughout the year you will work on problem solving skills and you will be given many open ended question options. It is the goal at the end of this course that you will be independent, creative problem solvers ready to face any math course the future may have for you.

Full Year **6 credits**

6350 Accounting I (cross-listed with Career & Technical Education)

Full Year **6 credits**

6351 Accounting II (cross-listed with Career & Technical Education)

Full Year **6 credits**

6393 Personal Finance (cross-listed with Career & Technical Education)

Semester **3 credits**

MATHEMATICS SEQUENCE CHARTS GRADES 9 - 12

The following chart represents four possible courses for the 9th grade year and the likely courses that will follow from grades 10-12. The curriculum structure reflects the importance of a solid foundation in Algebra prior to beginning Geometry. 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.

	Sequence One	Sequence Two	Sequence Three	Sequence Four
Grade 9	Applied Algebra I L2	Algebra I LI	Geometry I	Geometry H
Grade 10	Applied Geometry L2	Geometry I	Algebra II LI	Algebra II H
Grade 11	Intermediate Algebra	Algebra II LI	Pre-calculus LI or Advanced Algebra with Trigonometry	Pre-calculus H or Statistics H/AP
Grade 12	Algebra II LI or Stats LI or Advanced Algebra with Trigonometry or College Algebra or Accounting I and/or Personal Finance	Pre-calculus L1 or Statistics LI/H or Advanced Algebra with Trigonometry or Accounting I and/or Personal Finance	Calculus H/AP or Pre-calculus L1 or Statistics LI/H/AP or Accounting I/II	Calculus H/AP or Statistics H/AP

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 **3610 MCAS Prep course** is taken as a second Math or Math/English class during 10th grade. It does not replace any course in the sequence of required classes.

Accounting I and II, and Personal Finance all count for math credit and may be taken in conjunction with other math courses or by themselves once you have completed either Algebra II or Intermediate Algebra.

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 on attending a four-year college following high school are strongly encouraged to take Pre-Calculus.

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

Career And Technical Education

Our program areas of Business Education, Family and Consumer Science, Industrial Technology, and Film and Video Production give students the meaningful, challenging educational experiences to gain the knowledge, skills, competencies, self-confidence and self-esteem to be successful in today's fast-changing society. Students participate in authentic, challenging projects that involve collaboration, technology, creativity, problem-solving, high-level communication, and other career specific skills.

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

ALL CAREER AND TECHNICAL EDUCATION COURSES ARE OPEN TO ALL STUDENTS.

BUSINESS AND OFFICE EDUCATION/TECHNOLOGY

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

FAMILY AND CONSUMER SCIENCES

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 Foods and Nutrition, students will learn how to make healthy, informed food choices using the U.S.D.A. Food Guide Pyramid. Food Services/Hospitality enables students to explain factors associated with a safe food supply (food handling, production, food storage, and preparation techniques). In the Introduction to Child Development and Parenting course, students will be able to describe proper prenatal care and identify types of birth defects while the Advanced Child Development and Parenting course gives students valuable internship experience in pre-schools.

INDUSTRIAL TECHNOLOGY

Be proactive! Be prepared! Take courses within the Industrial Technology area. Through authentic applications this program prepares students for college and/or further advanced training in technical fields. Courses stress use of the design process and the application of problem solving skills in the context of each area's real life situations.

FILM AND VIDEO PRODUCTION

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

6393 Personal Finance (L1)

(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.

Semester Course

3 credits

FAMILY AND CONSUMER SCIENCES

Courses in Foods & Nutrition and Food Services/Hospitality, as well as beginning and advanced courses in Child Development offered in the program area of Family and Consumer Sciences support the standards of the Health/Family and Consumer Sciences Curriculum Frameworks and seek to help all students make healthy, informed decisions about food, nutrition, sexuality and parenting—all skills for active and healthy lifestyles.

6503 Foods and Nutrition I

This course is designed to teach the basics of food preparation, with nutrition as the underlying theme. Using the food guide pyramid and its three major concepts of balance, variety, and moderation, students will address real-life issues regarding food intake and the nutritional value of food they prepare. They will learn the components of a nutrition label and how to use the information from nutrition labels to make informed food choice decisions. Readings, student powerpoint presentations, worksheets from the *Food for Today* textbook, as well as the use of the MyPyramid.gov website, will be an integral part of the course. Foods to be prepared include quick breads (muffins), yeast breads (pizza and whole wheat bread), as well as low-fat cookies (chocolate chip) and pastries (apple turnovers). *This course serves as a basis for further study in the Food Services/Hospitality courses (6513/6520).*

Semester Course

3 credits

SCHOOL-TO-CAREER

Food Services/Hospitality

(Limited to Sophomores, Juniors and Seniors)

(Prerequisite: Satisfactory completion of 6503 Foods and Nutrition I)

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. Readings, student power point presentations and food demonstrations, worksheets from the *Culinary Essentials* textbook, as well as the use of the websites cdc.gov, fightbac.org, MealsForYou.com, and MyPyramid.gov, will be an integral part of this course. Foods to be prepared include yeast breads, pasta, soups, quick breads, and pies (savory and sweet).

As safety and production allow, the Watertown High School cafeteria will be used as a supplemental learning environment. Guest speakers, as well as field trips to local restaurants, may be arranged to supplement classroom assignments. Where appropriate, students will be

given the opportunity to participate in internships to master knowledge, skills, and attitudes, which will help them find employment.

6513 Semester 3 credits

6520 Full Year 6 credits

6600 Introduction to Child Development and Parenting

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 pre-school age. Parenting is a major topic of study. Mid-year, 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 times, child abuse, the battering of women, addiction, divorce and AIDS will also be studied. Short research paper topics include child development theorists and birth defects. In the spring, each student will be given the opportunity to bring a child to a Piaget workshop at WHS. Guest speakers, as well as a field trip to Children’s Hospital, may be arranged to supplement classroom assignments. Guest speakers may include an obstetrics nurse, a certified nurse midwife, and/or an adoption advisor.

This course serves as a basis for further study in the Advanced Child Development and Parenting course (6610).

Full Year 6 credits

SCHOOL-TO-CAREER

6610 Advanced Child Development and Parenting

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

(Prerequisite: Satisfactory completion of 6600 Introduction to Child Development and Parenting)

Designed for students interested in going into the career fields of teaching, social work, nursing, medicine and counseling, this course gives students firsthand experience working with children as teacher assistants in elementary or preschool classrooms. Responsibilities include tutoring individual children, working with small groups and conducting lessons in reading, math, art, science, social studies and foods.

Students can choose from a variety of areas for their placements as teacher assistants. These areas include: preschools; elementary school grades; resource rooms (involving work with individual children who need extra attention and help); and special education classes. In their placements, students will complete 80 hours, which may be used toward the Department of Early Education and Child Care requirements for Infant/Toddler or Early Childhood certification. Class discussions will focus on students’ observations and their work with children. Readings and activities from *Working with Young Children* will help students build from their experiences.

Full Year 12 credits

INDUSTRIAL 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.

6223 Woodworking

This course will provide instruction for the proper use of tools and machinery while emphasizing planning, design and safety. The use and care of hand and power tools as well as computers will be introduced as a valuable tool in the design of projects. The industry today has undergone many changes, and the student will have training that will allow him/her to be competitive in this employment field.

Semester **3 credits**

6250 Advanced Woodworking and Technology

(Prerequisite: Successful completion of Woodworking 6223 or equivalent.)

This course is designed for the student who has successfully completed one year of skill training in high school woodworking. Activities will include the construction of period furniture and cabinet making using a CAD application to develop and design the project. On-line availability will allow the student to research furniture design; figure the costs of materials with current prices found on the Internet, and utilize technological changes to enhance their knowledge in this skill area. Safe work habits continue to be an important aspect of this program.

(Offering of this course is based on student enrollment.)

Full Year **6 credits**

6013 SolidWorks—3D Design Concepts and Techniques

This course will teach students how to create engineering drawings of parts and assemblies using SolidWorks mechanical design automation software. This is a process-based training course that emphasizes the processes and procedures students follow to complete a particular drawing tasks by initializing case studies to illustrate those process in real-world activities.

Semester **3 credits**

SCHOOL-TO-CAREER

6023 CAD Applications

(Prerequisite: Successful completion of course #6013 SolidWorks—3D Design Concepts and Techniques)

This course will enable students to experience real-world career activities performed by architects, engineers, and related technical drafting professionals. The problem solving activities include such topics as geometric shapes and construction, views of objects, working drawings, developments and intersections, architectural and structural calculations. These activities will enable students to decide if a career path related to Engineering and Architecture would be of interest. All problem solving activities related to the above content area will be created using SolidWorks CAD application software.

Semester Course **3 credits**

6030 Advanced CAD Applications (Computer Aided Design)

(Prerequisite: Successful completion of course #6023)

This course provides an excellent opportunity for students to prepare themselves for a future in Engineering, Architecture, Biotechnology, and many other high tech areas. Students produce realistic, accurate two- and three-dimensional drawings and full-scale color models. Students learn how to display drawings and how to communicate with SolidWorks CAD software through the keyboard, pointer, mouse, and menus. Students move sequentially from setting up SolidWorks CAD to building and editing drawings as well as covering surface meshes, solid molding, and rendering for photo realistic productions.

Full Year **6 credits**

6453 Maintaining Your Computer

No knowledge of computers needed. Do you own a computer at home? Will you need a computer after graduation from Watertown High School? For college or work? Then this introductory course in maintaining your computer system will be of interest to you. Learn the commonsense steps you can take to keep preventable performance problems at bay. Protect your PC from spikes and surges, create emergency backup diskettes, safeguard your system from viruses and avoid the environmental conditions that can wreak havoc on your PC.

Semester Course **3 credits**

SCHOOL-TO-CAREER

6460 Computer Repair and Upgrade (L1)

This course will introduce students to the knowledge and skills needed in the repair and operation of a computer system. The basic function, hardware, software, use of operating system and a brief history of the computer industry will be covered. Students will investigate (in a hands-on approach) the how to's of power supplies, microprocessors, memory, storage and hard drives. Extensive use of Microsoft operating systems and the set up of application software will be implemented throughout the course. The student will learn the process of diagnosing, maintaining and troubleshooting hardware and software while learning computer architecture for design and upgrade solutions. Quality computer technicians are vital to the private sector, and many jobs will be available in the future. This course will provide the basis for further study and training toward A+ Certification, the computer industry's nationally recognized testing program that certifies the competency of service technicians.

Full Year **6 credits**

6470 Advanced Computer Repair (L1)

(Prerequisite: Successful completion of course #6460)

This is an excellent opportunity for students to prepare themselves for a future in engineering, computer science, and industrial technology certification programs. Learn how to install, configure, administer and troubleshoot operating systems.

Each student will optimize the network computer systems for maximum performance, protection from internal and external attacks, configure networks and perform security techniques on the systems. Wireless networking will also be explored.

Full Year **6 credits**

6420 Engineering by Design (H) **(Recommended for Grades 11 and 12)**

Engineering by Design is a full-year, project-based course designed to introduce students to the world of technology and engineering as a first step in becoming technologically literate citizens. Additionally, the course will help students answer the question: "Why should I study math,

science and engineering if I don't plan on a technical career?" 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.

Full Year **6 credits**

7003/6313 Introduction to Computer Graphics L1

This course will introduce students to the basic concepts of graphic design on the computer. Hands on activities utilizing a variety of traditional graphic media will be combined with computer instruction and lab time. Desktop publishing software and graphic and photographic editing programs will be used to scan, import, generate, process and combine images and text.

To see examples of graphic design and other visual art projects created by WHS students, please visit the following URL: www.watertown.k12.ma.us/dept/fapa/index.html

Graphic Design Definition: The practice or profession of designing print or electronic forms of visual information, as for an advertisement, publication, or website.

Semester **3 credits**

6323/7033 Introduction to Web Design L1

(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 story boards, 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 at <http://www.watertown.k12.ma.us>.

Semester **3 credits**

FILM AND VIDEO PRODUCTION

6993 Introduction to Video Production (L1)

Are you addicted to Youtube? Do you spend hours watching and wondering how videos are made? Now is your opportunity to learn! In this course students will gain hands-on production experience using digital video. We will focus on acting, script writing, directing the camera, lighting for video, editing, and sound recording. We will also examine video production techniques through a mixture of screenings, discussions and hands-on exercises.

Semester **3 credits**

6980 Advanced Multimedia Production & Communication (L1)

(Prerequisite: Introduction to Video Production 6923)

This course provides students with a more in-depth study of multimedia and communications with an emphasis on technical skills in sound design, storyboarding, composition, lighting, and script writing. During the course students learn the standard stages of video production while developing their own final projects and portfolios.

Full Year **6 credits**

6963 Introduction to Documentary Video

Are you passionate about sports? Dance? Computers? Have a story to tell? In this course students will make a documentary video by working in teams, each student participating in one of many aspects of the production. Students will learn how to set up and record interviews, how to shoot sequences, and how to edit their footage. The final projects will be shown online and on the Watertown channel. We will also examine documentary production techniques through a mixture of screenings, discussion, and hands-on exercises.

Semester 3 credits

6883 Introduction to Television and News Production

Ever dream about being a sportscaster? How about a news anchor man/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 for the whole school and town to see!

Semester 3 credits

Video Yearbook

Students will be introduced to basic camera and editing techniques that will allow them to videotape various school activities (some taking place after normal school hours) to assist in the production of the school's annual video yearbook. Requirement: Students must be motivated to work independently, consistently, and responsibly, without the need for continual teacher supervision.

6973 Semester 3 credits

6970 Full Year 6 credits

**CAREER AND TECHNICAL EDUCATION DEPARTMENT
SEQUENCE OF CAREER AND TECHNICAL EDUCATION**

AVAILABLE FOR ALL GRADES

BUSINESS AND OFFICE EDUCATION

	Grade 9	Grade 10	Grade 11/12
BUSINESS / COMPUTER APPLICATIONS	6323 Computer Applications	6323 Computer Applications 6343 Advanced Computer Applications	6323 Computer Applications 6343 Advanced Computer Applications
ADMINISTRATIVE / FINANCIAL	5360 Economics / Finance (L1)	6360 Accounting I (L1) 5360 Economics/Finance (L1) 6393 Personal Finance (L1)	6360 Accounting I (L1) 6380 Accounting II (L1) 5360 Economics/Finance (L1) 6393 Personal Finance (L1)

FAMILY AND CONSUMER SCIENCE

	Grade 9	Grade 10	Grade 11/12
FOOD SERVICES	6503 Foods & Nutrition	6503 Foods & Nutrition 6513 Food Services	6513 Food Services 6520 Food Services / Hospitality 6503 Foods & Nutrition
CHILD DEVELOPMENT		6600 Intro/Child Development	6600 Intro/Child Development 6610 Adv. Child Development

FILM AND VIDEO PRODUCTION

	Grade 9	Grade 10	Grade 11/12
MEDIA, VIDEO, AND FILM PRODUCTION	<p>6993 Introduction to Video Production (L1)</p> <p>6993 Introduction to Video Production (L1)</p> <p>6963 Introduction to Documentary Video</p> <p>6883 Introduction to Television and News Production</p>	<p>6980 Advanced Multimedia Production & Communication (L1)</p> <p>6993 Introduction to Video Production (L1)</p> <p>6963 Introduction to Documentary Video</p> <p>6883 Introduction to Television and News Production</p>	<p>6980 Advanced Multimedia Production & Communication (L1)</p> <p>6963 Introduction to Documentary Video</p> <p>6883 Introduction to Television and News Production</p> <p>6973/6970 Video Yearbook</p> <p>6993 Introduction to Video Production (L1)</p>

INDUSTRIAL TECHNOLOGIES

	Grade 9	Grade 10	Grade 11/12
COMPUTER REPAIR	<p>6453 Maintaining Your Computer</p> <p>6460 Computer Repair & Upgrade</p>	<p>6453 Maintaining Your Computer</p> <p>6460 Computer Repair & Upgrade</p> <p>6470 Advanced Computer Repair</p>	<p>6453 Maintaining Your Computer</p> <p>6460 Computer Repair & Upgrade</p> <p>6470 Advanced Computer Repair</p>
ENGINEERING AND TECHNOLOGY EDUCATION	<p>6013 SolidWorks—3D Design Concepts & Techniques</p> <p>6023 CAD—Applying CAD in a Technical, Engineering and Architectural Environment</p> <p>6313/7003 Computer Graphics</p>	<p>6013 SolidWorks—3D Design Concepts & Techniques</p> <p>6023 CAD—Applying CAD in a Technical, Engineering and Architectural Environment</p> <p>6313/7003 Computer Graphics</p>	<p>6013 SolidWorks—3D Design Concepts & Techniques</p> <p>6023 CAD—Applying CAD in a Technical, Engineering and Architectural Environment</p> <p>6030 Advanced CAD</p> <p>6420 Engineering by Design</p> <p>6313/7003 Computer Graphics</p> <p>6323/7033 Graphics II / Web Design</p>
CONSTRUCTION EDUCATION	<p>6223 Wood</p>	<p>6223 Wood</p> <p>6250 Advanced Wood</p>	<p>6223 Wood</p> <p>6250 Advanced Wood</p>

Physical Education and Health

The physical education program provides a comprehensive curriculum that focuses on the mental, physical and social well being of students. Physical education activities offered to students challenge interpersonal, social and physical skills at all levels. Students who successfully complete each course will learn life-long skills that promote good health, physical fitness and wellbeing. Heart Rate Monitors will be provided to all students while participating in most PE activities to improve and monitor heart health. To meet the graduation requirement, students are required to complete and pass one full semester of PE during freshman, sophomore, and junior years. Seniors are encouraged to take PE as an elective once the graduation requirement has been achieved.

Health (grade 9) will teach students the skills necessary to make healthy choices that impact physical, mental and social wellbeing. This course will align with grade 9 physical education classes so that classes will alternate days throughout the school year.

8543 Health (Grade 9) Health Education focuses on the relationship that exists among physical, mental and social health. Topics that will be of primary focus 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. Knowledge will be gained through discussion, lecture, individual and group projects/presentations and research.

Semester 3 credits

8513 Grade 9 Physical Education

This course will focus on increasing fitness levels of students through a variety of life skill activities that will include geo fit dance/fitness; cooperative games such as omnikin, project adventure, and tchoukball; individual and team sports/activities, outdoor adventure activities i.e. snow shoeing. An overall skill based approach will enable students of all skill levels to improve and experience success. Regular use of heart rate monitors will teach students heart health and monitor personal heart rate during moderate to vigorous activity. The HS fitness center will also be used for physical education and students will learn how to maintain a personal fitness plan.

8593 Physical Education/Fitness (Grades 10-12) Semester Course

This course will provide students with traditional, contemporary, and innovative activities, games, and sports in order to increase and improve activity levels of students. Students will have an opportunity to engage in a variety of activities that promote a healthy active life-style. Upon successful completion of the physical education requirement, students will be able to demonstrate knowledge and skills that enable participation in activities that improve wellness, interpersonal and social skills, physical fitness and cardiovascular capacity. Activities may include ice-breaker games, racket sports, individual activities, recreation games such as tchoukball, ultimate frisbee, rugby; golf, fencing, geo fit dance, omnikin and volleyball. Outdoor adventure will include snow shoeing, walking/running.

Through the use of technology, students will have the opportunity to assess their personal level of some fitness components through the tri-fit fitness testing system. Regular use of heart rate monitors will raise awareness of heart health and students will be able to monitor personal heart rate during moderate to vigorous activity.

Full Year **6 credits**

4130 Foundations of Biology (L2)

(Prerequisite: Successful completion of Grade 8 Science)

This course serves as the introductory high school science course for students from grade eight who are developing their reading, writing and math skills. 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, evolution and ecology. Projects and laboratory work are conducted to supplement each topic.

Full Year **6 credits**

4500 AP Biology

(Prerequisites: B or above in Introduction to Physics and B+ or better in Honors Chemistry and mathematics including teacher recommendations and permission of the science coordinator.)

The Advanced Placement Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. The course covers three general areas of biology; molecules and cells, heredity and evolution and organisms and populations. The textbooks and laboratory exercises used for AP Biology are those used by college biology majors. The two major goals of AP Biology are to help students develop a framework for modern biology and an appreciation of science as a process. The ongoing information and knowledge explosion in biology makes these goals even more challenging.

(2007 The College Board)

Full Year **6 Credits**

4200 Biology (H)

(Prerequisite: High aptitude in science and math; A- or above in both physical science and honors math as well as recommendations from both grade nine science and math teachers.)

Honors biology is designed for capable students interested in a challenging, stimulating course about living organisms. The course emphasizes life cycles, genetics, plants, animals, ecology, microorganisms and human biology. There are extensive and interesting labs, dissections, projects and readings. Students will be expected to complete an extensive summer assignment. There is also an opportunity to participate in a year-long research project in ecology. The course prepares students for the College Board achievement test in biology.

Full Year **6 credits**

4210 Biology (L1)

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

The course is designed for successful science students interested in a thorough course about living organisms. The course emphasizes the cellular levels of organization. Areas studied include genetics, plant and animal physiology, and ecology. Term projects, dissection, chemistry, and outside readings supplement this interesting course.

Full Year **6 credits**

4220 Introductory Biology (L2)

(Prerequisite: Successful completion of Foundations of Biology or other grade 9 science course)

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

Full Year **6 credits**

4230 Introduction to Anatomy and Physiology (Grades 11 and 12)

Anatomy and Physiology is a college preparatory course open to junior/senior students who have successfully completed one year of biology and may be interested in a career in science or health-related fields. The systematic structure and functions of the human body are studied. Concepts are supported by extensive lab activities, including the fetal pig dissection. Individual and class projects are stressed. This course will be paired with Introduction to Medical Sciences. Students should register for both.

Half Year

3 credits

4180 Introduction to Medical Sciences (Grades 11 and 12)

This is a multifaceted course which provides Watertown students with hands on experience in the medical field, introduces them to the concepts of human anatomy and physiology, and exposes them to the myriad health care careers available in our community. The course curriculum is divided into 11 systems of the human body, each of which will be taught in 2 week blocks. The hands on experiential learning experience will occur at ProSim and Mount Auburn Hospital using case study method to reinforce the learning of anatomy and physiology. Weekly visits from professional guest speakers from the varied health care disciplines will provide students with insight into the numerous medical professions. Throughout the course students will practice science processing, decision making, problem solving, and critical thinking skills. During the hands on learning experience students will work in teams like health care professionals in the real world. The course will include an experience-based program which includes weekly one-hour trips outside of school; therefore, students must commit to being at school by 7:15 a.m. one day a week.

4240 Anatomy and Physiology (L1) (Grade 11 and 12)

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

Anatomy and Physiology is a college preparatory course open to junior/senior students who have successfully completed one year of biology and may be interested in a career in science or health-related fields. The systematic structure and functions of the human body are studied. Concepts are supported by extensive lab activities, including the fetal pig dissection. Individual and class projects are stressed.

Full Year

8 credits

4440 AP Chemistry

(Prerequisites: Successful completion of Honors Chemistry with a grade of B+ or above

Grade of B+ or above in honors mathematics through Algebra II or Pre-Calculus

or grade of A or above in L1 mathematics through Algebra II or Pre-Calculus

(*no single term grade for mathematics or science may be below a B- for the current year)

Enrollment in Pre-Calculus, Statistics or Calculus for the upcoming year)

AP Chemistry is an intensive survey of topics and laboratory experiences customarily covered in a first-year college inorganic chemistry course. The course provides a review of and builds upon the topics covered in Honors Chemistry with special attention given to all aspects of equilibrium, kinetics, redox and thermodynamics. Laboratory activities focus on the descriptive and quantitative aspects of the topics. 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** after school laboratory sessions (every Wednesday and Friday) 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

8 credits

4300 Chemistry (H)

(Prerequisites: Grade of B or above in grade 9 H Physics or grade B+ or above in H Biology and passing grade on an entrance exam

or grade of A or above in L1 Biology and a passing grade on an entrance exam.

Grade of B or above in honors mathematics through Geometry or Algebra II or grade of A or above in L1 mathematics through Geometry or Algebra II

(*No single term grade for mathematics or science may be below B- for the current year)

Enrollment in Algebra II or Pre-Calculus for the upcoming year)

Honors Chemistry is an intensive study of the theoretical and practical aspects of chemistry.

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

Full Year

6 credits

4310 Chemistry (L1)

(Prerequisite: Successful completion of biology and enrollment in or completion of Algebra II Current year to date math average of a C+ or higher)

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

Full Year

6 credits

4600 Physics AP-B

(Prerequisite: Successful completion of Math 3300 with a grade of B or better or Math 3310 with a grade of A- or better. Co-requisite: Math 3400, 3410 or higher recommended but not required)

This is a mathematically rigorous course in algebra-based physics. Topics will focus on mechanics and electricity and magnetism including: constant accelerated motion, vectors, forces, gravitation, energy, work, momentum, circular motion, static electricity, electric potentials, electrical energy and work, circuits, magnetism, electromagnetic induction, and Maxwell's equations. Laboratories will give real-time applications of theories presented in the course and computer written lab reports will be required. Students expecting to take the AP-B Physics exam will need to do extra work outside the regular class. There will be a required summer reading and review of trigonometry and vectors with a test at the beginning of the year.

Full Year

6 Credits

4400 Physics (H)

4410 Physics (L1)

(Prerequisite: B or above in Math 3310 or 3300 or A in math 3350 for honors credit

C or above in Math 3300, 3310 or 3350 for L1 credit)

Physics is a hands-on laboratory oriented course that emphasizes the synthesis of various modes of information with the physical realities presented in the laboratory. It is expected that students will question ideas and events occurring in their daily lives through critical analysis and learn to formulate approximate models that mimic reality with great accuracy. Subjects covered include basic Newtonian mechanics (translational and rotational), thermodynamics, optics, electricity and magnetism, and early atomic theory. Students pursuing the honors option are expected to evaluate phenomena with more mathematical rigor, solve problems involving greater detail, and apply a higher level of analysis to laboratory data. Quizzes and exams will reflect the increased level of understanding expected at the honors level. All students are expected to do quarterly projects involving concepts investigated in class.

Full Year **6 credits**

4790 Astronomy (L1)

(Prerequisite: Successful completion of a biology course)

This science elective acquaints students with the observable universe. The course will survey the exciting field of Astronomy and students will learn to distinguish planets, moons, stars, and galaxies. In addition, they will be very much aware of what is in their night sky by group observation sessions, a visit to an observatory, and classroom activities. Curriculum materials from the Harvard Smithsonian programs will be utilized.

Full Year **6 credits**

4020 Science Endeavors (L2)

The course is designed to be a hands-on third science course for students who have successfully completed a physical and a biological science course. The course will cover topics from chemistry, physical science and mathematics. Topics for discussion will come from criminalistics and be explored through class activities, group and individual projects, and labs in forensic science.

Full Year **6 credits**

6420 Engineering by Design (H)

6410/4810 Engineering by Design (L1)

(Recommended for Grades 11 and 12)

Engineering by Design is a full-year, project-based course designed to introduce students to the world of technology and engineering as a first step in becoming technologically literate citizens. Additionally, the course will help students answer the question: “Why should I study math, science and engineering if I don’t plan on a technical career?” 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.

Full Year **6 credits**

SCIENCE SEQUENCE CHART GRADES 9 - 12

<u>Grade 9</u> *	<u>Grade 10</u> **	<u>Grade 11</u>	<u>Grade 12</u>
4000 Intro to Physics	4330 Chemistry (H)	4500 AP Biology 4200 Biology (H)	4600 AP-B Physics 4440 AP Chemistry 4500 AP Biology 4400/4410 Physics(H/L1) 4250 Anatomy & Physiology (L1) 4790 Astronomy 6410/4810 Engineering by Design
4110 Physical Science (L1)	4210 Biology (L1) 4200 Biology (H)	4310 Chemistry (L1) 4300 Chemistry (H) 4250 Anatomy & Physiology (L1) 6410/4810 Engineering by Design	4400/4410 Physics (H/L1) 4600 AP-B Physics 4440 AP Chemistry 4500 AP Biology 4250 Anatomy & Physiology (L1) 4790 Astronomy 6410/4810 Engineering by Design
4120 Physical Science (L2)	4220 Biology (L1) 4210 Biology (L2)	4300 Science Endeavors	4790 Astronomy 4310 Chemistry (L1) 4240 Anatomy & Physiology (L1) 6410/4810 Engineering by Design

*** Students must successfully complete either course 4000, 4110, or 4120 before enrolling in any grade 10 or higher course.**

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

9903/9913 Counseling & Academic Program (C.A.P.)

(Prerequisite: Special Education Team Recommendation)

Counseling & Academic Program (C.A.P.) is designed to service students with psychiatric diagnosis. The program provides academic, emotional, and behavioral support to students at risk for outside placement in either clinical day, residential, or hospital programs. Some students may be transitioning from hospital programs and more restrictive settings into the public school environment. Students generally participate in all regular classes. On occasion, and depending on the individual need of the child, extended stays within the C.A.P. setting might be warranted. These decisions are Team driven and must be approved through a signed IEP or signed Amendment permitting a least restrictive placement.

Semester 3 credits

Transitional Developmental Learning Program

The Developmental Life Skills Program has been created to allow student involvement and interaction within their community. This program is designed to increase student knowledge of basic academic skills as well as activities of daily living. Functional in its approach, students move toward the world of employment or continued education upon graduation. Instructional support and direct instruction in specific content areas are provided on a daily basis. Appropriate social skills are also encouraged and taught.

9210 Learning Support English**9220 Learning Support History****9230 Learning Support Math****9250 Learning Support Science**

Full Year 6 credits

9223 Learning Support Resource**9233 Learning Support Resource**

(Prerequisite: Special Education Team Recommendation)

This course teaches study/organizational strategies and techniques to help the student experience success in the academic areas. The learning format includes, but is not limited to: small group instructions, 1:1 monitoring and reinforcement, homework completion, academic review and applications, evaluations, evaluation of study/organizational knowledge.

Semester 3 credits

9411 Language Based English (9th grade)**9412 Language Based English (10th grade)****9413 Language Based English (11th grade)****9414 Language Based English (12th grade)**

(Prerequisite: Special Education Team Recommendation)

This course is designed to increase the student's ability to achieve organization and coherence in a sentence, paragraph and composition as a whole. Further goals are to increase each students' grasp of standard use of grammar, mechanics and punctuation, and to provide the student with strategies for improving their reading comprehension through the use of short stories, poetry, novels, and plays. Computer lab/programs are used to augment each student's verbal and written language.

Full Year 6 credits

9500 Transitions to Work Program

(Prerequisite: Referral from Teacher and/or Guidance Counselor, approval of the program's coordinator and the final approval of the Headmaster)

Watertown High School recognizes and acknowledges the necessity for all students to be given the opportunity to gain awareness and understanding of the world of work while developing appropriate work behaviors, social and life skills. A job coach will be provided to assist student transition and the move toward the world of employment. Identification of the students is based upon referrals from teachers and/or guidance counselors' approval of the program's coordinator, and the final approval by the Headmaster. The community-based employers greatly enhance the experiences of all students to develop skills that will lead to more successful transition into the world of work. This program is incorporated into the student's overall schedule and requires 18 to 20 hours of work weekly to earn them 6 credits per year. Requirements may include weekly meetings with the coordinator or job coach; an in-house internship to prepare the student to transition into the work-force; submission of weekly pay stubs; signing out daily on the sheet provided in room 222; quarterly performance evaluations to assess students' progress; a midterm and year-end graded project; development of a program newsletter as part of the student's evaluation.

Full Year

6 credits

SPEECH THERAPY

Special Education Student Services/504 Recommendation

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

PHYSICAL THERAPY

Special Education Student Services/504 Recommendation

Physical Therapy is directed toward the optimal restoration of a student's functional ability. 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.

OCCUPATIONAL THERAPY

Special Education Student Services/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.

ADAPTIVE PHYSICAL EDUCATION

Special Education Student Services/504 Recommendation

Students who are unable to participate in the regular education physical education program due to medical or other reasons may be eligible for the Adaptive Physical Education Program. However, the student is required to receive an evaluation in order that the determination of eligibility can be made.

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.