



Westborough High School

90 West Main Street
Westborough, Massachusetts 01581

Program of Studies 2017-2018 School Year

Table of Contents

Introduction	3
Academic Overview	5
Course Selection	6
Internships and Special Offerings	10
Virtual High School	14
Business	15
Computer Science	19
English	22
English Language Learners	32
Family and Consumer Science	35
Fine Arts	38
Engineering Technology	49
Mathematics	53
Physical Education, Health & Wellness	61
Science	64
Social Studies	70
Special Education	75
World Language	79



Westborough High School

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Mr. Brian M. Callaghan, Principal
Mrs. Jessica M. Barrett, Assistant Principal
Mr. Matthew T. Lefebvre, Assistant Principal

Dear WHS Students and Families,

This Program of Studies booklet describes the courses and programs that will be available to students at Westborough High School for the 2017-2018 school year. We are very fortunate to have a community that strongly supports comprehensive curriculum offerings in our high school. We enjoy a school facility that is second to none, and the community's generous investment in public education demands that each of us make the very best use of the opportunities provided.

Selecting appropriate courses for study involves a careful review of personal interests, aspirations, academic development, strengths, and a growing understanding of post-secondary options for college and careers. As you plan your schedule, pay close attention to the various course levels, course prerequisites, and graduation requirements. Students who select multiple Advanced Placement, accelerated, or honors classes should note the rigorous expectations attached to homework and special assignments.

Our course selection process places a great deal of responsibility on students and parents. Please approach this critical task with care and seriousness. This will ensure that proper consideration be given to the appropriateness of courses selected. If you require assistance in determining appropriate level of a course or selection of electives, please seek out a School Counselor. Given how precious our resources will be in the year ahead, we simply must minimize inefficiency and place a high premium on personal responsibility for sound decisions. Our commitment to maintaining reasonable class size and the comprehensiveness of programs demands that the master schedule be developed with accurate data.

Please actively discuss your schedule for next year with parents, teachers, and our guidance staff. Best wishes for a successful year ahead.

Sincerely,

Brian M. Callaghan
Principal

Accreditation Statement

Westborough High School is fully accredited by the New England Association of Schools and Colleges, Inc., a private, non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction. A recent evaluation recognized us as extraordinary in adhering to rigorous standards for membership.

Accreditation of an institution by the New England Association indicates that a school meets or exceeds standards for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

N.E.A.S.C.

209 Burlington Road
Bedford, MA 01730-1433
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Westborough High School Core Values Statement

The Westborough High School community believes in a rigorous educational experience in a supportive environment that fosters respect and engagement in our diverse and global society.

Effective teaching and learning balances content and skills, encouraging critical and creative thinking. This requires expectations that challenge all community members to work hard to achieve their greatest potential. We need to communicate effectively and encourage the use of appropriate tools and technologies to share ideas and solve problems. By keeping an open mind while engaging and collaborating with our diverse population, we foster acceptance, appreciation and ultimately empathy. WE strive to be responsible, informed citizens who make ethical decisions and honor our commitments. Every member of this community can achieve the greatest academic, civic and social growth by following these beliefs.

Westborough High School Academic Overview

Learning Expectations

Academic Competencies

1. Evaluate: Comprehend essential information, context, point of view, and meaning in a variety of media (fiction, non-fiction, film, music, internet sources, etc.) in different forms (print, performance, and digital forms).
2. Think and Solve: Identify and comprehend questions, issues, and problems through appropriate methodology and focused analysis; create solutions by applying previous knowledge, logical reasoning, and creative thought.
3. Communicate: Share authentic ideas
 - a. Writing follows a defined format, style, and structure to its purpose.
 - b. Speaking/Presenting demonstrates proper tone, volume and understanding of purpose
 - c. Creative products are purposeful, high quality, and effective

Personal/Social Competencies

Stand up: As a member of our community, accept personal responsibility for completing tasks by deadlines, with authentic effort; be accountable for behavior, actions and products, and practice self-reflection.

Civic Competencies

Contribute: Engage in school and community activities to improve our school, local community, and world.

Graduation Requirements

Each student must pass a total of 24 credits, which include:

- 4.0 years of English (Grades 9, 10, 11, 12)
- 3.0 years of Mathematics
- 3.0 years of Science (2 laboratory courses)
- 3.0 years of Social Studies including 2.0 years of U.S. History
- 2.0 years of Physical Education
- 0.5 credits of Health
- 8.5 credits of Electives

Each student is also required to pass the Massachusetts Comprehensive Assessment System exams in language arts, mathematics, and science. Tenth graders take MCAS tests in the spring of each school year. Students who fail any of these tests will receive extra support and repeat individual tests in grades 11 and 12 until they receive a passing competency determination. In addition, any students who receive a needs improvement in math and English will be placed on a proficiency (EPP) plan that will require four full years of mathematics and English as well as **a passing grade in the course(s) and in their midyear and final exams.**

Schedule Requirements

Each student must choose seven classes each semester. Students are encouraged to select a variety of courses from our comprehensive curriculum. Please be aware that a schedule **full of Level 4 and 5 courses *will require a rigorous commitment to homework and study each night.***

Course Selection

As you make your course selections, remember to consider (1) your interests and academic goals, and (2) a balance between challenging coursework and your commitments outside the classroom.

Refer to this Program of Studies for courses and descriptions. The Course Catalog found in PowerSchool can also guide you.

Explanation of Course Levels:

Advanced Placement (AP) Level 5

Advanced placement courses are highly rigorous and move at a fast pace, culminating in a nationally standardized examination. AP courses try to replicate the challenge and higher order thinking—synthesis, analysis, evaluation, and creation—required at the college level.

Advanced Placement (AP) Exams are administered in the spring to those students desiring Advanced Placement or college credits or both upon being admitted to the college of their choice. **It is expected that all students who enroll in an Advanced Placement course at Westborough High School will take the official exam in the spring.** Students desiring to take an AP exam who are not enrolled in an AP class need the recommendation of their teacher and approval of the department chair and administration. Students enrolled in AP courses who choose not to take the AP exam will be required to take the AP teacher's local final examination.

Accelerated Level 5

Accelerated courses demand much independent learning as well as critical, creative, and analytical thinking. These courses, too, are highly rigorous and move at a rapid pace. Students take them for Level 4 credit, as they serve to provide extreme rigor in places where WHS does not offer an AP equivalent.

Honors Level 4

Honors courses require moderate to extensive independent work as well as ample outside preparation. These courses are designed to prepare students for college-level work. Students are assumed to be self-motivated.

College Prep Level 3

Level 3 courses offer students a balance of support and independence, with a push toward higher order thinking skills such as synthesis, analysis, evaluation, and creativity. College preparatory classes move at a moderate pace. Students should expect a fair amount of outside preparation.

College Prep Level 2

Level 2 courses move at a pace that emphasizes skill development, enabling teachers to scaffold the learning and support the student in his or her quest toward academic independence. While outside work is required, much of the learning takes place in the classroom, using small group instruction, individualized attention, and varied instructional practices as supports. Level 2 courses prepare students for educational opportunities after the high school experience. **Level 2 does NOT meet Division 1 or 2 NCAA eligibility for core courses. Further information can be found at www.eligibilitycenter.org.**

Course Enrollment Criteria:

Prerequisites for Courses

Careful attention should be given to the prerequisites for each course listed in the individual course description. The purpose of our prerequisite system is to provide guidelines for students in taking highly sequential and demanding levels of study. Specifically in **mathematics** and **world language**, a student desiring to continue a subject sequence, without the prerequisite grade, will be required to take a department exam and pass with the prerequisite grade as stated in this Program of Studies. Students are only eligible to take the math department exam if their final course average is within ten points of the prerequisite grade.

Students can meet with a Department Head to discuss the potential of moving up in a level of study despite not receiving the pre-requisite grade or teacher recommendation.

Repeating a Course Previously Passed

A repeated course that was previously passed is not factored in GPA. A repeated course does not receive graduation credits and cannot be used in fulfilling athletic eligibility requirements for participation.

Repeating a Course Previously Failed

Students who fail a subject may make up the deficiency in summer school, subject to our summer school policy. Please be aware that many of the courses offered in our curriculum are not offered during summer school. Failed courses can be repeated during the next school full year for credit.

Summer School Policy:

Eligibility

To be eligible for make-up of a failing grade, a student must have received a minimum average of 50% in the course failed and have the recommendation of the appropriate teacher.

Credit

To receive credit for a failed course, the student must earn a minimum grade of 70% in summer school. The summer school grade will be recorded on the student's transcript but will not count in weighted GPA.

Non-Credit

A course taken during the summer to improve a passing grade or for enrichment will not receive credit but will be recorded on the student's transcript. ***This grade will not count in weighted GPA.***

Prerequisite

To continue in a sequence at the same leveling in **mathematics** and **world language**, the student must pass a department exam with the prerequisite grade as stated in the program of studies.

Massachusetts State University System and UMASS Minimum Admissions Requirements

The admissions standards for the state universities and UMass emphasize a strong academic high school background so that students enter college ready to learn. These standards represent minimum requirements; meeting them does not guarantee admission, since campus officials consider a wide range of factors in admissions decisions. Students shall have fulfilled all requirements for the high school diploma or its equivalent upon enrollment. *It is important to note that admissions standards for the state's community college differ. Community colleges may admit any high school graduate or GED recipient.*

Freshman Applications

The admissions standards for freshmen applicants at Massachusetts Public four year institutions have three primary components;

1. Successful completion of required academic courses in specific subjects; and
2. A minimum average and weighted grade point average (GPA) earned in high school level academic courses; and completed at the time of application.
3. The submission of SAT or ACT scores. (This may vary at different campuses. Review their websites for the most accurate information.)

Academic Course Requirement

All freshmen applicants are required to successfully complete the following courses in each academic subject, for a total of 17 required courses.

Subject	Requirement
English	4 courses
Mathematics	4 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework) including mathematics during the final year of high school.
Sciences	3 courses with laboratory work (drawn from Natural Science and/or Physical Science and/or Technology/Engineering) Technology/engineering courses must be designated as science courses (taken for science credit) by the high school
Social Sciences	2 courses (including 1 course in U.S. History)
Foreign Languages	2 courses (in a single language)
Electives	2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

High School Grade Point Average and SAT/ACT Sliding Scale Requirements

The required minimum weighted high school GPA is 3.0 for the four-year public campuses in Massachusetts. For freshman applicants who do not meet the 3.0 GPA requirement, they must earn the following SAT or ACT scores in order to be eligible for admission.

The University of Massachusetts

University of Massachusetts, Amherst
University of Massachusetts, Boston
University of Massachusetts, Dartmouth
University of Massachusetts, Lowell

Weighted High School GPA	Combined OLD SAT Score (Critical Reading and Math)	Combined NEW SAT Score (Evidence Based Reading and Writing and Math)	ACT
2.51 – 2.99	950	1030	20
2.41 – 2.50	990	1070	21
2.31 – 2.40	1030	1110	22
2.21 – 2.30	1070	1140	23
2.11 – 2.20	1110	1180	24
2.00 – 2.10	1150	1220	25
Less than 2.0	May not be admitted.		

State Universities

Bridgewater State University
Fitchburg State University
Framingham State University
MA College of Art
MA Maritime Academy
MA College of Liberal Arts
Salem State University
Westfield State University

Weighted High School GPA	Combined OLD SAT Score (Critical Reading and Math)	Combined NEW SAT Score (Evidence Based Reading and Writing and Math)	ACT
2.51 - 2.99	910	990	19
2.41 - 2.50	950	1030	20
2.31 - 2.40	990	1070	21
2.21 - 2.30	1030	1110	22
2.11 - 2.20	1070	1140	23
2.00 - 2.10	1110	1180	24
Less than 2.0	May not be admitted.		

Please refer to the Massachusetts Board of Higher Education website at www.mass.edu for more specific information regarding these admissions standards and how the state colleges and universities recalculate GPA. Please note that these are minimum standards and meeting them does not guarantee admissions to a state college or university.

Internships and Special Offerings

Student Assistant	Banking and Finance	QUEST
Half Year (SA303)	Full Year (SA201)	Quarter Four

Student Interns:

- Explore potential areas for careers
- Learn workplace skills and expectations
- Gain valuable experience, social skills, and maturity
- Connect academic learning and work-based experience

Student Assistant Internships Grades 11-12 only

The program will provide students with a pathway into career-oriented environments and authentic workplaces. Student interns will be given challenging work that extends our curriculum, provides relevant applications, and develops critical skills that will connect to and transfer into future career demands. Some students will actually follow a school to career transition pathway. Interns are assigned to a site mentor who will provide direction and support.

Banking and Finance Internship Grades 10-12 only

This course offers student tellers an opportunity to immerse themselves in the real world of banking; in an authentic setting, students will process deposits and withdrawal transactions, handle customer service needs, process loan applications and payments, write teller checks, and most importantly, come to understand banking and to gain financial literacy. Students may only enroll in this course after making an application to the Central One Credit Union, following through a rigorous interview, and committing to customer service and confidentiality.

QUEST Internship 12th Grade only

The number of our seniors considering a QUEST internship during the last six weeks of their high school career has been increasing every year. The value and significance of quality internships both locally and nationally has increased, leading to the possibility of more students wishing to participate. The increase in the numbers warrants clarification of the following points of emphasis.

The decision to participate in the QUEST program with students that are taking an AP course(s) should be made with consideration and input from the student, parent(s), and the AP teacher(s). The final decision should be recognized as the student's personal choice.

The QUEST students Quarter 3 grade extends to the beginning of the QUEST internship. The teacher has the prerogative to adjust a QUEST student's quarter 3 grade if a student is not fulfilling the class requirements.

Students involved with the Fine Arts Program are expected to attend one rehearsal per week plus a dress rehearsal prior to the production or concert. Upon completion of the concert or production all time will be spent at the student's internship site. Students must communicate the fulfillment of this obligation with their teacher, the QUEST Director and receive approval from their sponsor to leave the internship site.

To encourage and promote a high standard for VHS courses, W.H.S. requires a student to have a current average of 80 or better at the end of 3rd Quarter in order to participate in the QUEST program. VHS students are expected to continue with the VHS course responsibilities until the end of the VHS 4th Quarter. VHS students electing QUEST will sign the VHS/QUEST contract included in the student's application packet.

WHS Career Education Program

This alternative education program is for students whose needs and interests demand school supervised work experience. Students attend academic classes in the morning and work at supervised, credit bearing, career oriented job sites in the afternoon. This program is coordinated through Mr. Brian Callaghan.

Goals of the Career Education Program

- Develop transferable academic, technical and employability skills
- Apply basic knowledge and skills to real world settings
- Increase self esteem
- Develop specific career internships through personalized work experiences
- Increase awareness of workplace cultures
- Develop professional interpersonal skills
- Deepen understanding of the connection between academic and employment spheres.

Gender Studies L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD130 (L3)	None L4 credit only with approval from course instructor	.5	9, 10, 11, 12	Semester	Yes
AD140 (L4)					

An introductory course to gender studies which will examine how cultures represent gender difference with a focus on the history of gender in American culture as well as gender in contemporary American culture. Topics of study will include social construction of gender including the workplace and family as well as influence on dress, appearance, and behavior. The media's portrayal of gender and gender stereotypes will be of particular interest. Additional topics of study will include the role of gender in sexuality, religion, power structures, and the intersection of gender, race, class, and ethnicity. Level 4 students will be required to complete additional readings and assignments.

Logical Reasoning L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD230 (L3)	None L4 credit only with approval from course instructor	.5	10, 11, 12	Semester	Yes
AD240 (L4)					

Logic is integral to the foundations of Math and Science and is a key tool employed in all social sciences. Thus, to master logic is to acquire a very real advantage in many areas of life. This logic class is a semester course designed for grades 10, 11, and 12. The first part of the course covers categorical and propositional logic with an emphasis on transcribing natural language sentences into symbolic logic. The second half of the course offers a limited introduction to predicate logic as well as work with syntactic, semantic, and pragmatic fallacies. This course does not have homework. Each class period is broken into three distinct parts: 1.) an initial lecture and demonstration by your instructor; 2.) time for students to work on the day's exercise set; and 3.) a review of the day's exercise set with time for students' questions. Grading is based upon a total of twenty quizzes and one essay. The essay is written over several class periods at the end of the course. This course can be taken for either level three or level four credit. Each of the quizzes and the essay have an extra component that only level four students are required to complete.

Peer Tutoring					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD300	Approval of teacher(s) of subject area(s) in which student plan to tutor	.5	11, 12	Semester	No

Peer Tutoring is an unleveled semester-long course open to Juniors and Seniors. There is a special application process in the Spring. Students choosing this must gain the approval of teachers of academic areas in which they would like to tutor (for example, approval from a Biology teacher to tutor a student in Biology). Peer tutors will participate in a training to learn how to work with peers in a one-on-one environment. In addition to having a deep academic foundation in a given subject, students wishing to become peer tutors should have strong communication skills, patience, a warm personality, and the ability to work independently.

Strategic Projects L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD330 (L3)	None L4 credit only with approval from course instructor	.5	11, 12	Semester	Yes
AD340 (L4)					

This is a semester-long project-based course that will develop the skills and attitudes necessary for personal and professional success in the 21st century. Through independent and group projects, students will work toward mastery of various competencies such as the 4 C's (Critical Thinking, Communication, Collaboration, Creativity) as defined by the Partnership for 21st Century Learning (www.p21.org). The course will focus on building a student's organization, self-management, decision-making, academic endurance and confidence through assignments with real-life applications. Ultimately, students will: build strength and resiliency within themselves; develop their ability to engage collaboratively and constructively with others; and gain the skills to develop big ideas and carry them out fearlessly. The flow of the course will be differentiated for each student as much as possible so there is flexibility to work toward different competencies at different times over the semester. This course will be offered at levels 3 and 4. Assignments and expectations will differ based on the level the student has selected.

Tech Support 1 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD131	Approval of instructor	.5	9, 10, 11, 12	Semester	Yes

Students will be responsible for implementing technology integration support and technical assistance in an educational context. Under the general direction of the RTS staff, students will serve as the initial contact for technology requests from students and staff. On a daily basis, would address technology issues and provide necessary problem solving for teachers and students on a professional level. Students would be helping build knowledge base of technology content in the forms of tutorials, blogs or video presentations and assure that they are kept up to date as screen shots or processes changes. They will assist with equipment set up or other in class assistance needed by teachers as well as projects deemed necessary for tech maintenance by staff. To be successful in this course, students should have a prior understanding of Apple OS, Microsoft Windows OS, and the iPad iOS and Chrome.

Tech Support 2 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD132	Approval of instructor and successful completion of Tech Support I	.5	9, 10, 11, 12	Semester	Yes

Students will be responsible for implementing technology integration support and technical assistance in an educational context. Under the general direction of the RTS staff, students will serve as the initial contact for technology requests from students and staff. On a daily basis, would address technology issues and provide necessary problem solving for teachers and students on a professional level. Students would be helping build knowledge base of technology content in the forms of tutorials, blogs or video presentations and assure that they are kept up to date as screen shots or processes changes. They will assist with equipment set up or other in class assistance needed by teachers as well as projects deemed necessary for tech maintenance by staff. To be successful in this course, students should have a prior understanding of Apple OS, Microsoft Windows OS, and the iPad iOS and Chrome. Students will be involved in the mentoring and training of students in Tech Support 1 and will take on leadership responsibilities.

Technology Support Design Thinking L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD242	Approval of instructor and successful completion of Tech Support 1 & 2	.5	10, 11, 12	Semester	Yes

Students will be responsible for implementing technology integration support and technical assistance in an educational context. Under the general direction of the RTS staff, students will serve as the initial contact for technology requests from students and staff. On a daily basis, would address technology issues and provide necessary problem solving for teachers and students on a professional level. Students would be helping build knowledge base of technology content in the forms of tutorials, blogs or video presentations and assure that they are kept up to date as screen shots or processes changes. They will assist with equipment set up or other in class assistance needed by teachers as well as projects deemed necessary for tech maintenance by staff. To be successful in this course, students should have a prior understanding of Apple OS, Microsoft Windows OS, and the iPad iOS and Chrome. Students will be involved in the mentoring and training of students in Tech Support 1, will take on leadership responsibilities, and will complete an instructor-approved project.

AP Psychology					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
AD350	Approval of Administration: Decisions will be made based on students' overall academic performance and course load	1	12	Full year	Yes

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They will learn about the ethics and methods psychologists use in their science and practice. This course is designed to mirror an entry level college course; therefore, students must be willing to accept the challenge of a rigorous curriculum. Students will take the AP Psychology College Board Test in May.



Virtual High School

Site Coordinator: Ms. Diane Rodriguez

Mission Statement of the Virtual High School Program

The mission of The Virtual High School is to develop and deliver standards-based, student-centered online courses that increase educational opportunities and 21st century skills.

Learning Expectations of the Virtual High School Program

Virtual High School students are expected to be:

- Self-directed and motivated
- Good at organizing and managing their time
- Comfortable using technology
- Good readers and writers
- Curious about the subject they are studying

Virtual High School Full Year Course L4, AP*					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
VHS301	Dependent on VHS Course	1	11,12	Full Year	Yes

**Any student who takes a VHS Advanced Placement course at Westborough High School must take the AP Exam in order to receive Level 5 credit on their transcript. If a student does not take the AP Exam for the course, then, Level 4 credit will be reflected on the student's transcript.*

Virtual High School Semester 1 Course L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
VHS302	Dependent on VHS Course	.5	11,12	Semester	Yes

Virtual High School Semester 2 Course L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
VHS303	Dependent on VHS Course	.5	11,12	Semester	Yes

The Virtual High School program unites teachers and students from a variety of social, economic, and geographic backgrounds to study and collaborate with one another in a virtual learning environment. They offer a wide range of unique elective offerings, including many Advanced Placement courses.

Students interested in electing VHS courses should have proven success in honors level courses and self confidence in their ability to succeed in an independent learning environment. Semester courses as well as full year courses are available. Students may enroll in a maximum of two semester courses or one full year course. For more information visit the Virtual High School website at thevhscollaborative.org. The course catalog is available by choosing *Programs & Courses, Catalog*.

To enroll in VHS, you must fill out a VHS course request form. Students selecting an AP course must also complete the AP endorsement form. Once you are enrolled, you will be scheduled one VHS period per course in the Library Media Center. VHS courses require students be actively engaged in their coursework approximately 6-8 hours for a standard level class, 8-10 hours for an honors level class, and 10-12 hours for an AP level class each week.

Business

Department Chair: Mrs. Darrell Potosnak

Course Offerings:

Accounting I L4	Business Concepts L3
Accounting II L4	Entrepreneurship L3
Marketing L3	Business Law L4
Business Management L3	Personal Finance L3
Financial Investing L3	International Business L3
AP Microeconomics	AP Macroeconomics

Mission Statement of the Business Department

The Business Education Department is committed to providing comprehensive courses that will play a prominent role in developing the knowledge, skills, and attitudes to make astute personal economic decisions and to succeed in the workforce.

Learning Expectations

Students in the Business Department are expected to be:

Effective communicators who:

- Read, write and speak English clearly
- Express ideas coherently in class discussions and presentations

Critical thinkers and problem solvers who:

- Identify and brainstorm solutions to problems
- Gather, analyze and evaluate information
- Apply acquired knowledge
- Draw conclusions from various data

Responsible citizens who:

- Engage in independent and cooperative learning activities
- Make responsible personal and economic decisions
- Acquire a set of marketable, transferable skills for work and personal use

Effective users of technology who use technology to access and evaluate information

Business Concepts L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU130	None	.5	9,10	Semester	Yes

This semester course provides students with an understanding of how the American business economy operates and helps prepare them to make decisions as consumers, wage earners, and citizens within that economy. With the approval of the instructor, this course may be taken for level 2 credit.

Accounting I L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU240	None	.5	10,11,12	Semester	Yes

This semester course is designed to provide a background in accounting for those students interested in pursuing a career in business. The course utilizes automated accounting software in a case study approach to develop a fundamental knowledge of accounting principles. Topics emphasized in the course include owner's equity in a proprietorship, analyzing and journalizing financial transactions as well as developing financial statements.

Accounting II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU241	C- or better in Accounting I	.5	10,11,12	Semester	Yes

This semester course expands on the principles of Accounting I and continues the case study approach. Concepts developed in this course include: journalizing purchases, cash payments, sales and cash receipts, posting to general and subsidiary ledgers, preparing payroll records, taxes, and reports.

Entrepreneurship L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU231	None	.5	10,11,12	Semester	Yes

This semester course will focus on small business ownership. Future small business owners will learn fundamental business concepts as well as how to identify a market need, develop a business and write a business plan. During this process, fundamental principles of banking, marketing, and taxation will also be studied.

Marketing L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU330	None	.5	11,12	Semester	Yes

This semester course provides students with an understanding of the marketing concept, with specific emphasis on price, product, place and promotion. Students will learn marketing through the discussion and application of marketing strategy, market segments and the role of promotion in the contemporary market place.

Business Law L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU340	None	.5	11,12	Semester	Yes

This course will acquaint students with legal rights and responsibilities by using authentic case studies. Topics included for study and focused discussion are the legal issues relating to buying and selling of goods, contracts, ethics, property, and torts.

Business Management L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU230	None	.5	10,11,12	Semester	Yes

The central focus of the course is to build a solid foundation of established business principles and practices that form the groundwork for all operations with emphasis on economic, legal and social foundations. Management's use of business ethics and motivational theories to guide decision making and employee development are examined as business leaders make decisions in a dynamic economic environment. The course stresses group work, focused classroom discussion and research in relating topics to current business trends. With the approval of the instructor, this course may be taken for Level 2 credit.

Personal Finance L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU131	None	.5	9,10	Semester	Yes

This semester course provides students with an overview of financial and economic concepts, focusing specifically on skills and information needed to manage one's own finances. The issues of budget creation, checking accounts, financial records, credit, insurance, and employment laws will also be examined. With the approval of the instructor, this course may be taken for Level 2 credit.

Financial Investing L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU234	None	.5	10,11,12	Semester	Yes

This semester course provides students with an overview of how to prepare themselves for the challenges of financial security in their future. This course will specifically focus on taxes, loans, investing (reasons, risk, return and strategies), credit (laws and responsibilities) as well as selecting and financing a residence and vehicle.

International Business L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU232	None	.5	10,11,12	Semester	Yes

The course will prepare students for the economic realities of living and working in a global marketplace. Since the United States functions as an integral member of the global economic community, consumer products and job opportunities are increasingly impacted by events in the international arena. Cultural and economic factors existing in other parts of the world will have greater impact on our economic existence than ever before. Students electing this course will be involved in group work, discussion and individualized course work as they develop the insight as well as the understanding necessary to function as informed citizens in a global economy.

AP Macroeconomics					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU351	Teacher recommendation and approval of course instructor	.5	11, 12	Half Year	Yes

AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students will gain a thorough understanding of the principles of economics and how economists use those principles to examine aggregate economic behavior. Students learn how the measures of economic performance, such as gross domestic product (GDP), inflation, and unemployment are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. The course recognizes the global nature of economics and provides ample opportunities to examine the impact of international trade and finance on national economies. Various economic schools of thought are introduced as students consider solutions to economic problems.

Students are expected to take the AP Exam in May.

AP Microeconomics					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
BU450	B- or better in Algebra 1, recommendation of grade eleven Math teacher, and approval of current course instructor.	1	12	Full Year	Yes

It is almost impossible to listen to any newscast or read a newspaper today without seeing economics at work in the world around us. This course provides students with a thorough preparation for the AP examination in Microeconomics by studying the forces that influence financial decisions made by consumers and producers within our economic system. The four models of economic competition will be examined in relationship to the product and factor markets, with emphasis placed on graphical analysis, cost curves and the determinants of supply and demand. The role of government in promoting greater efficiency to correct market failures and equity will also be studied.

Students are expected to take the AP Exam in May.

Computer Science

Department Chair: Mrs. Darrell Potosnak

Course Offerings:

Exploring Computer Science I L3	Introduction to Programming Using Python L3
Exploring Computer Science I L4	Introduction to Programming Using Python L4
Exploring Computer Science II L3	Web Design L3
Exploring Computer Science II L4	Web Design L4
Java Programming L4	AP Computer Science
AP Computer Science Principles	

Mission Statement of the Computer Science Department

The Computer Science department is committed to providing comprehensive offerings that establish foundations for lifelong learning and empower students to be effective participants in a computerized, information rich society.

Learning Expectations of the Computer Science Department

Computer Science students are expected to be:

Critical thinkers and problem solvers who:

- Make effective use of project design methodology (e.g. algorithms, flowcharts, storyboards)
- Code, debug and implement comprehensive computer programming projects
- Make effective use of software to design and generate quality products

Effective users of technology who:

- Utilize Internet resources
- Efficiently organize and distill information
- Effectively use integrated software packages.
- Demonstrate a conceptual foundation of procedures and processes on which transferable software utilization skills are dependent
- Demonstrate a conceptual foundation of structures and commands on which transferable computer programming skills are dependent

Effective communicators who:

- Present technical concepts and processes clearly and effectively
- Read, write and trace program code accurately

Responsible citizens who:

- Work productively as members of a project development team
- Actively engage in independent self-directed exploration of computer science concepts
- Use technology responsibly

Exploring Computer Science I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS130	None	.5	9,10,11,12	Semester	Yes

Exploring Computer Science I L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS140	None	.5	9,10,11,12	Semester	Yes

This is an introductory, project-oriented course exploring the world of computer science and problem solving. Assignments are inquiry-based, focus on socially relevant computing topics, and utilize a variety of tools and platforms. Topics include human computer interaction, problem solving, web design, and introductory programming. **This course is a prerequisite for Exploring Computer Science II, Introduction to Programming Using Python, Web Design, Java Programming, and AP Computer Science courses.**

**Students taking this course for honors credit (L4) will be required to complete a semester-long independent project.

Exploring Computer Science II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS131	Successful completion of Exploring Computer Science I	.5	9,10, 11, 12	Semester	Yes

Exploring Computer Science II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS141	B or better in Exploring Computer Science I L3 or B- or better in Exploring Computer Science I L4	.5	9,10, 11, 12	Semester	Yes

This course is a continuation of Exploring Computer Science 1. In this project oriented course students will have the opportunity to apply concepts learned in the previous course. Assignments are inquiry-based, focus on socially relevant computing topics, and utilize a variety of tools and platforms. Topics include computing and data analysis, robotics, and other relevant applications.

**Students taking this course for honors credit (L4) will be required to complete a semester-long independent project.

Introduction to Programming Using Python L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS132	Successful completion of Exploring Computer Science I	.5	9, 10,11,12	Semester	Yes

Introduction to Programming Using Python L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS142	B or better in Exploring Computer Science I L3 or B- or better in Exploring Computer Science I L4	.5	9, 10,11,12	Semester	Yes

This is an introductory, project oriented programming course. Students will be introduced to object oriented programming using the Python programming language. Students will gain experience in foundational programming concepts through the creation of relevant programming projects and game design.

**Students taking this course for honors credit (L4) will be required to complete a semester-long independent project.

Web Design L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS232	Successful completion of Exploring Computer Science I	.5	10, 11, 12	Semester	Yes

Web Design L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS242	B or better in Exploring Computer Science I L3 or B- or better in Exploring Computer Science I L4	.5	10, 11, 12	Semester	Yes

This course will introduce students to the fundamentals of web design. Students will learn web programming using HTML and CSS. Students will also learn to use commercial web authoring software and graphics software. Students will gain experience and demonstrate their knowledge and skills through projects creating websites.

**Students taking this course for honors credit (L4) will be required to complete a semester-long independent project.

Java Programming L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS243	B or better in Exploring Computer Science I L3, or B- or better in Exploring Computer Science I L4	.5	10, 11, 12	Semester	Yes

This is a project based programming course introducing students to object oriented concepts using a subset of the Java language. Students will develop and refine their project design skills as well as acquire a knowledge and understanding of fundamental Java language structures and data types. This course is a prerequisite for AP Computer Science.

AP Computer Science Principles					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS351	B or better in Exploring Computer Science I L3 or L4, B or better in an additional computer science course, and approval of course instructor	1	10,11,12	Full Year	Yes

This course investigates the central ideas of computer science with fundamental topics that include problem solving, design strategies, and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problems solving and design.

The Advanced Placement Computer Science Principles exam is expected of all students in this course.

AP Computer Science					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
CS350	B or better in Java Programming and approval of the course instructor	1	11,12	Full Year	Yes

This course is a continuation of the methods and concepts introduced in Java Programming. Emphasis is on the application of more advanced programming techniques and data structures in the development of object oriented programming projects. The topics discussed in this course will be consistent with the Educational Testing Services recommendations relative to the AP Computer Science A exam.

Students are expected to take the AP exam in May.

English

Department Chair: Ms. Cheryl Tucker

Course Offerings:	Elective Courses:
English 9 L2, L3, L4	Creative Writing L3
English 10 L2, L3, L4	Empower Your Writing L3, L4
English 11 L2, L3, L4, L5	Journalism I L3, L4
AP English Literature and Composition	Journalism II L4
Senior Seminars	Reflective Writing L3, L4
	Speech L3

Mission Statement

The mission of the English program is to help students use language to facilitate their thinking while learning to understand and respect the ideas of others. By doing so, they deepen their awareness of themselves and their world. The department strives to empower students with habits that lead to coherent, critical, and creative thinking. We believe that participation in this process makes our students' lives more personally rewarding.

Our students:

- Understand, analyze, and interpret the ideas found in significant and diverse literary works
- Express their ideas using all forms of communication
- Engage in the writing process
- Appreciate literature

Academic Expectations:

Effective communicators who:

- Formulate clear, logical, and organized arguments using evidence
- Use a variety of media
- Apply standard conventions of spoken and written English
- Listen actively

Critical thinkers and problem solvers who:

- Develop lifelong intellectual curiosity
- Demonstrate self-reliance
- Exhibit creativity
- Research effectively
- Analyze literature both in discussion and writing
- Approach issues with a kaleidoscopic perspective
- Accept mystery and ambiguity
- Develop comprehension of literature

Responsible citizens who:

- Understand and respect themselves
- Understand and respect difference
- Make informed choices
- Work successfully individually and in groups

Efficient users of technology who:

- Select technology appropriate to their purpose
- Consider their audience and apply a variety of tools to support clear and effective communication
- Research on the Internet, finding and recognizing valid sources
- Critically evaluate information conveyed by various media
- Use technology to facilitate and enhance the writing process

English 9 L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN120	In addition to having the recommendation of the Grade 8 English teacher, students placed in this course meet <i>at least two</i> of the following criteria and will benefit from the support of individualized instruction in writing and reading comprehension: <ul style="list-style-type: none"> Earn a C- or lower in English class Earn a C+ or lower on grade 8 portfolio Scored a Level 3 or lower on the State Standardized Test 	1	9	Full Year	Yes

This course provides a solid and fundamental program in reading, writing, and discussion skills with an additional level of support to prepare students to take a variety of academic courses. The course offers direct instruction in the standard conventions of written English. The course also attempts to impart a level of sophistication, insight, and precision in students' understanding of literature. During the course of the full year, students will write a variety of major essays, most of which will be based on analysis of literary works. Shorter and less formal writing exercises will be assigned over the course of the year as well. Students will be required to read various genres, which include novels and plays as well as short stories and poetry.

English 9 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN130	B+ or lower in Grade 8 English, B on grade 8 writing portfolio, and recommendation of Grade 8 English teacher	1	9	Full Year	Yes

The pace and intensity of this course are appropriate for students who have solid reading and writing skills. The course offers direct instruction in the standard conventions of written English. The course also attempts to impart a level of sophistication, insight, and precision in students' understanding of literature. During the course of the full year, students will write a variety of major essays, most of which will be based on analysis of literary works. Shorter and less formal writing exercises will be assigned over the course of the year as well. Students will be required to read various genres, which include novels and plays as well as short stories and poetry.

English 9 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN140	A- or higher in Grade 8 English, B+ or higher on the grade 8 writing portfolio, and recommendation of Grade 8 English teacher	1	9	Full Year	Yes

English 9 Honors L4 is a challenging program intended for students who have consistently demonstrated excellent abilities in both writing and intuitive reading. In order to understand and appreciate the major works of literature covered during the full year; students are expected to have advanced inferential reading skills. Students will be introduced to five basic literary genres: drama, poetry, essays, novels, and short stories. Students will be required to write a multitude of major essays over the course of the year, most of which will be based on analysis of literary works. Shorter and less formal writing exercises will be assigned over the course of the year as well.

English 10 L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN220	Recommendation of ninth grade English teacher	1	10	Full Year	Yes

This course continues to provide a solid program in reading and writing skills, preparing students for more advanced and demanding academic courses. English 10 L2 builds on the skills acquired freshman year. Students continue to read and analyze novels, short stories, poems, plays, and essays. Continued from freshman year, direct instruction on the standard conventions of written English is part of the curriculum. During the course of the year, students are required to read several texts culminating in the writing of essays involving literary analysis. Students will also be asked to complete many shorter and less formal writing exercises.

English 10 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN230	C- or better in English 9 L3 and recommendation of ninth grade English teacher	1	10	Full Year	Yes

This course is intended for students with solid reading and writing skills. Research activities, vocabulary work, detailed instruction in the writing process, and high expectations for literal and inferential comprehension of literature help prepare students for future success in all coursework. There will also be direct instruction on the standard conventions of written English. During the course of the year, students are required to read a variety of major works analytically, including novels and plays, as well as short fiction, poems, and essays. Most of the writing assignments in the course require literary analysis.

English 10 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN240	C+ or better in English 9 L4 or a final average of A or better in English 9 L3 coupled with recommendation of ninth grade English teacher	1	10	Full Year	Yes

English 10 Honors L4 is a highly rigorous course that requires students to produce sophisticated analysis of novels, short stories, plays, and poems, with an emphasis on connotative understanding of challenging poetry. Students are charged with writing many major essays involving insightful textual analysis of literature. There are also numerous less formal, shorter writing exercises and a challenging research exercise required over the course of the year. Students are required to contribute thoughtfully to class discussion as well as engage in outside, independent reading. Key components to success in this course are independence and insight. Finally, vocabulary study is also an expectation of the course.

English 11 L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN320	Recommendation of tenth grade English teacher	1	11	Full Year	Yes

English 11 L2 covers several major literary works, as well as numerous short stories, plays, and poems that center on the American experience. A review of the standard conventions of written English is included. Class discussion grows organically from the major themes encountered in the students' reading, and essay assignments are often based upon these class discussions. Students are required to write many major essays involving literary analysis. In addition, numerous shorter, less formal writing exercises will be required.

English 11 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN330	C- or better in English 10 L3 and recommendation of tenth grade English teacher	1	11	Full Year	Yes

English 11 L3 covers many major literary works, as well as numerous short stories, plays, and poems that center on the American experience. A review of the standard conventions of written English is included. Class discussions grow organically from the major themes encountered in the students' reading, and essay assignments are often based upon these class discussions. Students are required to write many major essays, most of which will involve literary analysis. Many less formal, shorter writing assignments will also be required. Students are expected to generate sophisticated, precise, and insightful thesis statements, and demonstrate evidence of advanced reading comprehension skills.

English 11 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN340	C+ or better in English 10 L4 or a final average of A or better in English 10 L3 coupled with recommendation of tenth grade English teacher	1	11	Full Year	Yes

English 11 L4 is a very rigorous course in which students read at an accelerated pace a variety of genres including novels, plays, short stories, and poems that center on the American experience. The literature examines American life, past and present, from the viewpoints of both male and female writers. In order to prepare students for success at the university level, many major essays are assigned. Most of these challenging essay assignments are based on literary analysis, including a longer analytical research project. Several less formal, shorter writing assignments will also be required.

English 11 L5					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN351	88 or better in English 10 L4 coupled with recommendation of tenth grade English teacher	1	11	Full Year	Yes

This course focuses on an intensive study of literature and the development of analytical and critical writing skills, and leads logically to the Grade 12 Advanced Placement English course. The program encourages close reading of poems, plays, and novels, and fosters discussions on a variety of literary topics. Grading for this course is mostly dependent upon the students' performance on major writing assignments. Students will be required to write many major assignments, both in and out of class, during the course of the full year.

AP English Literature and Composition					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN450	B- or better in English 11 L5 coupled with recommendation of eleventh grade English teacher; or final average of A- or better in English 11 L4 and the recommendation of current English teacher as well as the recommendation of a current AP English teacher. Students' analytical writing will be carefully considered when recommending students for AP.	1	12	Full Year	Yes

The primary goal of the course is to encourage students to continue to develop their independence as readers and skillful writers. This college-level course features a substantial amount of required and outside reading, as well as frequent written assignments, both short and long term. Most of this writing will be literary analysis, although students will have opportunities for creative work as well. After completion of the required summer reading, students will begin the course with several weeks of intensive analysis of poetry and short stories, followed by thematic units based on a variety of novels and plays from the 16th Century to the present.

AP English Literature and Composition will be conducted as a seminar, with active participation in class discussion and student presentations expected. The course will also provide preparation for the AP exam, which all students in the class are encouraged to take.

This is a full year course. Students who select this course should **not** sign up for Senior Seminars.

Senior English Seminars

All seniors who are not selecting AP English Literature must take two Senior English Seminars, one each semester. Students may not take more than one Senior English Seminar per semester except with the approval of the building principal. All seminars are half year, half-credit courses that fulfill one-half of the senior English requirements. **English elective courses do NOT fulfill the senior English requirement.**

Course Level:

Most of the Senior English Seminars may be taken for L2, L3, or L4 credit. Assignments and expectations will differ based on the level the student has selected. All students taking a Senior English Seminar for L4 credit will be expected to complete additional work.

Senior Seminar: Adventure Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN4201 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN4301 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN4401 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

Do you dream of faraway places? Do you feel an irresistible impulse to travel the world? Is adventure in your blood? In this class, we will remember who we are at our essence. Since the beginning of time, humanity's interest in the unknown has been universal and enduring, our need to push boundaries unyielding. Whether it's seeking a newer world, getting off the beaten path, or discovering a truer sense of self, this insatiable desire to explore will be the central focus of the literature read in this course.

Senior Seminar: Contemporary Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN420 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN430 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN440 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

This course will concentrate on literature written in the past 30 years with an emphasis on best sellers. Students will distinguish between escape (commercial) fiction and interpretative (literary/quality) fiction while also exploring current trends in literature, universal and timeless themes, and concerns commonly addressed in contemporary writing.

Senior Seminar: Dystopian Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN429 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN439 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN449 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

Utopian, or seemingly perfect societies, often hide a dark side, known as a dystopia. What is “perfect” is often actually a profoundly destructive, dehumanizing nightmare for the citizens who live there. This class will consider several examples of dystopian works from both literature and film. It will also look closely at post-apocalyptic literature, possibly including zombies, as well as futuristic depictions of society gone terribly wrong.

Senior Seminar: Film as Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN421 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN431 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN441 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

This course is designed to examine films with a literary lens. Students will use the terminology of film analysis to study adaptations of novels and short stories as well as original screenplays. Applying the common language of theme, setting, character, and narrative, in addition to cinematic effects, students will consider the possibilities, problems, and results of translating text to film.

Senior Seminar: The Hero's Journey

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN428 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN438 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN448 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

It's the same story over and over: a young person unsatisfied with his life and convinced that there is a larger place for him, discovers that he is an important part of a special world that he never knew existed. He meets a mentor who gives him a powerful gift, and as the young person journeys to that special place, he faces a series of challenges and ultimately becomes a hero. This course looks closely at several of those stories and investigates what their differences have to say about the cultural attitudes surrounding their writing. But whether the special realm is Hogwarts, Mordor, or the Death Star, this class also takes a close look at the similarities between the stories, and discusses what they reveal about the essential nature in all of us.

Senior Seminar: Poetry

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN424 L2	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN434 L3	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN444 L4	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

“It is the poet’s obligation to bear witness” – Plato

Over the course of the semester, students will look at various forms of poetry that have been used to “bear witness” to historical events, social movements, and other major issues of the past and present. In doing so students will sample various poets, eras, and styles of poetry and come to understand how poetry can influence positive change, in small ways as well as in big ways. Ultimately, students will realize that we can all be poets in our own right and that what we say matters.

Senior Seminar: Philosophy and Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN433 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN443 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

Some literature is philosophical, and some philosophy is quite literary. This course will explore the ways in which major philosophical ideas manifest themselves in other types of writing, and will utilize both philosophical texts and works of fiction. It will survey a broad swath of writers from the ancient Greeks through the present day. No background in the history of philosophy is required or assumed.

Senior Seminar: Psychology in Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN425 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN435 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN445 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

Writers and thinkers have continually struggled with the concept of the self and the reliability of the mind. Can we trust what we think or what we perceive? Will society accept those who don’t think or act the same way? Is there a ‘normal’? In this class we will use relevant psychological theories to delve into the mind from a literary point of view to better understand the psychology of not only ourselves, but of the society we live in.

Senior Seminar: War in Literature

Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN427 (L2)	Recommendation of grade eleven English teacher	.5	12	Semester	Yes
EN437 (L3)	C- or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes
EN447 (L4)	C+ or better in English 11 L4 or final average of A or better in English 11 L3 coupled with recommendation of eleventh grade English teacher	.5	12	Semester	Yes

The perspectives on war are as diverse as the people who are affected by those conflicts. This course will focus on the depiction of war in literature and how that depiction has changed over the course of time. We will discuss how literature can objectively portray war, speak out against war, or extol the virtues of heroism and patriotism. Historical background as well as the range of human responses to war, and the resultant moral and psychological problems which arise will be topics of particular interest. Consider: courage/cowardice, loyalty/protest, justifiable taking of life/murder. Students will pursue an examination of the effects of war on those involved in the fighting and those they leave behind. Novel, short story, poetry, and film will be examined.

Elective Offerings

The following courses may be elected *IN ADDITION* to the required English courses. Elective courses are intended to provide students with greater opportunities to engage in writing, reading, and speech activities beyond those provided in the required courses.

Creative Writing L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN135	None	.5	9,10,11,12	Semester	Yes

This course explores creativity, the imagination, and creative written expression. Learn to write powerful stories and poems with a strong voice, sensory detail, structure, and tension.

Empower Your Writing L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN134 (L3)	Students should take the same level as their English course.	.5	9,10,11	Semester	Yes
EN144 (L4)		.5	9,10,11	Semester	Yes

Learn to write beyond the five-paragraph essay. Find your voice and write with a purpose meaningful to you. This portfolio-based course will provide you the opportunity to practice writing multiple genres including persuasive and narrative pieces that address your connection to the world outside of the high school classroom.

Journalism I L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN131 (L3)	Students taking this course for honors credit (L4) are required to complete additional course work.	.5	9,10,11	Semester	Yes
EN141 (L4)		.5	9,10,11	Semester	Yes

Journalism I will include techniques of basic news gathering, writing, and editing. Feature stories, profiling, reviews, and other types of writing are studied and practiced extensively, along with the principles and practices involved in online publishing. All of the activities are related to the school newspaper and to communications as a possible career. The issues of ethics, libel, and privacy are also included in this curriculum.

Journalism II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN241	B- or better in Journalism I coupled with approval of Journalism teacher	1	10,11,12	Full Year	Yes

This course offers instruction in the basics of producing broadcast news stories on our school newspaper. Students will learn the best practices in broadcasting, continue writing in a journalistic mode, and acquire skills on how to use professional software such as Final Cut Pro. The course will also continue to study media ethics. Finally, students will also explore ways for journalists to build an audience using social media, interactivity, and other methods to engage viewers.

Reflective Writing L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN133 (L3)	The level of this course should be the same as the teacher-recommended English level.	.5	9,10,11,12	Semester	Yes
EN143 (L4)		.5	9,10,11,12	Semester	Yes

Do you want to write about your life? Do you want to express your opinion about a topic? Are you curious about how people's life experiences influence their views? These questions lie at the heart of personal stories (or memoirs) and personal essays. In this reflective writing course, we will read and write stories and essays that focus on real-life personal experience. Topics include: using narration, description, and reflection; developing your unique voice; using figurative language; and finding the extraordinary in the ordinary.

Speech L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
EN132	None	.5	9,10,11,12	Semester	Yes

This introductory course focuses on public speaking in a variety of situations, such as panel discussions, informative and persuasive speeches, and debate. Students will learn to handle speech apprehension; build confidence; use voice, pacing, and body language effectively; and use research to build credibility.

English Language Learners

Building Coordinator: Ms. Jackie Coelho

Course offerings:

ESL Academics S1	SEI English L3
ESL Academics S2	ELD Science L2
ESL I L3	ELD US History I L3
ESL II L3	ELD US History II L3
ESL Reading L3	ELL Inquiry Class
ESL Writing L3	

The Mission of the Westborough Public Schools English Language Education Department is to empower students of all cultures to achieve academic success and become responsible, productive, and contributing members of a global society.

ELL students at WHS are expected to:

- Learn about the culture of the school and how to navigate within it
- Learn about the broader culture of the U.S. and how to navigate within it
- Work toward becoming independent learners and self-advocates
- Show continuous growth in the four domains of language acquisition
- Apply linguistic constructs appropriately in social and academic settings
- Become effective communicators in English
- Be responsible school citizens, helping others in the same process
- Respect others and their differences

ESL Academics S1 & S2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL101 ELL102	Approval of ESL teacher	1	9, 10, 11, 12	Full Year	Yes

This course is for students who are learning English while enrolled in content classes.

ESL I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL130	Approval of ESL teacher	1	9,10, 11, 12	Full Year	Yes

This course is designed for students who have recently arrived in the U.S. and have little or no knowledge of the English language. The course focuses on the development of basic language skills, including conversation, grammar, vocabulary, reading and writing. Attention is given to learning about American culture as well. Students enrolling for this class should also enroll in ESL Reading. This course can be taken as a L3 course with teacher's approval.

ESL II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL131	Approval of ESL teacher	1	9,10,11,12	Full Year	Yes

This course is designed for students with a basic knowledge of English. It is for high beginners to intermediate English Language Learners and focuses on expanding the student's knowledge of the language, including grammar, vocabulary, and syntax. Study is done through reading, writing, lecture, discussions and drills. This course can be taken as a L3 course with teacher's approval.

ESL Reading L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL133	Approval of ESL teacher	1	9, 10,11, 12	Full Year	Yes

This course is designed for students who have recently arrived in the US and have little or no knowledge of the English language. The course focuses on the development of reading comprehension in English. Carefully scaffolded readings build vocabulary and basic reading strategies; both fiction and nonfiction are read. This course fulfills the graduation requirement for English. This course can be taken as a L3 course with teacher's approval.

ESL Writing L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL134	Approval of ESL teacher	1	9, 10,11, 12	Full Year	Yes

This course is designed for students who have recently arrived in the U.S. and have little or no knowledge of the English language. The course focuses on the development of writing skills in English with the goal of writing strong paragraphs. Writing tasks will include both personal and academic assignments. Writing will be used to reflect and to learn. Students will keep journals and write in response to readings. They will learn basic writing structures. This course fulfills the graduation requirement for English. This course fulfills the graduation requirement for English. This course can be taken as a L3 course with teacher's approval.

SEI English L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL132	Approval of ESL teacher	1	9, 10, 11, 12	Full Year	Yes

This course is an alternative English class for students learning English. Students will read a variety of literature genres: plays, poems, novels and short stories, and expand their writing skills. Grammar skills work will continue along with literary analysis. This course fulfills the graduation requirement for English.

ELD Science L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL128	Approval of ESL teacher	1	9, 10,11, 12	Full Year	Yes

This class is for SLIFE students and ELL students with a WIDA score below 4. It uses Physical Science content as the vehicle for English language development. Content covered will include basic Science skills and theories such as the use of measurements and the scientific method, basic labs and lab reports. It will include other Science topics best suited to the class goals. This class will count toward graduation.

ELD US History I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL103	Approval of ESL teacher	.5	9, 10,11, 12	Semester	Yes

This course uses English Language Development strategies as a vehicle to examine the historical origin and developments in major events of U.S. History from the Colonial era through Reconstruction. Emphasis will be placed on understanding the birth and development of the U.S. government as the nation formed and became a world power. This satisfies the graduation requirement.

ELD US History II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL104	Approval of ESL teacher	.5	9, 10,11, 12	Semester	Yes

This course uses English Language Development strategies as a vehicle to survey American History from Reconstruction to the present. Emphasis is placed on how, and why, the United States has evolved as a leader of the free world and how America might successfully deal with the challenges we face in the future. There will be analysis of conflicting points of view and current events. This satisfies the graduation requirement.

ELL Inquiry Class L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ELL105	Approval of ESL teacher	.5	9, 10,11, 12	Semester	Yes

This class will be based on a Guided Inquiry Design Framework. The main focus will be inquiry into career paths. The class will incorporate all the language domains in addition to critical thinking and problem-solving skills. Technology skills, research skills and habitudes will all play a role and the ELL department will collaborate with the library and counseling departments.

Family & Consumer Sciences

Department Chair: Mr. Bill Parsons

Course offerings:

Food Foundations L3	Art of Baking L3
International Foods Region A L3	Art of Cooking L3
International Foods Region B L3	

Mission Statement

The mission of the Family and Consumer Science Department is to provide a program where knowledge, skills, and practices promote general well being, healthy behaviors and successful life-management.

Learning Expectations

Effective Communicators who:

- Read, write and speak English clearly
- Display their competence by accomplishments and actions

Critical Thinkers and Problem Solvers who:

- Work effectively on a team
- Apply theoretical concepts

Responsible Citizens who:

- Display responsible work habits
- Work successfully with a wide variety of co-workers
- Demonstrate respect for other student's work
- Develop solutions within a diverse atmosphere

Effective users of Technology who:

- Perform basic computer tasks
- Practical use of a wide variety of technologies

Food Foundations L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FCS130	No	0.5	9,10,11,12	Semester	Yes

This course introduces students to the amazing world of food and enables them to develop the skills needed to successfully plan and safely prepare a variety of nutritious and delicious food products. Students will learn how to equip and organize a kitchen workspace then begin to develop foundation food preparation skills. Careers associated with food, cooking methods, food safety, kitchen mathematics, kitchen safety, mealtime etiquette, meal planning, recipe analysis & planning, serving food, and shopping for food are topics that will be covered.

International Foods Region A L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FCS131	C or better in Food Foundations	0.5	9,10,11,12	Semester	Yes

Students in this course will complete a brief review of laboratory procedures and foundation skills for food preparation and then be introduced to the cultures and cuisines of France and Italy. A variety of delicious traditional recipes will be prepared to increase students understanding and appreciation of each country's cuisine. **Prerequisite:** To enroll in this course, a student must have taken and passed at least one other WHS Foods course. If the student has not taken any other WHS food courses, **Food Foundations** is the required prerequisite for this course.

International Foods Region B L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FCS132	C or better in Food Foundations	0.5	9,10,11,12	Semester	Yes

Students in this course will complete a brief review of laboratory procedures and foundation skills for food preparation and then be introduced to the cultures and cuisines of China and Mexico. A variety of delicious traditional recipes will be prepared to increase students understanding and appreciation of each country's cuisine. **Prerequisite:** To enroll in this course, a student must have taken and passed at least one other WHS Foods course. If the student has not taken any other WHS food courses, **Food Foundations** is the required prerequisite for this course.

The Art of Baking L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FCS133	C or better in Food Foundations	0.5	9,10,11,12	Semester	Yes

This course was previously called Foundations of Baking. Students in this course will complete a brief review of laboratory procedures and foundation skills for food preparation and then focus on the preparation of sweet and savory baked goods. Students will learn about ingredients used for baking, the baking process, storing baked products and will prepare a variety of quick and yeast breads, cakes, cookies, pies and tarts. **Prerequisite:** To enroll in this course, a student must have taken and passed at least one other WHS Foods course. If the student has not taken any other WHS food courses, **Food Foundations** is the required prerequisite for this course.

The Art of Cooking L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FCS134	C or better in Food Foundations	0.5	9,10,11,12	Semester	Yes

This course was previously called Foundations of Cooking. Students in this course will complete a brief review of laboratory procedures and foundation skills for food preparation and then focus on the preparation of fruits, vegetables, grains, dairy products, eggs, and meat using a variety of cooking methods and creative additions to add nutrition and appeal to meals. Students will learn about various methods of heat transfer, moist heat cooking, dry heat cooking, microwave cooking, herbs and spices, and garnishes.

Prerequisite: To enroll in this course, a student must have taken and passed at least one other WHS Foods course. If the student has not taken any other WHS food courses, **Food Foundations** is the required prerequisite for this course.

Fine Arts

Department Chair: Mr. Christopher Martin

Course Offerings:

American Music History L3, L4	Graphic Design
AP 2D Studio Art	Integrated Theater Arts I & II (Option for L3)
AP 3D Design Portfolio	Mixed Chorus
AP 2D Design	Mixed Media Painting L3
2D Art Foundations	AP Music Theory
3D Art Foundations	Music Theory I & Music Theory II L4
3D Design L3	Piano Lab – No Level
Birth of Modernism L3, L4	Pottery I, II, III, IV
Chamber Orchestra	Shakespeare Text L3, L4
Concert Band	Symphonic Band
Concert Choir	Theatre Arts I & Theatre Arts II L4
Concert Orchestra	Theatrical Ensemble I & II L4
Digital Photography I & II	Theatre Foundations
Drawing I & II, L3,L4	Women's Chorale
Film & Society L3, L4	

MISSION

The mission of the arts is to provide for the creative expression of ideas, emotions, and beliefs as well as applying essential skills that are unique to art, music, and drama.

ACADEMIC EXPECTATIONS

VISUAL ARTS

Students are expected to:

- Apply the elements and principles of art in their work
- Apply a broad range of two and three dimensional media, techniques, and processes
- Apply creative thinking by observing, analyzing, inventing, and expressing ideas
- Apply critical thinking by observing, analyzing, interpreting, and evaluating their artwork and the artwork of others
- Make connections between the visual arts and other disciplines
- Describe the purpose and meaning of art as it relates to cultures and historical periods

THEATRE ARTS

Students are expected to:

- Apply the dramatic elements portray characters in scripted and improvised scenes
- Apply creative thinking by reading, analyzing, and writing dramatic works
- Rehearse and stage dramatic works
- Demonstrate skills in the basic tools, media, and techniques of theatrical production
- Describe and analyze their own theatrical work and the work of others using appropriate theatre vocabulary

- Describe the purpose and meaning of theatre as it relates to other disciplines.

MUSIC

Students are expected to:

- Apply the elements of music in performance and/or composition
- Sing and play alone and with others a varied repertoire of music
- Read and notate music
- Listen to, analyze, describe, and evaluate music and musical performances
- Apply creative thinking by analyzing, expressing, inventing, and interpreting ideas.
- Describe the purpose and meaning of music as it relates to cultures and historical periods

PLEASE NOTE:

- After successful completion of 2D Art Foundations, students may progress on to Multi Media Painting or Drawing 1 and Studio Art (Drawing) 2D AP.
- After successful completion of 3D Art Foundations, students may progress to a pottery sequence and 3D Design Portfolio AP.
- Students who elect music courses will have opportunities to develop their abilities in either choral or instrumental music, or both. Students who wish to pursue music at an advanced level can audition for the select ensembles such as Wind Ensemble, Concert Choir, or Women's Chorale.
- Students who wish to participate in after school musical ensembles, Districts, or All-States must be registered as a member of one of the major in-school performing ensembles.
- Graphic Design, Digital Photography, American Music History, Film & Society, Modernism, Music Theory, 2D Art Foundations, 3D Art Foundations, Theatre Arts 1, and Theatre Foundations are excellent courses for students who wish to include fine arts classes in their schedules. They are open to all students regardless of their backgrounds in the arts. These courses are strongly recommended for students who are contemplating or preparing for arts related careers.

2D Art Foundations					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA102	This course is mandatory for students who wish to take upper level two dimensional studio art electives.	.5	9, 10, 11, 12	Semester	No

This course provides students with the skills that are essential for a solid art background. Students develop competency and confidence in drawing, painting, and sculpture, through the use of pencil, charcoal, watercolor and acrylic paints. They develop an in-depth understanding of the elements of art and the principles of design, and apply their learning imaginatively and skillfully in their own work. Students are also exposed to the artwork of major artists and diverse cultures, developing understanding of how others have used art concepts and techniques to creatively communicate ideas and convey meaning through visual art. Students should expect to receive homework assignments in this course.

3D Art Foundations					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA103	This course is mandatory for students who wish to take upper level three dimensional studio art electives.	.5	9, 10, 11, 12	Semester	No

This course provides students with the skills that are essential for a solid art background in clay and sculptural mediums. They develop an in-depth understanding of the sculpture elements of art and the principles of design, and apply their learning creatively and proficiently in their own work. Students are also exposed to the artwork of major artists and diverse cultures, developing understanding of how others have used art concepts and techniques to creatively communicate through visual art. Students who successfully complete this course have the background to continue in Pottery and 3D Design courses.

Drawing I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA131	C or better in 2D Art Foundation or with approval of instructor	.5	9, 10, 11, 12	Semester	Yes

This course is a prerequisite for 2D Studio Art AP

Drawing I is a course designed to investigate the processes involved in the creation of the visual statement. Three major components of the course are the development of the student's ability to "see," the mechanics of rendering an image, and the production of visual statements made by people in the context of the history of art. These components are developed through a sequence of drawing exercises while using various media, such as sketching posed figures, studying contrasts of light and dark, asymmetrical compositions, and creating textures and patterns.

Drawing II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA240	B - or better in Drawing I, or with the approval of the instructor	.5	10, 11, 12	Semester	Yes

Drawing II is an advanced course in the study of the drawn image. The class is focused on intensified activities that include gesture and contour drawing, the creation of volume through linear extension, and the construction of forms through continual surface lines. Emphasis is on posed figures, figures in action, and the still life, using a variety of media and tools.

Mixed-Media Painting L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA230	C or better in 2D Art Foundation, or with approval of the instructor.	.5	10, 11, 12	Semester	Yes

Students electing Mixed-Media Painting will have an opportunity to study three major paint media--watercolors, acrylics and oil paints. In watercolor, the various uses of paper, and brushes and paint techniques will be studied. Because acrylics are relatively new paints with unlimited potential, much experimentation will be expected from each student. In contrast, students will study the strict laws governing the construction of an oil painting.

Graphic Design					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA100	None	.5	9, 10, 11, 12	Semester	No

Graphic Design students will use technology along with traditional graphic materials to create their designs. They will utilize Adobe Creative Suite 4, digital cameras, scanners, and a large format printer in this course. Students will demonstrate original and consistent application of elements and principles of design in their work. The intent of this course is to have students progress to think and format as designers, become skilled with Photoshop CS 6, Illustrator CS6, In Design CS 6, ultimately working with all three programs to create a body of work that can be documented through assignments, sketchbooks, and CD or flashdrive.

3 Dimensional Design L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA231	C or better in 3D Art Foundations. This course is a prerequisite for 3-D Design Portfolio AP.	.5	10, 11, 12	Semester	Yes

This course will introduce the fundamental concepts and components of three-dimensional design in art. The main emphasis of this course is to develop critical thinking skills as they apply to three dimensional art forms and to help students gain a deeper understanding of visual art. Sculptural issues will be explored through the solution of design problems. The basic components line, plane, mass and space are examined using a variety of materials such as mat board, clay, wire mesh, paper, plaster, wood, and found objects. The course is intended to develop the conceptual skills related to three-dimensional thinking and the ability to produce creative and practical solutions used in resolving three-dimensional problems encountered in sculpture. Students who successfully complete this course can use the work towards completion of the breadth portion of the 3-D Design obligation.

Pottery I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA132	C or better in 3D Art Foundations	.5	9,10,11,12	Semester	Yes

Pottery II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA141	C+ or better in Pottery I	.5	10,11,12	Semester	Yes

Pottery III L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA242	C+ or better in Pottery II	.5	10,11,12	Semester	Yes

Pottery IV L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA250	B- or better in Pottery III (Independent Study, per permission of the instructor)	.5	10,11,12	Semester	Yes

These courses provide an in-depth and progressive study of wheel-thrown pottery. Students learn how to use the potter's wheel and decorate pottery using a variety of techniques. This is a skill based class where there are fundamental throwing techniques that students master as they progress. Special attention is given to individual development and artistic expression.

Digital Photography I					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA101	None	.5	9, 10, 11, 12	Semester	No

Digital Photography will focus on students learning how to create visual artwork using digital cameras, scanners, printers and Photoshop CS 6 to create montages, apply artistic effects, clone objects and people, modify color and shadows, and alter perspectives in their photographs. Some of the concepts covered include how to take the best initial picture, selecting and transforming parts of an image, color and value corrections, working with layers and masks, file formats, and working with and selecting the best technology to achieve the most artistic result. Students upon completion of this course should have a good working knowledge of the Digital SLR camera and Photo enhancement software.

Digital Photography II					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA200	C or better in Digital Photography I	.5	10, 11, 12	Semester	No

Digital Photography II expands upon the photographic competencies and aesthetic sensibilities covered in Digital Photography I.

AP 2D Studio Art (Drawing)					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA450	B- or better in Drawing I or Multimedia Painting; admission is subject to a portfolio review by the instructor.	1	12	Full Year	Yes

AP Studio Art class is designed by The College Board based on a set of national standards for performance in the visual arts. It is designed for those students who are seriously interested in the practical experiences of art making regarding issues in two-dimensional design. This 2-D course involves purposeful decision making about how to apply the elements and principals of art and design in an integrative way. Students are guided through a rigorously organized curriculum where they can demonstrate their knowledge and skills in design principles articulated through the visual elements.

For this portfolio, students are asked to demonstrate mastery of 2-D design through any two-dimensional medium and/or process. This AP course addresses three major concerns that are worked on throughout the school full year. They are: Quality, Concentration, and Breadth. A completed portfolio is assembled and submitted to the College Board for assessment at the end of the full year.

A summer assignment is a vital part of Advanced Placement Studio Art. Students must prepare several works before returning to school in September. It is expected that all students signed up for this course will submit their portfolio to the College Board AP evaluation committee for review.

AP 3D Design Portfolio					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA451	B- or better in Pottery III or 3D Design; admission is subject to a portfolio review by the instructor.	1	12	Full Year	Yes

3D Design Portfolio follows a set of national standards for performance in the visual arts. It is designed for those students who are seriously interested in the practical experiences of art making regarding issues in three-dimensional design. This 3-D course involves purposeful decision making about how to apply the elements and principles of art and design in an integrative way. Students are guided through a rigorously organized curriculum where they can demonstrate their knowledge and skills in design principles articulated through the visual elements.

For this portfolio, students are asked to demonstrate mastery of 3-D Design through either Sculpture mediums or Pottery. This course addresses three major concerns that are worked on throughout the school full year: Quality, Concentration, and Breadth. Students can elect to submit a completed portfolio is for assessment at the end of the full year. Students must prepare several works before returning to school in September before their senior full year by completing a summer assignment.

AP 2D Design					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA451	B- or better in Digital Photography 1 or Graphic Design; admission is subject to a portfolio review by the instructor.	1	12	Full Year	Yes

The AP 2-D Design course is designed by The College Board based on a set of national standards for performance in the visual arts; the portfolio contains 29 artworks in three sections: Quality, Concentration, and Breadth. This class is designed for experienced, highly motivated students in graphics and photography emphasizing making art through photography and digital media. Students will be required to investigate all three aspects of the portfolio, which include Quality, Concentration, and Breadth; media used will be digitally based in graphics and photography. Students will have access to Adobe Creative Suite software as well as a scanner and printer. Students are expected to develop mastery in photographic and graphic concepts, composition and execution of ideas. Summer course work is required and is a vital element of completing the portfolio with the student prepared to present their work for critique in September. AP 2D Design is not based on a written exam; instead, all students are required to submit a finished portfolio to the AP College Board evaluation committee in May of the school year.

Modernism L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA330 (L3)	None	.5	11, 12	Semester	Yes
FA340 (L4)					

This interdisciplinary, team-taught course focuses on the art, music, literature, and theater of the twentieth century. Beginning with an analysis of contemporary cultural trends, the course then explores the roots of these trends by turning to the Modernist period. After some training in "aesthetic scanning," an approach to analyzing art, music, and literature, students will have the opportunity to study the connections between modern poetry, fiction, and theater; jazz, classical, and popular music; and artistic movements from impressionism to performance art. The course involves reading, discussion; slide lectures, listening to music, field trips, written assignments, and creative projects.

*Students taking this course for honors (L4) credit are required to do an extended research project.

Music Theory I					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA105	None	.5	9, 10, 11, 12	Semester	No

This course is an in-depth study of the basic elements of music including rhythm, melody, harmony, expressive elements, tone color and form. Ability to sing or play an instrument is helpful, but not required to take the course.

The main goal of the course is to give students a solid foundation in the basics of music theory and to develop skills in sight singing and rhythmic and melodic dictation. Selected examples of music from various periods of music history as well as music from modern idioms including Jazz and Rock are used for purposes of illustrating treatment of musical elements, and to broaden the musical background of the students.

Music Theory II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA241	B- or better in Music Theory I or with the permission of the instructor	.5	10, 11, 12	Semester	Yes

This course is an in-depth study of harmony beginning with seventh chords and progressing to atonality. Topics include orchestration, 18th century harmony, 20th century harmony, ear training, dictation, and solfege.

AP Music Theory					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA350	B or better in Music Theory II, or permission of the department head	.5	11,12	Semester	Yes

The goals of this course are to prepare students for the Advanced Placement music theory exam, and develop advanced skills in music theory, music composition, analysis, and MIDI technology. Heavy emphasis is placed on developing skill in sight signing, as well as melodic, rhythmic, and harmonic dictation. Students will be expected to compose at least four original pieces during the course.

American Music History L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA232 (L3)	None	.5	10, 11, 12	Semester	No
FA244 (L4)					

This course focuses on how the development of Western music through the colonization of American and the influence of immigrants from around the world led to the birth and development of American Music. Throughout this course, students will carefully examine the various styles that were indigenous to America such as vaudeville, spirituals, ragtime, gospel, jazz, blues, and rock and roll. This course involves reading, discussion, slide lectures, listening to music, written assignments, and creative projects. Students wishing to take this class for Level IV Honors credit will be required to do an extended research project. **This course may be taken to fulfill a senior history elective requirement. This course may be taken to fulfill a senior history elective requirement.**

Piano Lab – No Level					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1021	None	.5	9, 10, 11, 12	Semester	No

This course is designed for students with little or no experience with piano. The concepts of reading and performing standard notation, basic level piano repertoire, piano technique, sight-reading, improvisation, and MIDI will be presented. This course is offered to all students. No experience in choral or instrumental music is necessary. Students need not know how to read music.

Concert Band					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA107	None	1	9, 10, 11, 12	Full Year	No

The Concert Band performs a wide variety of music including marches, light concert music, and standard band music from various time periods in music history. Participation in this course requires attendance at all scheduled concerts including Band-O-Rama, Winter Concert, Spring Concert, Graduation, and adjudication festivals. Daily individual practice and preparation, class participation, and some after school sectionals are required

Symphonic Band					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA106	Audition Required	1	9, 10, 11, 12	Full Year	No

Participation is open to brass, woodwind, and percussion players by audition. The Wind Ensemble will focus on advanced repertoire including class works for wind band and orchestral transcriptions. Participation in this course requires attendance at all concerts including Band-O-Rama, Winter Concert, Spring Concert, Baccalaureate, Graduation, and adjudication festivals. Students in this ensemble are strongly encouraged to take private lessons. Daily individual practice and preparation are required, as well as attendance at a monthly sectional after school.

Concert Orchestra					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA109	None	1	9, 10, 11, 12	Full Year	No

The Concert Orchestra rehearses and performs Baroque, Classical, and Contemporary musical repertoire. A wide range of music is selected to give the Orchestra members a well-rounded knowledge of musical styles from the classical literature to Broadway and popular music as well as music of contemporary American composers. Participation in this course requires attendance at all concerts. Concert Orchestra is open to all string players who play violin, viola, cello, and double bass.

Chamber Orchestra					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA108	Audition Required	1	9, 10, 11, 12	Full Year	No

This course is open to grades 9-12 by audition. The Chamber Orchestra will study and perform a variety of advanced string and full orchestra literature, encompassing a wide range of styles and periods in music history. Participation in this course requires attendance at all concerts. Students in this ensemble are strongly encouraged to take private lessons.

Women's Chorale					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1010	Audition Required	1	9, 10, 11, 12	Full Year	No

The Women's Chorale is a select vocal performance ensemble. Audition is required for entrance. The course stresses the fundamentals of vocal technique and the study and performance of music composed for treble voices. Students study and perform music from a wide range of musical styles, encompassing all periods of music history and many cultures from around the globe. Previous participation in Mixed Chorus does not guarantee that a student is admitted to Women's Chorale.

The Women's Chorale performs at the October Choral Collage Concert, the Winter Concert, and the Spring Concert. Often the ensemble will perform at other venues, including competitions and festivals.

Mixed Chorus					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1011	None	1	9, 10, 11, 12	Full Year	No

The Mixed Chorus is a non-selective vocal performance ensemble. No audition is required for entrance. The course stresses the fundamentals of vocal technique and the study and performance of music composed for four-part music for mixed voices (soprano, alto, tenor, and bass). Students study and perform music from a wide range of musical styles, encompassing all periods of music history and many cultures from around the globe in a large group situation. Previous singing experience is helpful, but not necessary. The Mixed Chorus performs at the October Choral Collage Concert, the Winter Concert, and the Spring Concert as well as other venues, including competitions and festivals.

Concert Choir					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1012	Audition Required	1	9, 10, 11, 12	Full Year	No

The Concert Choir is a select group of students who have shown an outstanding vocal and musical ability through participation in other vocal performance ensembles. The group will study advanced choral works both with accompaniment and *a cappella*. Students should be able to read music and should have a solid background in vocal technique. Entrance into Concert Choir is by audition only. The auditions take place as students are selecting courses for the following academic full year. Previous participation in either the Women's Chorale or Mixed Chorus does not guarantee that a student is admitted to Concert Choir.

Choir & Wind					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1013	Approval by department chair	1	9, 10, 11, 12	Full Year	No

Choir & Orchestra					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1015	Approval by department chair	1	9, 10, 11, 12	Full Year	No

Mixed Chorus & Concert Band					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1014	Approval by department chair	1	9, 10, 11, 12	Full Year	No

Chorale/Orchestra					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1016	Approval by department chair	1	9, 10, 11, 12	Full Year	No

Students are allowed to join no more than two ensembles that rehearse during the same periods without the approval of the Department Chair.

Theatre Arts I					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1018	None	.5	9, 10, 11, 12	Semester	No

Theatre Arts 1 is a performance-based course designed to introduce students to the basic elements of Theatre. Students will develop basic acting skills such as pantomime, improvisation, physical character building, voice work, script analysis and emotional connection. Students will be expected to memorize and perform contemporary monologues and scenes and develop believable characters, physically and emotionally. Projects include performing scripted scenes and monologues, keeping a journal to reflect upon their own work, and reviewing peer performances.

Theatre Arts II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA1419	B- or better in Theatre Arts 1 or Shakespeare: Playing the Text	.5	9,10,11,12	Semester	Yes

Theatre Arts II is a performance based class that builds on Theatre Arts I to further students' understanding of acting principles, theatrical conventions, and the role of a director. Students will develop understanding of audition techniques, performance of classical and Shakespearean texts, scene study skills, and introductory playwriting and directing concepts. Students will focus on creating their own acting "method" using exercises from Stanislavsky, Meisner, Hagen, Spolin, Boal, and other acting greats. Projects include performing scripted monologues and scenes, self-scripting and performing monologues, keeping a journal to reflect upon their own work, and reviewing peer and professional performances.

Integrated Theater Arts I (Option for L3)					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA136	None	.5	9,10,11,12	Semester	No/Yes (Option for L3)

Designed in conjunction with the Special Education department, Integrated Theater Arts is an introductory theater arts course designed to connect students with diverse learning abilities and backgrounds. The course utilizes Theater to practice and strengthen independence in life skills, such as self-advocacy, collaboration, and social skills. Students will work collaboratively to stage a theater performance, developing acting, directing, and technical theater skills. Projects will include a class performance at the end of the semester, as well as reflections in and outside of class.

Integrated Theater Arts II (Option for L3)					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA137	Successful completion of Integrated Theater Arts I	.5	9,10,11,12	Semester	No/Yes (Option for L3)

Designed in conjunction with the Special Education department, Integrated Theater Arts II is a continuation of Integrated Theater Arts I and is designed to connect students with diverse learning abilities and backgrounds. The course utilizes Theater to practice and strengthen independence in life skills, such as self-advocacy, collaboration, and social skills. Students will work collaboratively to stage a theater performance, developing acting, directing, and technical theater skills. Students taking Integrated Theater Arts II will take on leadership and mentor roles to complete a class performance at the end of the semester, as well as reflections in and outside of class.

Theatre Foundations					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA138	None	.5	9, 10, 11, 12	Semester	No

As an introduction to the theatrical process, students will learn design principles, technical roles and responsibilities, directing methods and theories, and stage and arts management techniques. This course will also explore Theatre History and cover the evolution of theatrical styles and performances from the Origins of Theatre through the 20th century.

Theatrical Ensemble I & II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA243 (I)	Limited by audition to students who have successfully completed Theatre Arts I plus one other Theatre offering with a B- or better, or by permission of the instructor.	.5	10, 11, 12	Semester	Yes
FA341 (II)					

Created in the mold of theatre companies such as the Wooster Group, the Group Theater, Upright Citizens Brigade and Steppenwolf, this class aims to provide students with an opportunity to create and explore their own work and its relevance to the world around them. This is the third and concluding course in the Theatre Arts sequence.

Using a specific topic chosen by the instructor (such as transcendentalism, the Grecian wars, community issues, One Act Form, 10 Minute Play Form) students will create an original piece of material in a process driven environment. Students will explore how to properly use their bodies to express the emotional and concrete actions of characters, how to construct effective scenes, and how to strengthen their overall craft as theatrical artists. The class will culminate in a performance of these materials in front of a live audience.

Film and Society L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA135 (L3)	None	.5	9, 10, 11, 12	Semester	Yes
FA143 (L4)					

This course will examine the art of motion pictures using examples from a variety of genres and eras. The course will cover Silent Film, Propaganda Film, Epic Film, Film Noir, and Animation, as well as feature works of master storytellers working in and outside these genres and styles. Students will learn about directing, editing, screenwriting, actor's choices, character development, and cinematography. Students will also closely examine the effects that our society has had on American Cinema and how film makers have reflected and affected our world socially, financially, and artistically. This course will involve film viewing, script reading, lectures, discussions, written work, and creative projects.

*Students taking this course for honors (L4) credit are required to do an extended research project

Shakespeare: Playing the Text L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
FA130 (L3)	None	.5	9,10,11,12	Semester	Yes
FA140 (L4)					

This course will provide an introduction to William Shakespeare and his body of work. Students will understand the social climate in which he worked, the reoccurring themes and motifs in his plays, and the ways in which he uses meter and rhyme as a means of enhancing meaning and providing the actor with tools for performance.

Students will gain skill in reading, interpreting, memorizing, directing, and performing Shakespeare's works they will understand the basics of character development and scene analysis. Projects include performing scripted scenes, performing monologues in self-created masks, reciting sonnets, keeping a journal to reflect upon their own work, and reviewing peer and professional performances.

*Students who select the course for honors (L4) will be required to do an extended research project.

Engineering Technology

Department Chair: Mr. Bill Parsons

Course offerings:

Intro to Engineering L3, L4	Wood Technology III L3
Engineering Design (with 3D Modeling) L3, L4	Graphic Technology I L3
Advanced Engineering Design (with 3D Modeling) L3, L4	Graphic Technology II L3
Desktop Manufacturing L3, L4	Materials Engineering L3, L4
Wood Technology I L3	Applied Engineering L4
Wood Technology II L3	Robotics L3

Mission Statement

The mission of the Engineering Technology Department is to provide a project-based learning experience centered on the application of engineering concepts, materials, processes, and systems.

Learning Expectations

Effective Communicators who:

- Read, write and speak English clearly
- Use a variety of communication technologies
- Display their competence by successfully solving project-based engineering problems

Critical Thinkers and Problem Solvers who:

- Use a systematic problem solving technique (the engineering design process)
- Have the ability to work collaboratively
- Use the application of theoretical concepts

Responsible Citizens who:

- Display responsible work habits
- Work successfully with a wide variety of colleagues
- Are respectful of other students' ideas
- Develop solutions within a diverse atmosphere

Effective users of Technology who:

- Use a variety of materials and engineering processes
- Apply varied solutions to technical problems
- Perform basic computer tasks
- Have practical experience with a wide variety of technologies

Intro to Engineering L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET130 (L3)	None	1	9, 10, 11, 12	Full Year	Yes
ET140 (L4)					

Students will learn the fundamentals of two dimensional design using architecture as a focus of study. Throughout the full year students will use their acquired skills to design and plan a variety of engineering, architecture, and other design-based projects. This course will benefit students interested in the fields of engineering, architecture, and design.

Students who chose the honors option will learn all of the material in the L3 Intro to Engineering class and will also participate in additional units on the topic of architectural history and architectural design styles.

Engineering Design (with 3D Modeling) L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET230 (L3)	C or better in Intro to Engineering and Architecture	1	10, 11, 12	Full Year	Yes
ET240 (L4)					

In this class, students will enhance their understanding of the engineering design process by completing various design projects/challenges selected from examples in the mechanical and civil engineering fields. Throughout the course, students will be using 3D modeling software (e.g. SolidWorks) to assist in the design and documentation of their projects. This course will benefit students interested in the fields of engineering and design as well as students who enjoy a hands-on approach to learning. This course can be taken in the Honors level only with the approval of the instructor.

Advanced Engineering Design (with 3D Modeling) L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET330 (L3)	C or better in Engineering Design	1	11, 12	Full Year	Yes
ET340 (L4)					

In this class, students will further their understanding of the engineering design process by completing various design projects/challenges selected from examples in the mechanical and civil engineering fields. Advanced Engineering Design students will use 3D modeling software (e.g. SolidWorks) to assist in the design, documentation and detailed analysis of their projects. This course will benefit students interested in the fields of engineering and design as well as students who enjoy a hands-on approach to learning. This course can be taken in the Honors level only with the approval of the instructor.

Desktop Manufacturing L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET430 (L3)	C or better in Advanced Engineering Design	1	12	Full Year	Yes
ET440 (L4)					

The focus of this class will be projects to be completed using various desktop manufacturing tools such as 3D printers and CNC routers. Students will use the engineering design process and 3D modeling software (e.g. SolidWorks) to complete their projects. This course will benefit students interested in the fields of engineering and design as well as students who enjoy a hands-on approach to learning. This course can be taken in the Honors level only with the approval of the instructor.

Wood Technology I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET132	None	1/2	9, 10, 11, 12	Semester	Yes

This course is a project based course in which the students will be required to complete pre-determined projects while learning how to safely use hand held tools as well as portable and machine tools. Throughout the semester students will be introduced to basic woodworking, production and finishing methods.

Wood Technology II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET232	C or better in Wood Technology I	1	10, 11, 12	Full Year	Yes

This is a design based course where students will be required to make one pre-determined project and one or more projects of their own design. A variety of production techniques and furniture construction will be presented throughout the course. Advanced operations on all the tools and machines as well as the use of jigs and fixtures will be included.

Wood Technology III L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET331	C or better in Wood Technology II	1	11, 12	Full Year	Yes

Students will be expected to design and build their own projects. Advanced woodworking skills will be expected in the project designs. A unit in framing and structures will be introduced as well.

Wood Technology IV L3 or L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET431 ET441	C or better in Wood Technology III	1	12	Full Year	Yes

Students will be expected to design and build their own projects. Advanced woodworking skills will be expected in the project designs. Advanced usage of lathe and handtools will be emphasized. Students who take this class for Level 4 credit will be required to complete a master project using advanced techniques.

Graphic Technology I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET133	None	.5	9, 10, 11, 12	Semester	Yes

This course is an introduction to the tools and equipment used in graphic reproduction. Throughout the course, the students will explore a variety of graphic reproduction techniques used in art and industry. Students will be required to complete assigned projects in different forms of reproduction and be able to explore their own creating visions with self-directed projects.

Graphic Technology II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET233	C or better in Graphic Technology I	.5	10, 11, 12	Semester	Yes

Students in this class will participate in all of the project-based activities as Graphic Technology I, but on a more advanced level. In addition, students will learn the production and business aspects of graphic reproduction by working on real-life school-based projects.

Materials Engineering L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET231 (L3)	None	.5	10, 11, 12	Semester	Yes
ET241 (L4)					

Students in this class will investigate the behavior and engineering properties of various materials. The class will use a project based approach to look at topics including how materials fail, ways materials can be loaded, and the various ways materials respond to loads. At the conclusion of this class, students will have gained an understanding of how materials behave and how to select a material based on engineering concepts.

Students who chose the honors option will learn all of the material in the L3 Materials Engineering class but will use a more quantitative approach to their investigations.

Applied Engineering L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET141	None	.5	9,10,11,12	Semester	Yes

This course involves the practical application of scientific principles. Students will be exposed to a variety of hands-on engineering design activities such as rocketry, alternative energy generation, and a “pumpkin chuck.” Students who enjoy working with a variety of materials and equipment to solve design-based problems are encouraged to take this course.

Applied Engineering II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET242	C or better in Applied Eng I and approval of instructor	.5	10,11,12	Semester	Yes

This course involves continued practical application of scientific principles. A variety of engineering topics will be introduced on a revolving basis and students will also design self directed projects. Student who enjoyed Applied Tech I and wish to work with a variety of materials and equipment to solve design-based problems are encouraged to take this course.

Robotics L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
ET131	None	.5	9,10,11,12	Semester	Yes

During the semester course students will be building and programming vex robotics using a team approach. The emphasis will be on the building and designing of the robots to perform pre-determined tasks. The tasks will be designed for classroom robotic competitions.

Mathematics

Department Chair: Mrs. Mignini

Course Offerings:

Foundation of Algebra L2	Advanced Algebra and Trigonometry L3
Intermediate Algebra L2	Precalculus L4
Algebra 1 L3	Precalculus L5
Algebra 1 L4	Calculus L4
Numerical Geometry L2	AP Calculus AB
Geometry L3	AP Calculus BC
Geometry L4	Statistics L3
Geometry L5	Statistics L4
Fundamentals of Algebra 2 L2	AP Statistics
Algebra 2 L3	MCAS Prep L2
Algebra 2 L4	Algebraic Connections L2
Algebra 2 L5	

Mission Statement:

The mission of the mathematics department is to facilitate all students to obtain mathematical content and skills that will empower them to:

- Enroll in the highest level course in which he/she can succeed
- Think critically and creatively
- Solve rigorous and authentic problems
- Collaborate and communicate effectively
- Identify and use appropriate tools and technology

Department Learning Objectives in Mathematics

Effective communicators who organize and consolidate their mathematical thinking through communication.

Students are expected to:

- Express mathematical ideas coherently to diverse audiences
- Use appropriate and accurate mathematical language
- Develop, evaluate, and defend persuasive mathematical arguments
- Analyze, evaluate, and discuss the mathematical reasoning and strategies of others

Critical thinkers and problem solvers who solve problems that arise in mathematics and in other contexts.

Students are expected to:

- Identify and describe the problem
- Collect and organize information
- Formulate relevant questions and develop an appropriate model
- Choose appropriate strategies and implement a plan of action
- Draw logical conclusions and evaluate results
- Responsible citizens who participate actively as members of a team

Efficient users of technology who recognize its role in mathematics.

Students are expected to:

- Use technology as a learning tool
- Select appropriate technology
- Acknowledge the limitations of technology

Each student should purchase a scientific calculator as these will be used frequently in class and are allowed on standardized tests (MCAS, SATs & ACTs). Students enrolled in Algebra 2, Precalculus, Calculus, and Statistics are encouraged to purchase a TI-83 Plus graphing calculator. Be aware that the minimum requirement in math for admission to Massachusetts state colleges is Algebra I, Geometry, and Algebra 2.

Suggested Math Course Sequence

	Freshman	Sophomore	Junior	Senior
Accelerated Track	Geometry Accelerated	Algebra 2 Accelerated	Precalculus Accelerated	AP Calculus AB or BC and/or AP Statistics
Honors Track Option 1	Geometry L4	Algebra 2 L4	Precalculus L4	Calculus L4 and/or AP Statistics or Statistics L4
Honors Track Option 2	Algebra 1 L4	Geometry L4	Algebra 2 L4	Precalculus L4
College Prep Option 1	Geometry	Algebra 2	Advanced Algebra & Trigonometry	Precalculus L4 and/or Statistics
College Prep Option 2	Algebra 1	Geometry	Algebra 2	Adv. Algebra & Trig., and/or Statistics
College Prep Option 3	Foundation of Algebra	Intermediate Algebra	Geometry or Numerical Geometry	Algebra 2 or Fundamentals of Algebra 2

Note: Students may deviate from the suggested sequence shown above by meeting the prerequisites shown in the course descriptions as well as by obtaining the approval of their current math teacher and the department chair. Students desiring to enroll in a class without having met the prerequisite grade will be required to take a department exam and pass with the prerequisite grade as stated in the Program of Studies in order to demonstrate the foundation of skills and motivation necessary to be successful in the course. Students are only eligible to take the math department exam if their final course average is within ten points of the prerequisite grade.

Foundation of Algebra L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA120	None	1	9	Full Year	Yes

Foundation of Algebra covers approximately half of the Algebra 1 curriculum. Topics studied include operations with integers, organizing data, experimental probability, functions and their graphs, solving equations and inequalities in one variable, and graphing and writing linear equations. Emphasis will be on mastery of basic algebra skills and problem solving strategies. Students who complete Foundation of Algebra will be expected to enroll in Intermediate Algebra the following year.

Intermediate Algebra L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA221	Successful completion of Foundation of Algebra or Algebra I	1	10	Full Year	Yes

Intermediate Algebra covers the second half of the Algebra 1 curriculum. The course focuses on systems of equations and inequalities, quadratic equations, radical expressions, exponents, polynomial operations, factoring, rational expressions, as well as a unit of geometry to introduce students to some of the concepts covered on the grade 10 MCAS test.

Algebra 1 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA130	Grade of A- or better in Grade 8 Key Concepts Grade 8 and the recommendation of Grade 8 teacher; or C- or better in Grade 8 Math	1	9	Full Year	Yes

Concepts and skills developed in this course are the foundations for all higher mathematics courses. Topics include equations and inequalities in one and two variables, functions and their graphs, systems of linear equations and inequalities, introductory probability and statistics, exponents and exponential functions, polynomials and factoring, quadratic equations and radicals. Emphasis is on developing mastery of algebraic skills, problem-solving techniques, and applying mathematical concepts to real-life situations.

Algebra 1 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA141	A- or better in Grade 8 Math	1	9	Full Year	Yes

Algebra 1 Honors is designed for students who possess a strong and consistent work ethic, as well as an ability to learn independently. Students enrolled in this course will require a strong background in all topics taught in Grade 8 Math. The course will cover the same concepts as the Algebra 1 (level 3) class, but at a faster pace and in greater depth. Modeling with mathematics and Statistics will also be emphasized in the honors class.

Numerical Geometry L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA222	Successful completion of Intermed. Algebra, or Algebra 1	1	10, 11	Full Year	Yes

In this course, students study concepts of both plane and solid geometry and their applications to real-life situations. Similar polygons, parallel and perpendicular lines, perimeter and area of polygons and circles, and volume and surface area of solid figures are emphasized.

Geometry L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA131	Grade of C- or better in Algebra 1, or Grade 8 Algebra 1 Honors; grade of A- or better in Intermed. Algebra and teacher recommendation	1	9, 10, 11	Full Year	Yes

This course covers topics of both plane and solid geometry as specified by the state standards for Geometry. Emphasis is on lines, angles, polygons, parallel and perpendicular lines, congruence, similarity, and circles. Elementary coordinate geometry, trigonometry, and proofs are introduced. This course relies heavily on solid Algebra 1 skills.

Geometry L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA140	Grade of B- or better in Grade 8 Algebra I Honors and recommendation of Grade 8 math teacher; grade of A or better in Algebra 1 and teacher recommendation.	1	9, 10	Full Year	Yes

This course develops the same topics as those studied in Geometry, but in greater depth. Students are expected to discuss, analyze, and inter-relate geometric concepts. The focus in the Honors class is on deductive reasoning, with specific emphasis placed on writing formal proofs.

Geometry L5					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA151	Grade of A or better in Grade 8 Algebra I Honors and recommendation of Grade 8 math teacher.	1	9	Full Year	Yes

This course develops the same topics as those studied in Geometry Honors. Students explore many of these concepts to a greater depth, and are expected to exhibit proficiency in writing proofs. Additional topics covered in the class include formal logic, mappings, and points of concurrency in a triangle. A large amount of work will be expected outside of class.

Fundamentals of Algebra 2 L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA320	Successful completion of Numerical Geometry or Geometry	1	11, 12	Full Year	Yes

This course will familiarize students with the main topics of the Algebra 2 curriculum. Students will review and build upon concepts introduced in Algebra I, such as factoring, inequalities, and systems of equations. Students will also focus on the basic Algebra 2 concepts needed for college level mathematics.

Algebra 2 L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA231	Grade of C- or better in Geometry Grade of A- or better in both Numerical Geometry and Intermed. Algebra or successful completion of Geometry L4.	1	10, 11, 12	Full Year	Yes

This course builds upon the work done in Algebra 1. Topics covered include functions; systems of equations and inequalities; radical expressions, equations, and inequalities; complex numbers; polynomial equations and functions; rational expressions and equations; exponential and logarithmic functions. The class concludes with and introduction to radian measure and circular trigonometry.

Algebra 2 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA240	Grade of C- or better in Geometry L4; or grade of A or better in both Algebra 1 and Geometry and teacher recommendation; or grade of A or better in both Intro to Algebra and Geometry and teacher recommendation.	1	10, 11	Full Year	Yes

Students enrolled in this course are expected to have a strong background in all topics taught in Algebra I. This course builds upon the work done in Algebra I, with a focus on complex numbers, functions, logarithmic, exponential, rational, and polynomial equations; matrices; system of linear and nonlinear equations; sequences and series; probability and statistics. The class concludes with an introduction to radian measure and circular trigonometry.

Algebra 2 L5					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA251	B- or better in Geometry Accelerated; Grade of A or better in Geometry L4 and A- or better in Grade 8 Algebra 1 Honors and teacher recommendation	1	10	Full year	Yes

This course is for the student who has maintained a high average during his/her prior math courses. Motivation, desire, persistence, and a willingness to work outside of class are prerequisites as important as ability. The content includes a rapid review of topics covered in Algebra 1 before proceeding to algebra beyond quadratics. By the end of the year, students will have completed most of the algebra requirements for the study of trigonometry, analytic geometry, and mathematical analysis. For this course all students are required to purchase a TI-84 graphing calculator.

Advanced Algebra and Trigonometry L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA332	Grade of C- or better in Algebra 2; successful completion of Algebra 2 L4	1	11, 12	Full Year	Yes

This course consists of topics from three major areas: Algebra, Trigonometry, and Probability and Statistics. The algebra component will explore advanced concepts and techniques as they are applied to the manipulation of algebraic expressions and equations. The trigonometry section will emphasize trigonometric principles involving both right and oblique triangles. The probability and statistics component will explore fundamental counting principles, permutations, combinations, probability and statistical analysis.

Precalculus L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA341	Grade of C+ or better in Algebra 2 L4; grade of A or better in Algebra 2 and teacher recommendation; or B or better in Advanced Algebra and Trigonometry	1	11, 12	Full Year	Yes

This course consists of topics from two major areas: trigonometry and analytic geometry. The course begins with the study of the six trigonometric functions. Topics studied include right triangle trigonometry, graphs of the trigonometric functions, inverse trigonometric functions, fundamental identities, trigonometric equations, and the laws of sines and cosines. The second part of the course includes a study of functions. Exponential and Logarithmic functions will be investigated and graphs of straight lines and conic sections will be developed. Applications and problem solving involving coordinate geometry will also be included. The course will conclude with an introduction to limits. Students are encouraged to purchase a TI-83 or 84 graphing calculator for this course.

Precalculus L5					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA350	Grade of B- or better in Algebra 2 L5; grade of 95% or better in Algebra 2 L4	1	11	Full Year	Yes

The first part of this course includes a full semester of trigonometry, math induction, and sequences and series. The second part of the course concerns itself with an analysis of elementary functions, an introduction to the theory of equations, and translations of the conic sections. The course will conclude with an introduction to calculus topics, including limits and derivatives. Since an integral component of this course is the use of the graphing calculator, students are encouraged to purchase a TI-83 or 84 graphing calculator.

Calculus L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA440	C or better in Precalculus L4 or successful completion of Precalculus L5	1	12	Full Year	Yes

This course will familiarize students with the main topics covered in a first full year college level calculus course. Students will be introduced to the concepts of limits and continuity, as well as the applications of derivatives and integrals. The content of the course will be similar to that of the AP class, although not to the same depth. Whereas AP Calculus prepares students to enter a college level Calculus II course, Calculus L4 will prepare students to enter a college level Calculus I course.

AP Calculus AB					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA450	C+ or better in Precalculus L5 or grade of A- or better in Precalculus L4 with recommendation of the current mathematics teacher	1	12	Full Year	Yes

AP Calculus AB is structured around three big ideas: limits, derivatives, and integrals and the Fundamental Theorem of Calculus. It is equivalent to a semester of calculus at most colleges and universities. The syllabus for AP Calculus AB is consistent with the AB level of AP Calculus as recommended by the College Board and this course will prepare students for the Advanced Placement examination in Calculus AB. All students are expected to take the exam. Students are required to purchase a graphing calculator (recommended: TI-84).

AP Calculus BC					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA451	Grade of A- or better in Precalculus L5 with recommendation of the current mathematics teacher	1	12	Full Year	Yes

AP Calculus BC includes all topics in AP Calculus AB, plus other topics such as parametric, polar, and vector functions, and series. It is equivalent to one year of calculus at most colleges and universities. The syllabus for AP Calculus BC is consistent with BC level of AP Calculus as recommended by the College Board and this course will prepare students for the Advanced Placement Examination in Calculus BC. All students are expected to take the exam. Students are required to purchase a graphing calculator (recommended: TI-84).

Statistics L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA333	Successful completion of Algebra 2; or currently enrolled in Algebra 2 with teacher recommendation	1	11, 12	Full Year	Yes

The topics for this course will be divided into three main themes: exploratory analysis of data, planning a study, and probability. Statistics is the science of collecting and analyzing data for making meaningful inferences. Probability is the study of predicting the outcome of events based on known or measurable quantities as well as on elements of chance. Students will be introduced to the basic concepts and procedures of both topics and how these are used to solve problems in probability and statistics as they relate to games of chance, social sciences, physical sciences, etc.

Statistics L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA342	Successful completion of previous level 5 course; grade of C- or better in previous level 4 course and the recommendation of the current mathematics teacher; grade of B- or better in Advanced Algebra & Trigonometry	1	11, 12	Full Year	Yes

This course covers the same topics as those studied in the Level III class, but in greater depth. Additional tests and/or projects may be assigned.

AP Statistics					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA250	Grade of C+ or better in previous level 5 course and the recommendation of current mathematics teacher; grade of B or better in previous level 4 course and the recommendation of the current mathematics teacher	1	10, 11, 12	Full Year	Yes

The topics for this course will be divided into four main themes: exploratory analysis of data, planning a study, probability, and statistical inference. The syllabus is consistent with the AP Statistics course recommended by the College Board. The material covered in the course will prepare students for the Advanced Placement Examination in Statistics. All students are expected to take the exam. Students are required to purchase a TI-83 plus graphing calculator.

Note: AP Statistics is an elective class; it should NOT replace Algebra 2, Advanced Algebra & Trigonometry, or Precalculus in a "non-senior" student's schedule.

Math MCAS Prep L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA220	Student who is identified as being at risk of not passing the grade 10 MCAS test.	.5	10	Semester	No

This course provides extra support for tenth graders preparing for the May MCAS test in mathematics. The curriculum will address specific areas in algebra, geometry, and data analysis. In addition, the course familiarizes students with the format of the exam and addresses effective test taking strategies.

Note: The MCAS Prep classes do not satisfy the graduation requirement in mathematics.

Algebraic Connections L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
MA420	Successful completion of Numerical Geometry	1	12	Full Year	Yes

The class will develop problem solving skills and strengthen algebraic skills through real life applications. Topics will include number sense and estimation, proportions, unit conversions, metric system, statistics and probability, percents, the mathematics of finance, and mathematical modeling of contemporary problems. Additional topics will be tailored to meet the needs of students in the class.

Physical Education, Health & Wellness

Department Chair: Mr. Roger Anderson

Course Offerings:

P.E. / Wellness 9-12
Adaptive P.E.
Fitness
Health/Wellness
Sports Intensive PE

Mission Statement

The Westborough Public Schools PE, Health & Wellness program is an integral part of the educational process. Our mission is to empower students to achieve & maintain lifelong wellness. Through the implementation of a comprehensive curriculum delivered in a positive and challenging environment, students will acquire the knowledge, attitudes, and skills necessary to accomplish this goal.

Westborough High School Physical Education Health & Wellness Graduates will be:

Effective communicators who:

- Communicate in a variety of dynamic, active situations including advocating for both self and others
- Listen actively and respond to diverse audiences
- Utilize a variety of media

Critical thinkers and problem solvers in an active environment who:

- Apply a decision making process in real-life situations
- Gather information and form strategies
- Implement strategies when making decisions and setting goals
- Turn to appropriate sources of support when in need
- Reflect upon results and make adjustments

Responsible citizens who:

- Work cooperatively and independently
- Respect others and recognize that their choices can affect the health of themselves and others
- Take responsibility for their actions and decisions
- Produce quality work

Effective users of technology who:

- Access appropriate tools to enhance learning and living

P.E./Wellness 9					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE101	None	.5	9	Semester	No

P.E./Wellness 10					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE201	None	.5	10	Semester	No

P.E./Wellness 11					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE301	None	.5	11	Semester	No

P.E./Wellness 12					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE401	None	.5	12	Semester	No

Physical Education (Grades 9-12):

We recommend that students take and pass at least one semester per full year to fulfill the graduation requirement of **two full credits of Physical Education**. Additional semesters of Physical Education may be taken as an elective for upperclassmen when the schedule allows. The majority of classes will be activity based with expanded use of the activities presented in the freshman full year. There will also be new activities and elective opportunities. A small portion of the Physical Education classes will be dedicated to relevant health & wellness skills. Review of the major health topics presented in grade 9 as well as age appropriate transitional topics will be discussed:

In a semester of Physical Education students will be exposed to approximately ten different activities. A variety of individual sports, team sports, fitness activities and adventure activities will be offered. Students will typically warm-up, participate in an activity for the day and have the option of showering at the end of the period. The major goals for this course are fostering a sense of teamwork, sportsmanship and respect in a dynamic and active environment. Working to create positive attitudes toward physical activity for life is also part of our mission for Physical Education. The wellness portions of these classes provide students with specific opportunities to work on the skills of Health and Wellness.

Health & Wellness 9					
Course #	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE102	None	.5	9	Semester	Yes

Health & Wellness (Grade 9):

Our health class is a semester course, entirely dedicated to Health topics in a skill-based format. Earning a passing grade in the course is required for graduation

During the Health portion students explore the following skills: Accesses Information, Analyzing Influences, Interpersonal Communication, Decision Making, Goal Setting, Self-Management and Self Advocacy. Within the framework of these skills, the following topics will be explored: wellness, nutrition, substance abuse, human growth and development, communicable and non-communicable diseases, first aid, safety, stress, violence, abuse, and sex education. Students will become actively engaged in class discussion and cooperative group projects. This course will help to increase student awareness of current health issues, promote positive decision-making skills, and aid in the development of healthy, life-long behaviors.

Fitness Class					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE304	None	.5	11,12	Semester	No

During this semester long fitness elective, students will become familiar with the Fitness Center. They will explore the use of the cardiovascular machines, the strength training equipment as well as a variety of lifting techniques. Students will learn how to design and implement their own fitness program. In taking this class, students will earn one-half credit in Physical Education toward their graduation requirements.

Sports Intensive PE					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE303	None	.5	11,12	Semester	No

This junior/senior elective is for students who enjoy being physically active and want to participate at a very high level. The activity is fast paced and primarily team sports.

Adaptive P.E.					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
PE102	Approval of the PE Department Head	.5	9,10,11,12	Semester	No

Adapted Physical Education is a course that students are recommended for. This course is individual in nature and activities match up with students IEP's or individual goals.

Science

Department Chair: Mr. Michael Fontaine

Course Offerings:

Anatomy and Physiology L3	AP Chemistry
Anatomy and Physiology L4	Oceanography L3
Biology L2	Forensics L3
Biology L3	Exercise Physiology L3
Biology L4	Natural Science and Engineering L2
AP Biology	Natural Science and Engineering L3
Chemistry in the Community L2	Natural Science and Engineering L4
Chemistry L3	Physics L3
Chemistry L4	Physics L4

Mission Statement

The Westborough High School Science Department's mission is to provide an opportunity for all students to pursue excellence in the study of science, using the process of scientific inquiry to learn fundamental concepts of the biological and physical science.

Creative and effective problem solvers who apply the scientific method to:

- Demonstrate a curiosity and inquisitiveness of the natural world
- Identify and analyze
- Choose and implement appropriate strategies to solve the problem
- Collect and organize both qualitative and quantitative data
- Interpret data and draw valid conclusions and communicate results

Thoughtful and effective communicators who:

- Construct and interpret graphical data using a variety of techniques
- Write and speak clearly, concisely, and accurately to convey a scientific meaning
- Write technical scientific papers

Informed and active citizen who:

- Exhibit responsibility, act with integrity and respect
- Demonstrate scientific literacy in the interpretation and evaluation of ideas
- Understand the role of science and technology in the modern world

Suggested Course Sequence

Freshman	Sophomore	Junior	Senior
Natural Science & Engineering L4	Biology Biology L4	Chemistry Chemistry L4 AP Biology Anatomy and Physiology	Physics AP Chemistry AP Biology Anatomy and Physiology Electives
Natural Science and Engineering L3	Biology	Chemistry Anatomy and Physiology Electives	Physics Anatomy and Physiology Electives
Natural Science and Engineering L2	Biology	Chemistry	Electives

Natural Science and Engineering L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC121	Grade 8 Science teacher recommendation and successful completion of Grade 8 Science	1	9	Full Year	Yes

To prepare students for multi-faceted careers in science, technology, and engineering, this course will require students to work collaboratively to solve real world problems. Through projects based on National Science Foundation case-studies, students will learn the skills and content grounded in engineering, environmental science, chemistry, and physics. Students will show their proficiency using the designing, building, testing, evaluating, and redesigning of engineering-based solutions; embrace the non-linear analysis of real-world problems. Coursework will emphasize guided student inquiry and guided student synthesis of course topics, with a heavy emphasis on increasing independent problem solving throughout the course of the year.

Natural Science and Engineering L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC131	Grade 8 Science teacher recommendation and a grade of C or better in Grade 8 Science	1	9	Full Year	Yes

To prepare students for multi-faceted careers in science, technology, and engineering, this course will require students to work collaboratively to solve real world problems. Through projects based on National Science Foundation case-studies, students will learn the skills and content grounded in engineering, environmental science, chemistry, and physics. Students will show their proficiency using the designing, building, testing, evaluating, and redesigning of engineering-based solutions; embracing the non-linear analysis of real world problems. Coursework will emphasize independent student inquiry and guided synthesis of course topics, with a heavy emphasis on increasing independent problem solving throughout the course of the year.

Natural Science and Engineering L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC142	Grade 8 Science teacher recommendation and a grade of A- or better in Grade 8 Science	1	9	Full Year	Yes

To prepare students for multi-faceted careers in science, technology, and engineering, this course will require students to work collaboratively to solve real world problems. Through projects based on National Science Foundation case-studies, students will learn the skills and content grounded in engineering, environmental science, chemistry, and physics. Students will show their proficiency using the designing, building, testing, evaluating, and redesigning of engineering-based solutions; embracing the non-linear analysis of real-world problems. Coursework will emphasize independent student inquiry and student driven synthesis of course topics; laying the foundation for students to be prepared for more advanced science courses and supporting the engineering program.

Biology L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC220	Successful completion of Natural Science and Engineering L2	1	10	Full Year	Yes

The study of life engages the student in an exciting adventure studying ecology, biochemistry, cell biology, genetics, evolution and anatomy. Students will uncover the mysteries of nature using largely laboratory and project-based investigations.

Biology L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC230	Successful completion of Natural Science and Engineering L3 and recommendation of that teacher; A- or better in Natural Science and Engineering L2 and recommendation of that teacher	1	10	Full Year	Yes

This course invites students to explore life from a molecular, organismal and ecological perspective. Topic of discussion will include the chemistry of life, life processes, the genetic basis of inheritance, basic anatomy and physiology, ecological studies, and the origin, evolution and diversity of life. Each unit includes laboratory investigation to reinforce concepts.

Biology L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC141	B- or better in Natural Science and Engineering L4; A or better in Natural Science and Engineering L3	1	10	Full Year	Yes

This course requires a high level of reading comprehension, writing, critical thinking and interpretation skills. Designed for students who have a strong interest in and aptitude for science, this course provides a molecular based curriculum that emphasizes conceptualization and application of concepts to large biological themes such as cell structure and function, energy utilization, genetic continuity, evolution, interdependence and diversity of life. Concepts are investigated in a number of laboratory experiments and projects, requiring students to employ basic research skills as they follow the scientific method.

AP Biology					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC350	B- or better in Biology Honors or A- or better in Biology Level III and teacher recommendation; AND B- or better in Chemistry L4 or concurrent enrollment in WHS Chemistry L4, AND AP Biology teachers approval	1	11,12	Full Year	Yes

This course is equivalent to a college level freshman biology course. Areas of emphasis include molecules and cells, genetics and evolution and organisms and populations. Laboratory studies include the twelve investigations establish by the AP Biology curriculum staff of the College Board as well as others designed by the instructor. Students will take the AP Biology College Board Test in May.

Chemistry in Community L2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC320	C- or better in Foundation of Algebra and Intermediate Algebra, or concurrently taking Intermediate Algebra	1	11,12	Full Year	Yes

This lab intensive course provides students with problem solving activities that relate chemistry to their everyday lives. The **Chemistry in the Community** textbook relates chemistry concepts to themes such as the chemistry of water, materials, petroleum, air, industry, nuclear interactions, and food. This course presents a hands-on, interactive approach to learning chemistry.

Chemistry L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC231	C- or better in Algebra I; A or better in Foundation of Algebra and Intermediate Algebra	1	10,11,12	Full Year	Yes

Students in this course will study the basic principles of chemistry. Specific areas of study will include the laws and theories of chemistry, stoichiometry, atomic and molecular structure, chemical bonding, properties of solutions, kinetic-molecular theory, periodicity of the elements, and acids and bases. Through this laboratory based course students will gain a better appreciation for chemistry in their everyday lives.

Chemistry L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC240	B- or better in Algebra 1 or concurrently taking Algebra 2 L4	1	10,11,12	Full Year	Yes

This course is designed for students who are considering studying science beyond high school. Students will apply problem solving skills in a variety of situations including collecting and analyzing laboratory data, stoichiometry, kinetics, and equilibrium and thermochemistry. Other topics will include periodicity, bonding, nuclear chemistry, acids and bases. Students will use web-based learning and cooperative learning as well as computer interfaces to collect and analyze data.

AP Chemistry					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC351	B- or better in Precalculus Honors or concurrently enrolled; B- or better in Chemistry Honors, College Board reports that a CR + M score on PSAT's of 114+ correlates with an AP score of 3 or better.	1	11,12	Full Year	Yes

The AP Chemistry curriculum is established by the College Board and has a major laboratory component that includes approximately twenty experiments. Students will learn to use computer interfaces to collect and analyze data; analytical, synthesis, and separation techniques; how to prepare and standardize solutions; and qualitative and quantitative analyses. The course covers the topics and laboratory experiments typical of a first full year college course. Topics to be studied include: kinetics, thermodynamics, equilibrium, stoichiometry, periodicity, bonding, molecular structure, nuclear reactions and half-life, the non-ideal behavior of gases, electrochemistry, organic and inorganic chemistry, and solutions. Students taking AP Chemistry may receive college credit upon successful completion of the course and the AP examination.

Anatomy and Physiology L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC331	C- or better in Biology L4 or C or better in Biology L3	1	11, 12	Full Year	Yes

This course involves a fascinating exploration of human anatomy and physiology in which students discover how the human body is organized and how it functions. Laboratory investigations include cat dissection and "hands on" physiological studies of the fundamental systems of the body.

Anatomy and Physiology L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC341	C+ or better in Biology L4 or B- or better in Biology L3	1	11, 12	Full Year	Yes

This is an accelerated course designed for students considering careers in the allied health professions, biology or biotechnology. Topics include organization of the human body, histology, as well as an in depth investigation of the body's systems. Laboratory investigations include cat dissection as well as the use of biotechnology instrumentation (i.e. EMG, EEG, EKG and GSR).

Physics L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC330	C+ or better in Algebra II or concurrently taking Algebra II; C- or better in Chemistry L3	1	11,12	Full Year	Yes

Students in this course will study basic principles of physics and their application to everyday life. Hands-on laboratory investigations, including real-time computer-based experiments, are an integral part of this course. Students concentrate on the topics of kinematics, dynamics, waves and sound, momentum, work and energy, electricity and magnetism. A primary component of this course is learning to approach and solve problems.

Physics L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC340	B- or better in Precalculus Honors or concurrently taking Precalculus Honors; C+ or better in Chemistry Honors and recommendation of Chemistry teacher or approval of Physics teacher	1	11,12	Full Year	Yes

This is an accelerated course designed for students considering careers in science or engineering. Topics studied include vector mathematics, kinematics, dynamics, waves and sound, momentum, work and energy, electricity and magnetism. Hands-on laboratory investigations, including real-time computer-based experiments, are an integral part of this course. Honors Physics places particular emphasis on problem solving skills, conceptual understanding, construction and interpretation of graphical data, and critical analysis of quantitative laboratory results.

Exercise Physiology L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC332	None	.5	11,12	Semester	Yes

This course will integrate chemistry, physics, human anatomy and physiology, health and nutrition and apply them to the human machine in exercise and sports. Course topics include the energy systems, physiological adaptations to exercise, biomechanics of exercise and sports, sports nutrition, ergogenic aids in sports, common sports related injuries, and fitness testing. This course will appeal to students considering careers in medical field (physical/occupational therapy, nursing, and sports medicine), health and fitness, coaching/sports management or physical education.

Forensics L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC334	C+ or better in Biology L3 or B+ or better in Biology L2	.5	11,12	Semester	Yes

The focus of this introductory course is for students to learn how science is used to solve crimes.

Oceanography L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SC333	None	.5	11,12	Semester	Yes

This course introduces students to the fundamentals of physical oceanography and marine biology. Students will study physical oceanography including tides and marine topography, as well as marine ecosystems and biological adaptations to the marine environment. An oceanographic field trip will be part of this course.

Social Studies

Department Chair: Mr. Edward Belbin

Course Offerings:	Elective Courses:
Grade 9 History L3	Psychology L3
United States History I L3, L4	Economics (Macro) L3
United States History II L3, L4	Facing History and Ourselves L3, L4
AP United States History	Sociology L3
	Legal Studies L3
	Current Affairs L3
	United States Civil War L4
	The World Since 1989 L4
	World War II L3, L4
	Special Topics in Psychology L4

Mission Statement

Social Studies promotes the pursuit of truth regarding human nature and behavior while developing responsible, well informed independent decision makers capable of perpetuating, and participating in a democratic society.

Learning Expectations Social Studies students will be:

Effective communicators who:

- Write with clarity and purpose
- Express well informed opinions
- Actively participate in group discussion and debate
- Practice deliberate introspection and reflection
- Determine the reliability of historical sources
- Identify viewpoint and bias

Creative problem solvers who:

- Work cooperatively with others
- Draw inferential meaning from historic events and data
- Develop individual group hypotheses and conjecture
- Identify causal relationships

Responsible citizens who

- Are aware of and understand the dynamics of current events and issues
- Are aware of and understand the complexity of democratic decision making
- Engage in community activity and service
- Demonstrate objectivity and awareness of viewpoint
- Participate in cooperative decision making
- Exhibit pride and effort in their work

Proficient users of technology who

- Determine the validity and value of informational sources
- Practice effective research technique

Grade 9 History L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS1301	None	1	9	Full Year	Yes

This course will address skills and standards mandated by the Massachusetts Curriculum and Frameworks. In this course students will grapple with the notions of individual and group identity while exploring seven historical concepts organized in a thematic manner. Students will wrestle with each concept using historical case studies from around the world within the time frame of 500 A.D. to the present. Additionally, students will be encouraged to challenge traditional interpretations of historical events and to develop theories of their own. Emphasis will be placed on the development of historical skills and growth of cultural literacy.

United States History I L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS230	None	1	10	Full Year	Yes

Continuing to build on the skills and standards introduced in Grade 9, this course will examine the historical origin and developments in United States History from the Colonial era through the Reconstruction (1763-1877) as outlined by the Massachusetts Curriculum Frameworks. This study will be supplemented with a focus on geography, civics/government and current event issues as they relate to the material presented. Finally, this course will enhance and promote the development of organizational, writing, research, and critical thinking skills.

United States History I L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS240	A- or better in Grade 9 History, or the recommendation of the Grade 9 History teacher	1	10	Full Year	Yes

This course is consistent in purpose and content with course SS230. However, this course is designed for students who would most profit from a more rigorous investigation of course content. Emphasis will be placed on long and short-term independent study and analysis. Successful performance in a variety of oral reports/discussions and extensive projects, that may include major research and analysis papers, is required. Students can expect a high frequency of independent work.

United States History II L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS330	None	1	11	Full Year	Yes

This course is a college preparatory survey of American History from Reconstruction to the present in accordance with Massachusetts Curriculum and Frameworks. Emphasis is placed on how, and why, the United States has evolved as a leader of the free world and how America might successfully deal with the challenges we face in the future. There will be analysis of conflicting points of view, research assignments, and/or book reports. This course will enhance and promote the development of organizational, writing, research, and critical thinking skills.

United States History II L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS340	Grade of B or better in US History I L4 (SS240), or a grade of A or better in US History I L3 (SS230), or recommendation of US Hist I teacher	1	11	Full Year	Yes

This course is a college preparatory survey of American History from Reconstruction to the present. It is intended for those students who would most profit from the challenge of intensive investigation of conflicting points of view, the analysis of both secondary and primary sources, independent study, and major research and thesis paper assignments.

AP United States History (meets requirement for Grade 11)					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS350	Grade of A- or better in US History I Level IV (SS240) <u>OR</u> a grade of A or better in US History I Level III (SS230) <u>OR</u> the special written recommendation of a previous social studies instructor. The Social Studies Department reserves the right to review student success in the student's past English courses and may also require a writing sample for admission to the AP course.	1	11	Full Year	Yes

This is a college level history course designed to meet the needs of highly motivated students who have a strong interest in history and have the ability to profit from an advanced program in American History.

The student should expect daily reading assignments, independent study and frequent research assignments. The student is expected to read and analyze both primary and secondary source materials and to demonstrate ability to interpret and evaluate these diverse sources in verbal and essay form. Students are expected take the AP American History exam in May as preparation for the exam is the primary goal of the course. Therefore, the course is content driven and places heavy emphasis on written critical analysis. Extensive writing and discussion are integral components of the program. Students should expect extensive independent work outside of classroom time.

Psychology L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS430	None	.5	12	Semester	Yes

Psychology is the study of the behavior of individuals. It explores what people do, how they think, and why they act as they do. Some of the topics studied include personality, testing and evaluation procedures, motivation, abnormal psychology, growth and development, and learning theories. Heavy emphasis is placed upon classroom discussion and the reading of relevant articles on assigned topics. Students who enter this class after the first day are expected to make up all missed work.

Economics (Macro) L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS431	None	.5	12	Semester	Yes

This semester course consists of a study of macro-economic concepts and the language of economics. Concepts presented include such topics as supply and demand, economic markets, inflation, deflation, business cycles, and the role of organized labor and government in a market economy as well as an explanation of the principles of consumer economics. Students who enter this class after the first day of class are expected to makeup all missed work.

Legal Studies L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS432	None	.5	12	Semester	Yes

Legal Studies is a semester course designed to familiarize students with the philosophy and practice of civil, criminal and constitutional law. While highlighting the use of debate, research, case studies, mock trial and speakers from the legal and law enforcement community, this course will acquaint students with the ethics, language and culture of law in the United States. The Mock Trial is the culmination of this course and all students participate in its planning and execution. Students who enter this class after the first day of class are expected to makeup all work.

Sociology L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS433	None	.5	12	Semester	Yes

The study of sociology examines man, his behavior and current social issues. This course stresses the use of research and analysis in examining patterns of man's group behavior. Independent work as well as group project and extensive class discussion are stressed. Students who enter this class after the first day of class are expected to makeup all missed work.

Current Affairs L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS434	None	.5	12	Semester	Yes

This course will provide interested and motivated students with an opportunity to increase their knowledge of local, state, federal and international affairs through in-depth investigation. Students will select and investigate 6-8 significant current political topics with the guidance of the instructor in an effort to become more active and well-informed citizens. The course will require significant research-based group work and authentic community-based learning activities.

Facing History and Ourselves L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS331 (L3)	Level 4 credit only with approval from the course instructor	.5	11,12	Semester	Yes
SS341 (L4)					

This semester course is open to grades 11 and 12. Any junior requesting this course will need to be recommended for it by their current History teacher. This course examines bias, racism, and prejudice in a historical context. Through their study of intolerance and genocides such as the Holocaust, students will be able to make the correlation between history and the moral and ethical choices they are forced to make on a daily basis in their own lives. The course will use a wide range of academic research, film, guest speakers, projects, and class discussion to achieve the goals of the course.

The United States Civil War L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS440	None	.5	12	Semester	Yes

This course is open to any senior who has a keen interest in US History and who wants to challenge themselves with an in depth study of the watershed event of the nation. Instruction will focus on the underlying causes of the war, the war itself, and local involvement in the war. Instruction will routinely be student centered emphasizing significant examination of both primary and secondary documents. With extensive guidance and support, students will engage in one significant independent research project per quarter.

The World Since 1989 L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS441	None	.5	12	Semester	Yes

This course is open to any senior who has a keen interest in modern world history and who wants to challenge themselves with an in depth study of the contemporary world. The course will include a survey of world history since 1989 and will examine specific situations in great detail. This is a student driven research and presentation based course that explores issues outside the United States in depth. Topics center on issues such as economic globalization, religious fundamentalism, and nationalism in Asia, Africa, and Latin America. Instruction will be student centered emphasizing research in and out of the classroom.

World War II L3, L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS332 (L3)	Successful completion of US History I; Level 4 credit per recommendation of course instructor	.5	11,12	Semester	Yes
SS342 (L4)					

This course is designed for students who wish to examine the United States' role in the origins, execution and aftermath of World War II. The course will employ extensive use of film, primary and secondary documents and artifacts. Students who wish to receive level 4 credit will engage in independent work that will include 2 books of the student's choosing.

Special Topics in Psychology L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SS442	Successful completion of Psychology	.5	12	Semester	Yes

This course is designed for self-motivated students with a keen interest in the field of Psychology. Students, with the guidance of their instructor, will engage in significant independent research. With their instructor, students will determine and create a meaningful product intended for multiple audiences.

Special Education

Department Chair: Mrs. Charlene Miller

Course offerings:

Academic Support	Stride Program Course Descriptions:
Foundations of English/Language Arts	Consumer Math
Essentials of Algebra 1 Part 1	English Essentials
Essentials of Algebra 1 Part 2	History Essentials
Essentials of Geometry	Science Essentials
Essentials of Senior Math	Life Skills
	Pre-Vocational Skills and Studies
	School to Work Internship
	School to Work Externship

Mission Statement

The Special Education Department provides specialized instruction and services in core academic courses as determined by the students' needs. The department utilizes the grade level standards according to Massachusetts Frameworks & Common Core for each area of instruction. Placement is determined during the Special Education team meeting process, and is designed to meet the disability related needs of individual students.

Academic Support /Learning Centers					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE101 Grade 9 SPE201 Grade 10 SPE301 Grade 11 SPE401 Grade 12	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	No

Academic Support/Becker					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE102 Grade 9 SPE202 Grade 10 SPE302 Grade 11 SPE402 Grade 12	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	No

Academic Support is designed to provide each student with direct instruction with specific compensational, organizational, and self-advocacy skills in a small group learning environment.

Math

Essentials of Algebra 1 Part 1					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE120	Permission of the Department Chair	1	9, 10	Full Year	Yes

This course and Essentials of Algebra 1 Part 2 are designed to cover the skills and curriculum that is included in the mainstream Algebra 1 course (313) Topics studied in Part 1 include operations with integers, organizing data, experimental probability, functions & their graphs, solving equations and inequalities in one variable, and graphing and writing linear equations. Emphasis is placed on mastery of basic algebra skills and problem solving strategies.

Essentials of Algebra 1 Part 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE121	Permission of the Department Chair	1	9, 10	Full Year	Yes

This course is the second part of the Essentials of Algebra curriculum. Topics of study include systems of equations and inequalities, quadratic equations, radical expressions, exponents, polynomial operations, factoring, rational expressions, as well as a unit of geometry to introduce students to some of the concepts covered on the grade ten MCAS test.

Essentials of Geometry					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE220	Permission of the Department Chair	1	10, 11	Full Year	Yes

In this course, students study concepts of both plane and solid geometry and their application to real-life situations. Similar polygons, parallel & perpendicular lines, perimeter and area of polygons and circles, and volume and surface area of solid figures are emphasized.

Essentials of Senior Math					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE406	Permission of the Department Chair	1	12	Full Year	Yes

This course offers continued math instruction to seniors as they prepare to enter post-secondary education. The curriculum will address practical MCAS topics as well as other math concepts necessary to receive a Massachusetts high school diploma. Students will be taught math skills necessary for personal finance, budgeting, and the use of mathematics in the real world.

Consumer Math					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE507 SPE508 SPE509 SPE510	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	Yes

This course is designed to strengthen functional math skills in the areas of simple computation, problem solving, money management, budgeting, and purchasing/ordering.

English

English Essentials					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE515 SPE516 SPE517 SPE518	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	Yes

This course will emphasize development of functional reading and writing skills. Using both specific programs and a variety of literary genre short stories and poetry will be studied to enhance reading comprehension, vocabulary development, critical thinking and written expression skills.

Foundations of English/Language Arts					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE103 SPE203 SPE303 SPE403	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	Yes

This course is designed to strengthen reading comprehension, written expression, language and vocabulary and critical thinking skills. Students will read a variety of literary works that will include the novel, short story, nonfiction writing, plays, and poetry that will culminate in the writing of essays, project work, and written assessments.

Social Studies

History Essentials					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE519 SPE520 SPE521 SPE522	Permission of the Department Chair	1	9,10,11,12	Full Year	Yes

This course is designed to expose students to current and historical issues and events. Through multi-media presentation the students will demonstrate knowledge and understanding of their school, town, community and the world.

Science

Science 1, 2, 3,4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE511 SPE512 SPE513 SPE514	Permission of the Department Chair	1	9,10,11,12	Full Year	Yes

This course will teach the essential components and skills presented in the Physical Science, Chemistry, Physics, Biology and Technology science curriculum.

Skill Development

Life Skills					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE503 Gr 9 SPE504 Gr 10 SPE505 Gr 11 SPE506 Gr 12	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	No

This course is designed to strengthen independence in functional/life skills to include the areas of independent living, self-advocacy, social skills, self-care, money management, and navigating public transportation. Students in this course also may enroll in the following:

Pre-Vocational Readiness Skills and Studies					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE404	Permission of the Department Chair	1	9, 10, 11, 12	Full Year	No

This course is designed to strengthen the areas of vocational and social skills in the workplace and community. Course work will include resume writing, job application, assistive technology, and computer skills. Students in this class may transition to a post-secondary adult educational program.

Electives

Student Internship					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE601	Permission of the Department Chair	1	11, 12, PG	Semester	No

This course provides students taking part in the WHS Lifeskills/Pre-Vocational program with continued instruction of basic job-related skills and tasks that can occur within the high school setting. Such skills include clerical and office tasks, food-industry skills or retail skills. Students will learn how independently follow and complete completion checklist for various job related tasks. In addition, all students will gain important social skills in relation to working collaboratively as a team and the importance of clear communication when in a workplace.

Student Externship					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
SPE405	Permission of the Department Chair	1	12, PG	Semester	No

This course provides students taking part in the WHS Lifeskills/Pre-Vocational program with an understanding of basic job-related skills and tasks that can occur both at high school and in the community. Such skills include those needed to be successful in potential job sites including retail, office, food or hospitality settings. Students will learn to independently follow and complete a checklist for various job related tasks via daily hands-on, supervised training. In addition, all students will gain important social skills in relation to working collaboratively as a team and the importance of clear communication in the workplace.

World Language

Department Chair: Mr. Dominique Trotin

Course Offerings:

Chinese L3 Year 2, 3, 4	Spanish L2 Year 2
Chinese L4 Year 2, 3, 4	Spanish L3 Year 1, 2, 3, 4
AP Chinese Language L5	Spanish L4 Year 2, 3, 4
French L3 Year 1, 2, 3, 4	AP Spanish Language
French L4 Year 2, 3, 4	El Mundo Hispano L4
AP French Language & Culture	Conversation Spanish L3
Le Monde Francophone L4	Spanish Film L3

Our curriculum is aligned with the World-Readiness Standards for Learning Languages and we track student progress using the national proficiency guidelines developed by ACTFL (the American Council for the Teaching of Foreign Languages).

Learning Objectives:

Effective communicators who:

- Read, write, and speak clearly in the foreign language
- Use a variety of media
- Listen and respond to diverse audiences in a foreign language

Responsible citizens who:

- Demonstrate acceptance, respect, and empathy for other cultures
- Work cooperatively
- Respect the rights of others
- Take responsibility for their actions and decisions
- Produce quality work

Creative problem solvers who:

- Incorporate problem solving and critical thinking skills into the real world situations using the foreign language

Please note that our French, Spanish and Chinese courses are not intended for native or heritage speakers. Students who already have a working knowledge of those languages are encouraged to enroll in an alternative World Language course.

Incoming freshmen should note that the appropriate course for a student who completed the first year of language study in the middle school (7th and 8th grade) is Year 2 at the level recommended by their middle school World Language teacher. Students starting a new language in the high school should enroll in Year 1 of their desired language.

Chinese

Chinese continues to grow in importance as an international language. Currently, one fifth of the global population speaks Mandarin Chinese, with over 870 million native speakers worldwide. Westborough High School currently offers the following courses in Mandarin.

Chinese L3 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL1302	C or better in middle school Chinese and teacher recommendation	1	9,10	Full Year	Yes

The course emphasizes conversation for everyday use, vocabulary building, more advanced grammar concepts, and an introduction to simple readings. Conversation and listening comprehension are stressed within the limits of learned vocabulary and structure. Cultural appreciation will be broadened through discussion and reading about Chinese-speaking countries. The learning experiences introduced in the first and second full year, with an emphasis on helping students develop audio-lingual skills as well as competence in reading and writing, are continued and expanded in the third full year.

Chinese L4 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL145	A- or better in Chinese at the middle school and teacher recommendation	1	9,10	Full Year	Yes

The course offers a fast-paced rigorous curriculum for highly motivated students who want a challenging course of study. The course emphasizes conversation for everyday use, vocabulary building, more advanced grammar concepts, and an introduction to simple readings. Conversation and listening comprehension are stressed within the limits of learned vocabulary and structure. Cultural appreciation will be broadened through discussion and reading about Chinese-speaking countries. The learning experiences introduced in the first and second full year, with an emphasis on helping students develop audio-lingual skills as well as competence in reading and writing, are continued and expanded in the third full year.

Chinese L4 Year 3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL245	B or better in Chinese II L4 or A- or better in Chinese II L3 and teacher recommendation	1	10,11,12	Full Year	Yes

This course will tie together and expand the basic knowledge acquired in the previous 2 full years. Additional grammatical structures will be taught. Classroom activities will assist the students in acquiring proficiency in the linguistic skills of listening, speaking, reading, and writing through the use of dialogue, grammar, vocabulary study, and cultural readings. There are regular aural, oral, and written assessments to measure student progress. The culture, civilization, and language of China are studied.

Chinese L4 Year 4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL349	B+ or better in Chinese III L4 and teacher recommendation	1	11,12	Full Year	Yes

This is an advanced course for students who have taken a Chinese class for 3 years at the honors level. This is a rigorous curriculum for highly motivated students who want a challenging course of study. Classroom activities will assist the students in acquiring proficiency in the linguistic skills of listening, speaking, reading, and writing through the use of dialogue, grammar, vocabulary study, and cultural readings. Regular aural, oral, and written assessments will be performed to measure student progress. The culture, civilization, and language of China are studied.

AP Chinese Language					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL350	A- or better in Chinese IV L4 and permission of course instructor	1	11, 12	Full Year	Yes

The AP course prepares students to demonstrate their level of Chinese proficiency across the three communicative modes (Interpersonal, Interpretive, and Presentational) and the five goal areas (Communication, Cultures, Connections, Comparisons, and Communities). Its aim is to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills within a cultural frame of reference reflective of the richness of Chinese language and culture. The course focuses on language proficiency while interweaving level- and age- appropriate cultural content throughout the course and providing for frequent formative assessment of students' developing proficiencies within the context of their learning. Instructional materials and activities are carefully and strategically adapted from authentic sources to support the linguistic and cultural goals of the course.

French

French continues to be a crucial international language, being spoken by over 120 million native and nonnative speakers across the globe. It is also the only language besides English that is spoken on five continents and is taught in every country in the world. Westborough High School offers the following courses in French.

French L3 Year 1					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL136	None	1	9,10,11,12	Full Year	Yes

This is an introductory course designed for first- year students who begin the study of French in the High School and for students who studied French in the Middle School and would benefit from additional practice of the language. This course aims to develop basic proficiency in aural understanding, speaking, reading, and writing. Students will be introduced to the culture of French- speaking countries. Upon successful completion of this course, students may move either to French L3 Year 2 or French L4 Year 2, pending grades and teacher recommendation.

At the end of the year students will be able to...

- pronounce French words.
- introduce themselves and have a basic conversation.
- discuss a variety of basic topics using correct language structures.
- write on a variety of basic topics in grammatically -accurate French.
- recognize French -speaking countries and discuss cultural differences.
- achieve a “Novice High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

French L3 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL137	C or better in French 1, or C or better in middle school French and teacher recommendation	1	9,10,11,12	Full Year	Yes

In this second year course, students build off of and expand upon knowledge acquired in Year 1 French. They develop intermediate low proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture in French -speaking countries.

At the end of the year students will be able to...

- carry on basic and intermediate conversations on a variety of topics.
- describe past events and other early intermediate topics using correct language structures.
- write on a variety of early intermediate topics in grammatically -accurate French.
- recognize French -speaking countries and discuss important cultural differences.
- approach an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

French L4 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL143	A- or better in French 1, or A- or better in MS French and teacher recommendation	1	9, 10,11,12	Full Year	Yes

In this second year course, students build off of and expand upon knowledge acquired in Year 1 French. They develop early intermediate proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture in French -speaking countries.

At the end of the year students will be able to...

- carry on basic and intermediate conversations on a variety of topics.
- describe past events and other early intermediate topics using correct language structures.
- write on a variety of early intermediate topics in grammatically -accurate French.
- recognize French -speaking countries and discuss important cultural differences.
- achieve a “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

French L3 Year 3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL231	C or better in French 2 L3 and teacher recommendation	1	10, 11,12	Full Year	Yes

In this third year course, students build off of and expand upon knowledge acquired in Year 2 French. They develop intermediate low proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture of French -speaking countries.

At the end of the year students will be able to...

- carry on intermediate conversations on a variety of topics.
- describe past, future, and hypothetical events using correct language structures.
- write on a variety of basic topics in grammatically- accurate French.
- recognize French -speaking countries and discuss important cultural differences.
- achieve an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines

French L4 Year 3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL243	B or better in French 2 L4, or A- or better in French 2 L3 and teacher recommendation	1	10,11,12	Full Year	Yes

In this third year course, students build off of and expand upon knowledge acquired in French 2. They develop intermediate proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture of French -speaking countries.

At the end of the year students will be able to...

- carry on intermediate conversations on a variety of topics.
- describe past, future, and hypothetical events using correct language structures.
- write on a variety of basic topics in grammatically- accurate French.
- recognize French -speaking countries and discuss important cultural differences.
- approach an “Intermediate Mid” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines

French L3 Year 4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL334	C or better in French 3 L4, or B- or better in French 3 L3 and teacher recommendation	1	11,12	Full Year	Yes

In this fourth year course, students will continue to develop their aural, reading, writing, and speaking proficiency through the use of authentic materials, such as art, short stories, films, music and newspaper articles.

By the end of the course, students should:

- achieve an “Intermediate Mid” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

French L4 Year 4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL347	B or better in French 3 L4, or A- or better in French 3 L3 and teacher recommendation	1	11,12	Full Year	Yes

In this advanced intermediate course, students will continue to develop their aural, reading, writing, and speaking proficiency through the use of authentic materials, such as art, short stories, films, music and newspaper articles.

By the end of the course, students should:

- approach an “Intermediate High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Le Monde Francophone L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL440	B or better in French 4 L4, or A- or better in French 4 L3 and teacher recommendation	1	12	Full Year	Yes

In this advanced course, students will further develop their language skills through the study of Francophone culture. Each unit will focus on different themes. Students will look at original novels and/or short stories, and develop and present their own opinions in written and oral presentations. Students will research and present information on the francophone world.

By the end of the course, students should:

- achieve an “Intermediate High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Advanced Placement French Language & Culture					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL450	A-or better in French 4 L4 and permission of the course instructor	1	12	Full Year	Yes

This is a college -level course in which students will further develop reading, writing, listening and speaking skills in French. Students will be able to understand and critique novels, plays, articles, orations, and films orally and in writing using all verb tenses and moods. Students will be exposed to cultural perspectives through analysis and description of literature, historical documents, music, dance and theatre. Student proficiency will be assessed using the three modes of communication: presentational, interpretive and inter-personal.

By the end of the course, students should:

- approach an “Advanced Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

All students are required to take the College Board’s Advanced Placement exam in May.

Spanish

The importance of studying Spanish can be seen all around us. There are over 30 million people of Hispanic origin living in the United States alone. Westborough High School offers the following courses in Spanish.

Spanish L3 Year 1					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL138	None	1	9,10,11, 12	Full Year	Yes

This course aims to develop basic proficiency in aural understanding, speaking, reading, and writing. Students will be introduced to the culture of Spanish -speaking countries. Upon successful completion of this course, students may move either to Spanish L3 Year 2 or Spanish L4 Year 2, pending grades and teacher recommendation.

At the end of the year students will be able to...

- pronounce Spanish words.
- introduce themselves and have a basic conversation.
- discuss a variety of basic topics using correct language structures.
- write on a variety of basic topics in grammatically -accurate Spanish.
- recognize Spanish- speaking countries and discuss cultural differences.
- achieve a “Novice High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L2 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL123	B- or better in Spanish 1 L2 and teacher recommendation or middle school teacher recommendation	1	9,10,11,12	Full Year	Yes

This course is a continuation of Spanish I L2. It offers the student the opportunity to review and refine the four skills acquired in the previous full year. Students will continue to use the language lab, participate in students-based activities, have structured writing assignments, and study cultural perspectives.

At the end of the year students will be able to...

- approach an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L3 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL139	C or better in Spanish 1, C or better in MS Spanish and teacher recommendation	1	9,10,11,12	Full Year	Yes

In this second year course, students build off of and expand upon knowledge acquired in Year 1 Spanish. They develop intermediate low proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture in Spanish -speaking countries.

At the end of the year students will be able to...

- carry on basic and intermediate conversations on a variety of topics.
- describe past events and other early intermediate topics using correct language structures.
- write on a variety of early intermediate topics in grammatically -accurate Spanish.
- recognize Spanish -speaking countries and discuss important cultural differences.
- approach an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L4 Year 2					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL144	A- or better in Spanish 1, or A- or better in middle school Spanish and teacher recommendation	1	9,10,11,12	Full Year	Yes

In this second year course, students build off of and expand upon knowledge acquired in Year 1 Spanish. They develop early intermediate proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture of Spanish -speaking countries.

At the end of the year students will be able to...

- carry on basic and intermediate conversations on a variety of topics.
- describe past events and other early intermediate topics using correct language structures.
- write on a variety of early intermediate topics in grammatically -accurate Spanish.
- recognize Spanish -speaking countries and discuss important cultural differences.
- achieve an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L3 Year 3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL232	C or better in Spanish 2 L3 and teacher recommendation	1	10,11,12	Full Year	Yes

In this third year course, students build off of and expand upon knowledge acquired in Year 2 Spanish. They develop intermediate low proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture of Spanish -speaking countries.

At the end of the year students will be able to...

- carry on intermediate conversations on a variety of topics.
- describe past, future, and hypothetical events using correct language structures.
- write on a variety of basic topics in grammatically- accurate Spanish.
- recognize Spanish -speaking countries and discuss important cultural differences.
- achieve an “Intermediate Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines

Spanish L4 Year 3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL244	B or better in Spanish 2 L4 or A- or better in Spanish 2 L3 and teacher recommendation	1	10, 11,12	Full Year	Yes

In this third year course, students build off of and expand upon knowledge acquired in Year 2 Spanish. They develop intermediate proficiency in aural understanding, speaking, reading, and writing. The students deepen their understanding of the culture of Spanish -speaking countries.

At the end of the year students will be able to...

- carry on intermediate conversations on a variety of topics.
- describe past, future, and hypothetical events using correct language structures.
- write on a variety of basic topics in grammatically -accurate Spanish.
- recognize Spanish -speaking countries and discuss important cultural differences.
- approach an “Intermediate Mid” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L3 Year 4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL335	C or better in Spanish 3 L4 or B- or better in Spanish 3 L3 and teacher recommendation	1	11,12	Full Year	Yes

In this fourth-year course, students will continue to develop their aural, reading, writing, and speaking proficiency through the use of various authentic materials.

By the end of the course, students should:

- achieve an “Intermediate Mid” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Spanish L4 Year 4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL348	B or better in Spanish 3 L4 or A- or better in Spanish 3 L3 and teacher recommendation	1	11,12	Full Year	Yes

In this advanced intermediate course, students will continue to develop their aural, reading, writing, and speaking proficiency through the use of various authentic materials.

By the end of the course, students should:

- approach an “Intermediate High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

El Mundo Hispano L4					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL445	B or better in Spanish 4 L4 or A- or better in Spanish 4 L3 and teacher recommendation	1	12	Full Year	Yes

In this advanced course, students will further develop their language skills through the study of Hispanic culture. Each unit will focus on different themes. Students will look at various authentic materials, and develop and present their own opinions in written and oral presentations. Students will research and present information on the hispanic world.

By the end of the course, students should:

- achieve an “Intermediate High” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

Advanced Placement Spanish Language					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL451	A- or better in Spanish 4 L4 and permission of the course instructor	1	12	Full Year	Yes

This is a college-level course in which students will further develop reading, writing, listening and speaking skills in Spanish. Students will be able to understand and critique novels, plays, articles, orations, and films orally and in writing using all verb tenses and moods. Students will be exposed to cultural perspectives through analysis and description of literature, historical documents, music, dance and theatre. Student proficiency will be assessed using the three modes of communication: presentational, interpretive and inter-personal.

By the end of the course, students should:

- achieve an “Advanced Low” level on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines.

All students are required to take the College Board’s Advanced Placement exam in May

Spanish Film L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL332	B+ or better in Spanish 3 L3, or B- or better in Year 3 Spanish L4 Year 3 and teacher recommendation	.5	11,12	Semester	Yes

This course presents issues of Spanish culture through careful analysis and discussion of major Spanish film directors from the mid twentieth century to the present. This course will NOT meet prerequisites for AP Spanish or Mundo Hispano placement.

Spanish Conversation L3					
Course	Prerequisite	Credit	Grade Level	Course Length	Weighted
WL333	B+ or better in Spanish 3 L3 or B- or better in Spanish 3 L4 and teacher recommendation or B- in Spanish 4 L3 and permission of course instructor	.5	11,12	Semester	Yes

This course is designed for students who would like to continue with the study of Spanish without the structured study of formal grammar. The goal is to develop oral language skills. The emphasis is on listening and speaking the language. Grammatical reviews will occur as necessary. Oral presentations, dialogues, reading passages, and role-playing are important features. This course will NOT meet prerequisites for AP Spanish or Mundo Hispano placement.