

PRINCIPAL'S MESSAGE

Dear Students, Parents, and Guardians of Woburn Memorial High School,

On behalf of the faculty and staff of Woburn Memorial High School, I am pleased to present the Program of Studies for the 2019-2020 school year. A great deal of time has gone into developing a sound academic program that attempts to meet the needs and interests of all students. At Woburn Memorial High School, we believe all students should possess the college and career skills to meet success beyond high school. Founded in this belief, our course offerings provide opportunities for students to explore their interests while developing and honing these skills. This school year, we have redesigned our Program of Studies to better assist your efforts in planning your course of studies while at Woburn Memorial High School. Please use this resource to engage in dialogue and discussion about courses for next school year while considering future options. We want students to challenge themselves as they plan their future coursework. All courses are aligned to state and federal standards and support the development and ongoing practice of communication, collaboration, critical thinking, and problem solving skills, as well as the habits of mind necessary for college and career readiness in the 21st century.

This booklet contains information about our graduation requirements, the course selection and scheduling process, as well as brief descriptions of every course offered. Also included are related policies, and sections devoted to some of the specialized services, clubs, and extracurricular activities offered at Woburn Memorial High School. Teachers, guidance counselors, department heads, and administrators are available to assist students, parents and guardians in making course selections. The scheduling process begins in February and will be completed by June. During the latter part of the registration process, honoring requests for changes becomes increasingly difficult. Therefore, it is essential that students complete the registration process as early as possible, making the best choices available to them. Students will be assisted through this process with presentations during Advisory, and with one on one support from the guidance department. Courses will run according to demand, staffing and budget constraints.

It is our collective and sincere hope that all students reach the goals, dreams and aspirations they establish. Good luck and enjoy the remainder of the school year! If there is any way in which I can be of assistance, please contact me at (781) 937-8210 ext. 10100 or jcallanan@woburnps.com.

Respectfully,

Jessica B. Callanan
Principal

SOCIAL MEDIA

Woburn Public Schools webpage: www.woburnps.com

Twitter: @WoburnSchools

Woburn Memorial High School webpage: www.woburnps.com/wmhs

Twitter: @WMHStanners

GUIDANCE CURRICULUM COORDINATOR MESSAGE

Dear Students, Parents and Guardians of Woburn Memorial High School,

Students in Grade 8 at the John F. Kennedy Memorial Middle School, the Daniel L. Joyce Memorial Middle School, and the students in Grades 9, 10, and 11 at Woburn Memorial High School will soon begin to select their courses for the next school year. It is imperative that students and their parents/guardians give course selection a high priority during this time period.

Parents and guardians are urged to discuss courses with their children and their children's teachers and guidance counselors. This is your opportunity to share your concerns about your child's academic future. If you want your child to take a particular class, be sure he/she selects that course. However, you should realize courses with low enrollments will not be offered. Students will be notified as soon as possible if a course will not be offered.

All course prerequisites are listed in the *Program of Studies*. Teachers will also discuss the requirements for each course. If you wish to discuss your child's program with his or her teachers or counselor, please make an appointment immediately. All of our staff members look forward to discussing these important issues with you. Woburn Memorial High School teachers are available by appointment.

The parents of students in private and parochial schools should contact the Guidance Office at Woburn Memorial High School (781-937-8210 extension 10102).

We look forward to working with parents and students to provide a quality education for all students.

It is again our goal this year to give schedules to all students in June.

Rosemary Donovan
Guidance Curriculum Coordinator

ACCREDITATION

Woburn Memorial High School is a fully accredited member of the New England Association of Schools and Colleges (NEASC.) The accreditation is an expression of the confidence the NEASC has in Woburn Memorial High School's purpose, resources and performance. It attests to the judgment of educators from NEASC that Woburn Memorial High School is guided by well-defined and appropriate educational objectives; that the objectives are being achieved; and that the school is organized, staffed, and supported in such a way that it will be able to continue to reach the objectives for some time.

WOBURN MEMORIAL HIGH SCHOOL

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

WOBURN MEMORIAL HIGH SCHOOL

GRADUATION REQUIREMENT

All students must carry 30 credits each year.
Minimum credits required to graduate - 100 credits

COURSE CREDITS:

All students must be enrolled in 30 credits or more each year.

In addition, to graduate from Woburn Memorial High School, a student must successfully complete:

- 20 credits of English
- 20 credits of History and Social Science
- 20 credits of Science and Technology
- 20 credits of Mathematics
- 10 credits of World Language Courses - for college admittance credits must be in the same language and taken consecutive years.
- 6.25 credits of Physical Education / Wellness
- 2.5 credits of Business Courses
- 2.5 credits of Art Courses / Music Courses

Juniors participating in Work Study must carry 30 credits in addition to Work Study.

All students must pass MCAS in English/Language Arts, Mathematics, and Science in order to receive a diploma.

Woburn Memorial High School recognizes scholarship by publishing a scholastic honor roll each term and by the election of juniors and seniors to the National Honor Society of Secondary Schools, Woburn Memorial High School Chapter.

ACADEMIC RECOGNITION STANDARDS

I. Honor Roll Eligibility

A. High Honors Eligibility

Students who have received all A's or all A's and one B based on all courses taken. To qualify a student must have at least five full time courses.

B. Honors Eligibility

Students who have received all A's and B's based on all courses taken. To qualify a student must have at least five full time courses.

II. Graduating Summa Cum Laude, Magna Cum Laude, Cum Laude

A. Summa Cum Laude: Students who graduate in the top 10% of their class.

1. Class Rank is based on the student's letter grades.
2. Class Rank calculations are the sum of a student's cumulative weighted grades, divided by the number of credits attempted in core courses.

B. Magna Cum Laude: Students who graduate in the second 10% of their class.

1. All Class Rank requirements and calculations are the same as those for graduating Summa Cum Laude.

C. Cum Laude: Students who graduate in the third 10% of their class.

1. All Class Rank requirements and calculations are the same as those for graduating Summa Cum Laude.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

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COURSE SELECTION

To successfully choose a program for each succeeding year, students must:

1. Know the requirements for graduation.
2. Have a plan for completing these requirements and earning credit toward graduation. (See Academic Plan Worksheet.)
3. Read course descriptions and note recommended requisite skills.
4. Complete Time Management Calculator on school website.
5. Choose courses that connect to academic or occupational goals and interests.
6. Consult with guidance counselors and subject teachers who know a student's learning style.
7. Seek the advice and approval of parents in making course decisions.

As students progress through high school, they become both educated and well-rounded through a variety of learning experiences as they prepare for the future. In addition to the required academic courses, elective courses of study in a variety of curricular areas, such as Business, Performing Arts, Visual Arts, Wellness/Physical Education and Technology, are offered at WMHS and help students to better understand the greater world around them as they prepare for the challenges of postsecondary study and the 21st century workplace. All WMHS students are required to take courses to broaden their experiences and pursue specific interests.

COURSE CHANGE POLICY

Students who withdraw from a core course after fifteen school days will receive a Withdrawal (W). The "W" will appear on the permanent record and may be a determinant in class rank. If withdrawal occurs after term one, grades earned in the withdrawn class will follow the student to the new class.

Students should choose courses carefully and wisely at course selection time. Please be aware that students will be expected to fulfill the commitments made when the course selection sheet is submitted. **No change in course electives will be allowed once the school year begins.** A student may, however, make a change to an elective by seeing his/her guidance counselor immediately following the Move-Up Day activity of by the last day of school.

LEVELS OF INSTRUCTION

All of the courses at Woburn Memorial High School are offered at levels of instruction to meet the varying needs of students as they progress through the high school. Thus, each student's program is challenging and provides the student with a variety of opportunities to explore and expand his/her education opportunities.

The level of instruction a student selects in each subject should be determined by the following:

1. The ability of the student
2. Previous achievement in related courses.
3. Recommendations of subject area teachers and guidance counselors.
4. The expressed wish of the student and parents or guardian in terms of the student's interests and life aims.
5. The necessary sequence of courses required for graduation and entrance into specialized programs.

If a student is not recommended for a course he/she desires, the student and parent may:

1. Complete an override form and submit it to the principal by April 1.
2. Show an improvement in work and ask for reconsideration in June.

Advanced Placement Courses

The Advanced Placement courses (AP) allow high school students the opportunity to study college level courses while still in high school and offer them the possibility of receiving Advanced Placement credit in college on the basis of the AP examination. Students taking AP courses **must** take the AP exam in that subject.

Honors Courses

Honors level courses are intensive college preparatory courses. They require students to have a high level of proficiency in the subject. Honors level courses require students to be involved in high-level study through extensive project, reading, and writing assignments outside of the classroom.

College Preparatory Courses

All College Preparatory courses at Woburn Memorial High School demand a high degree of achievement; students are expected to complete a wide range of reading, writing, and project assignments.

Enhanced Competence Courses

Enhanced Competence (EC) courses are for those students who test below grade level in English, mathematics, science and technology, or history and social science. Teachers will work with students in the enhanced competence courses to increase the students' skills so they can enter the academic program and graduate from high school with demonstrated competency in English, mathematics, science, and history and social science. **These classes are not considered College Preparatory.**

Dual Enrollment

Dual Enrollment is a program for high school students who want to earn college credit through Middlesex Community College while working towards high school graduation requirements. Students must meet all prerequisites for any course. There is a fee. Students will receive AP credit.

WOBURN MEMORIAL HIGH SCHOOL

WEIGHTED GRADE POINT AVERAGE AND CLASS RANK

Woburn Memorial High School's Grade Point Average (GPA) and Rank in Class (RIC) structures align with current college admission practice and the Massachusetts College System. The Grade Point Average structure is a 4.0 weighted scale and is based upon the grades earned in the five academic areas: English, Mathematics, Science, Social Studies/History, Foreign Language and Honors level Business. All WMHS students are required to take courses in the elective areas of the Fine Arts, Business and Physical Wellness to broaden their experiences and pursue specific interests.

The Woburn Memorial High School secondary school record provides a Weighted Grade Point Average (GPA) and a Rank in Class to report academic performance at WMHS to post-secondary institutions. Weighted GPA is a statistic widely used for making decisions relative to college admission. To establish GPA, numerical values are assigned to semester grades earned according to the chart on the next page. Using these values, a student's rank average is computed. This rank will be reported in deciles, to communicate a range of student performance that reflects a student's academic record with respect to his/her peers. Exact class ranks will only be given to students ranked number one (1) through number ten (10) of each graduating class. All other students will be given a decile ranking. Rank in Class (decile) will be reported to the students for the first time when available at the conclusion of Grade 10. Both GPA and Rank in Class (decile) are reported to colleges.

GRADE WEIGHTING SCALE

- GPA and Rank in Class are cumulative and use final grades for their calculation.
- Students must attend WMHS for at least two full school years to be included in Rank in Class.
- Elective courses (Art, Music, Wellness/Physical Education, Journalism, Introduction to Theatre and some Business) are not leveled. These courses will therefore be assigned no weight and will not be included in the calculation of the Grade Point Average and Rank in Class.
- Credits will be awarded for successful completion of failed courses in an approved summer school or night school program.
- There are four levels of weighting given to classes, according to their level of rigor. For example, an Advanced Placement course carries a higher value than a College Preparatory course. Course levels and corresponding weighting are as follows:

Woburn Memorial High School				
Grade	AP	Honors	College Preparatory	EC
A+	5.3	4.8	4.3	3.8
A	5.0	4.5	4.0	3.5
A-	4.7	4.2	3.7	3.2
B+	4.3	3.8	3.3	2.8
B	4.0	3.5	3.0	2.5
B-	3.7	3.2	2.7	2.2
C+	3.3	2.8	2.3	1.8
C	3.0	2.5	2.0	1.5
C-	2.7	2.2	1.7	1.2
D+	2.3	1.8	1.3	.8
D	2.0	1.5	1.0	.5
D-	1.7	1.2	0.7	.2
F	0.0	0.0	0.0	0.0

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COLLEGE ADMISSION

Many changes have occurred in the college admissions process. Numbers of colleges are requiring students to take the College Entrance Examinations. SAT Reasoning Test, is designed to show how well a student reasons by assessing the student's abilities in reading, vocabulary, mathematics, and writing. The second, SAT Subject Tests, measures the student's knowledge in subjects such as English, social studies, mathematics, chemistry, physics, biology, French, Spanish, and Latin.

The American College Testing (ACT) program is also becoming popular in this area. Colleges may use this testing program instead of or in addition to the SAT testing program. The ACT program also consists of an aptitude/reasoning section and an achievement section. The writing section is optional but is required by most colleges.

College admissions officers place emphasis on the high school academic record, the rigor of the student's curriculum, recommendation of teachers and the guidance counselor, results of the SAT or ACT tests, personal interviews and extracurricular activities, and community service.

Students who are applying to college must make an appointment with their guidance counselor to review the requirements for college. By meeting frequently with their guidance counselor students will make more informed choices about the colleges that would best fulfill their academic needs and career goals.

ATHLETIC CO-CURRICULA ELIGIBILITY

Per Massachusetts Interscholastic Athletic Association (MIAA) guidelines, a student must accrue twenty (20) credits each term in order to be eligible for participation in athletics and co-curricular activities.

IMPORTANT: To be eligible for participation for fall sports and activities, a student must have passed courses valued at 20 credits during the fourth term of the previous school year. Also, a student must receive passing final grades to the equivalent of at least 20 credits. Students are allowed to attend an approved summer school to regain eligibility for fall sports and co-curricular activities.

REGULATIONS PERTAINING TO STUDENT RECORDS

A parent or a student who has entered the ninth grade or is at least fourteen years old has the right to inspect all portions of the student record upon request. The record must be made available to the parent or student no later than two days after the request unless the student or parent consents to a delay.

The parent and student have the right to receive copies of any part of the record, although a reasonable fee may be charged for duplicating the materials.

The parent and student may request to have parts of the record interpreted by a qualified professional of the school or may invite anyone of their choosing to inspect and interpret the record with them.

WOBURN MEMORIAL HIGH SCHOOL

**DESCRIPTION OF COURSES
2019 - 2020**

STUDENTS PLEASE NOTE

The selection of courses listed in this booklet will be subject to enrollment requests and budgetary allowances as determined by the fiscal constraints imposed for the 2019 - 2020 academic year.

**BUSINESS EDUCATION DEPARTMENT
HOMEWORK**

Course #	Earned Credits	Approx. Weekly Homework	SUBJECT	Available Grades	Prerequisite
559	2.5	1-2	Introduction to Business	10-12	
507	5	1-2	Banking 1 Honors	11-12	
508	5	1-2	Banking 2 Honors	12	Banking 1
509	2.5	0	Computer Applications	9-12	
546	2.5	0	Advanced Computer Applications	9-12	Computer Apps.
553	5	1-2	College Accounting 1 Honors	10-12	
583	5	1-2	College Accounting 2 Honors	11-12	College Accounting 1
573	2.5	1-2	Marketing	10-12	
574	2.5	1-2	Marketing 2	11-12	Marketing 1
575	2.5	1-2	Sports & Entertainment Marketing	10-12	
590	2.5	1-2	Personal Finance	11-12	

WOBURN MEMORIAL HIGH SCHOOL

BUSINESS EDUCATION

The Business Education Department's mission is to introduce and prepare all students for the many business or educational challenges they may encounter throughout their careers.

We at Woburn Memorial High School believe that a strong background in business creates a foundation that lasts a lifetime. The curriculum is designed to benefit both business and college bound students. Students who plan on entering the business world are encouraged to take advantage of the multitude of diversified courses that are offered to enable them to develop or enhance marketable skills for employment upon graduation. Courses such as computer applications, accounting, marketing, and banking are recommended. Students continuing on to college will find these courses useful in order to prepare them for their next level of learning.

All students are required to take at least a one-semester course in business. It is highly recommended and encouraged that students take Computer Applications in Grade 9 or 10. We suggest they take this class as early as possible as the skills learned will benefit them in their other classes.

COURSE TITLE: Introduction to Business (semester course)

LEVEL OFFERED: This course is not leveled. 559

PREREQUISITES: Available to sophomores, juniors and seniors with a strong interest in the business environment and a possible business career.

DESCRIPTION: Introduction to Business introduces students to the business environment and economic system from the viewpoint of activities as a consumer and a worker. It provides an overview of the entire field of business and gives background information that is necessary for those who may desire a business career. Course content includes the fundamentals of buying, selling, banking, and financial services, managing money, using credit wisely, insurance, and other business activities.

COURSE TITLE: Banking 1

LEVEL OFFERED: Honors 507

PREREQUISITES: Available to juniors and seniors only; a strong math background and an interest in the banking industry.

DESCRIPTION: Personal finance, an introduction to the banking industry, and all phases of entry-level banking will be taught. Students who would like to work in the school bank their senior year need to have taken Banking 1.

COURSE TITLE: Banking 2

LEVEL OFFERED: Honors 508

PREREQUISITES: Available to seniors only; Banking 1 or recommendation of present instructor.

DESCRIPTION: Students enrolled in Banking 2 will have the opportunity to work during the scheduled class period as bank tellers.

COURSE TITLE: Computer Applications (semester course)

LEVEL OFFERED: This course is not leveled. 509

PREREQUISITES: None

DESCRIPTION: Computer applications is a one-semester course which covers two Microsoft Office applications: Excel and PowerPoint, as well as Google applications or Microsoft Word. Students will learn to create and analyze spreadsheets, and develop effective slide presentations. Proficiency in keyboarding is not a requirement as students will use previously created documents and apply the concepts learned to them.

COURSE TITLE: Advanced Computer Applications (semester course)

LEVEL OFFERED: This course is not leveled. 546

PREREQUISITES: Computer Applications

DESCRIPTION: This class is a continuation of Computer Applications. Students will learn the advanced functions of Microsoft Excel, Microsoft PowerPoint, and Google applications.

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COURSE TITLE: College Accounting 1

LEVEL OFFERED: Honors 553

PREREQUISITES: Available to sophomores, juniors and seniors.

DESCRIPTION: College Accounting 1 is a comprehensive, accelerated course. Students establish a solid foundation of accounting principles and procedures for both a sole proprietorship service business and a partnership merchandising business. In addition, students will gain hands-on experience in computerized accounting procedures. A strong emphasis is placed on developing good work habits, analyzing problems, and applying accounting principles to problem solving.

COURSE TITLE: College Accounting 2

LEVEL OFFERED: Honors 583

PREREQUISITES: College Accounting 1

DESCRIPTION: College Accounting 2 is a continuation of College Accounting 1. College Accounting 2 is an automated course that explores detailed concepts of cost and management accounting for departmentalized businesses. Partnerships and corporate accounting cycles are also reviewed. This course places a heavy emphasis on the role of computers in accounting while analyzing complex problems and applying principles to detailed problem solving.

COURSE TITLE: Marketing 1 (semester course)

LEVEL OFFERED: This course is not leveled. 573

PREREQUISITES: Available to sophomores, juniors, and seniors.

DESCRIPTION: Marketing is designed to teach students about retail merchandising, management, business ownership, selling, advertising, and promotions. Students develop an awareness of the career opportunities available to them in these fields.

COURSE TITLE: Marketing 2 (semester course)

LEVEL OFFERED: This course is not leveled. 574

PREREQUISITES: Marketing 1

DESCRIPTION: This class is a continuation of Marketing 1. In this class, students will learn more advanced functions of retail merchandising, management, business ownership, selling, advertising, and promotion. They will use case studies, create advertising and hear from different industry professionals during the semester.

COURSE TITLE: Sports and Entertainment Marketing (semester course)

LEVEL OFFERED: This course is not leveled. 575

PREREQUISITES: Available to sophomores, juniors, and seniors.

DESCRIPTION: This innovative course introduces the fundamentals of marketing within the backdrop of the sports and entertainment industries. Marketing strategies will be stressed through the topics of sponsorship, pricing, market research, endorsements and promotions. This course will develop critical thinking, decision making and communication skills through real world applications. Students learn how professional athletes, sports teams, and well-known entertainers are marketed as commodities and how some of them become billionaires as a result. For students who have ever wondered about how things work behind the scenes of a major sporting event such as the Super Bowl or even entertained the idea of playing a role in such an event, this course introduces the fundamentals of a career in sports and entertainment marketing.

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COURSE TITLE: Personal Finance (semester course)

LEVEL OFFERED: This course is not leveled. 590

PREREQUISITES: Available to juniors and seniors.

DESCRIPTION: Personal Finance is a basic Banking course focusing on essential financial concepts including how the banking system works, the Federal Reserve, the money supply, and granting credit. We will also explore other relevant financial ideas including interest and interest rates, types of banking accounts including checking and saving accounts, budgeting for the future, writing checks and balancing a checkbook, identify theft, fraud, and the stock market. Lastly, we will focus on and complete a variety of computer based and internet projects dealing with some of the basic financial ideas and topics with which students should have a basic understanding upon graduating high school.

WOBURN MEMORIAL HIGH SCHOOL

ENGLISH DEPARTMENT

Course Number	Earned Credits	Approximate Weekly Homework (hrs.)	Course Name	Available to Grades			
				9	10	11	12
012	5	1-2	9 EC	x			
014	5	1.5-2.5	English 9 CP	x			
015	5	2-3	English 9 Honors	x			
022	5	1-2	10 EC		x		
024	5	1.5	English 10 CP		x		
025	5	3-5	English 10 Honors		x		
032	5	1-2	11 EC			x	
034	5	1-2	English 11 CP			x	
035	5	5	English 11 Honors			x	
036	5	5	Women in Literature Honors			x	
064	5	5	AP Language & Composition			x	x
055	5	5	AP Literature & Composition			x	x
042	5	1-2	12 EC				x
044	5	1-2	English 12 CP				x
059	5	1	Practical Literacy				x
045	5	2.5-3.5	English 12 Honors				x
047	5	2-3	Heroine's Journey Honors				x
049	5	2	Sports Literature Honors				x
080	5	1	Theater		x	x	x
079	5	1	Journalism		x	x	x
019	1.25	0	MCAS Review		x	x	
053	1.25	2.5	SAT Prep			x	
058	2.5	1	Public Speaking			x	x

WOBURN MEMORIAL HIGH SCHOOL

ENGLISH

The goal of the English Department is to develop facility in all areas of language arts - reading, writing, listening, and speaking. The English teachers use the Massachusetts English Language Arts Curriculum Framework Learning Standards as their guide for classroom instruction. Students must successfully complete four years of English to graduate from Woburn Memorial High School.

The English Department offers a sequential program in grammar, vocabulary, composition, and literature. At each grade level, students examine classical and contemporary novels, plays, poems, short stories, and essays. All students also write argument, narrative, and literary essays as well as a research paper each year. All students must meet prerequisite requirements or recommendation of present instructor or department chairperson for the course(s) they select.

ENGLISH 9

COURSE TITLE: English 9

LEVELS OFFERED: Enhanced Competence 012, College Preparatory 014, Honors 015

PREREQUISITES: Honors: Students must have achieved a grade of A in English 8 or have the recommendation of present instructor or department chairperson.

DESCRIPTION: English 9 stresses the introduction to principles of writing, vocabulary building, grammar, speaking, and listening, as well as, introducing students to new authors and their works.

All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

COURSE TITLE: English 9 CP Extension

LEVELS OFFERED: College Preparatory 016

PREREQUISITES: Invitation of Grade 8 teacher.

DESCRIPTION: This course is intended to provide further English instruction to aid in the transition to high school. The course will further enrich that of the English 9 CP content, providing further development of literacy skills in both reading and writing.

ENGLISH 10

COURSE TITLE: English 10

LEVELS OFFERED: Enhanced Competence 022, College Preparatory 024, Honors 025

PREREQUISITES: Honors: Students must have achieved a grade of A- in English 9 College Preparatory, or B or better in English 9 Honors, or recommendation of present instructor or department chairperson.

DESCRIPTION: English 10 provides the student with further instruction in the principles of writing, vocabulary building, grammar, speaking, and listening. Continued emphasis on reading and its interpretation is stressed through short stories, drama, novels, poetry, and essays. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

ENGLISH 11

COURSE TITLE: English 11

LEVELS OFFERED: Enhanced Competence 032, College Preparatory 034, Honors 035

PREREQUISITES: Honors: Students must have achieved a grade of A- in English 10 College Preparatory, or B or better in English 10 Honors, or recommendation of present instructor or department chairperson.

DESCRIPTION: English 11 provides the student with the ability to refine skills associated with grammar, writing, speaking, listening, and reading. The techniques of narration, description, exposition, and argumentation are developed. American literature is studied in depth. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

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COURSE TITLE: Profiles of Women in Literature and History

LEVEL OFFERED: Honors 036

PREREQUISITES: Students must have achieved a grade of A- or better in English 10 College Preparatory, or a B or better in grade English 10 Honors, or recommendation of present instructor or department chairperson.

DESCRIPTION: This course will examine the woman's role in history and literature. By focusing on both contemporary and historical women's issues, students will increase their knowledge of the lives, contributions, and roles of women around the world. The readings of this course include novels, plays, poems, articles, essays, speeches, and short stories. Writing is also a major component of this course. All students will be required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

ENGLISH 12

COURSE TITLE: English 12

LEVELS OFFERED: Enhanced Competence 042, College Preparatory 044, Honors 045,

PREREQUISITES: Honors: Students must have achieved a grade of A- or better in English 11 College Preparatory, or B or better in English 11 Honors, or recommendation of present instructor or department chairperson.

DESCRIPTION: In the senior year intensive instruction, geared to the student's life after graduation, is given through the study of world literature and writing. All students are required to keep a writing folder and will write a minimum of 12 pieces, including an extensive research paper.

COURSE TITLE: Practical Literacy

LEVEL OFFERED: College Preparatory 059

PREREQUISITES: Students must have recommendation of present instructor - based on ability, work ethic, and post-high school plans.

DESCRIPTION: This course is designed for students who are not planning to attend a four-year institution immediately following graduation. Stress will be placed on oral and written communication skills. Grades in the course will weigh heavily on in and out of class assignments, group discussions, and writing. Students will read and critically analyze various works of contemporary and classical works of literature as well as newspaper and magazine articles. The course's standards and objectives will be similar to that of an English 12 College Preparatory course, as students will be required to keep a writing folder and will write a minimum of 12 assignments.

COURSE TITLE: The Heroine's Journey in Literature

LEVEL OFFERED: Honors 047

PREREQUISITES: Students must have achieved a grade of A- or better in College Preparatory or Honors English 11 or recommendation of present instructor or department chairperson.

DESCRIPTION: The course will explore literature with a special focus on the heroine's perspective – in relation to that of the hero, but also particularly as a window on the unique, changing landscapes of a woman's life. In addition, students will also focus on the perception of women and their struggles through various texts and current events. The works studied – fiction, autobiography, poetry, essays – will draw on a variety of authors from Charlotte Bronte to Meredith Hall and will represent diverse eras and cultures. The writing program, standards and aims will be identical to that of the regular English 12 Honors course. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

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COURSE TITLE: Sport, Literature, and American Society

LEVEL OFFERED: Honors 049

PREREQUISITES: Students must have achieved a grade of B or better in College Preparatory or Honors English 11 and recommendation of present instructor based on writing ability and consistent work ethic.

DESCRIPTION: This project-based course focuses on eras and individuals in sports and their effects on American society. The historical significance of how individuals used their sports stature to influence and change American society outside of their sports context will be researched. The theme of sports helping to give an identity to America's multicultural society will also be explored. Reading assignments will vary from novels, memoirs, biographies, historical literature, and newspaper articles. Student writing assignments will include thematic essays from novels, research papers, and newspaper writing for both event coverage and personal profiles. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

ADVANCED PLACEMENT (Both courses are offered to grades 11 and 12)

COURSE TITLE: AP Language and Composition

LEVEL OFFERED: Advanced Placement 064

PREREQUISITES: Students must have achieved a grade of B or better in English 10 or 11 Honors or Advanced Placement Literature and Composition and approval of advanced placement teacher.

DESCRIPTION: AP Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Through writing and reading, students become aware of the interactions among a writer's purposes, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

COURSE TITLE: AP Literature and Composition

LEVEL OFFERED: Advanced Placement 055

PREREQUISITES: Students must have achieved a grade of B or better in English 10 or 11 Honors or Advanced Placement Language and Composition and approval of advanced placement teacher.

DESCRIPTION: AP Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, themes, as well as the importance of rhetorical devices. All students are required to keep a writing folder and will write a minimum of 12 pieces, including a research paper.

ENGLISH ELECTIVES (These courses must be taken in addition to regular English courses.)

COURSE TITLE: English MCAS Review - Grade 10 (semester course)

LEVEL OFFERED: This course is not leveled. 019

PREREQUISITES: Recommendation of present instructor.

DESCRIPTION: This course is required for students who failed the ELA MCAS test, or who are in danger of failing the MCAS test. It will be taken in addition to the Grade 10 English course.

COURSE TITLE: English MCAS Review - Grade 11 (semester course)

LEVEL OFFERED: This course is not leveled. 019

PREREQUISITE: Recommendation of present instructor.

DESCRIPTION: This course is required for students in Grade 11 who failed the ELA MCAS test in Grade 10. Students in Grade 11 who wish to up-grade their scores may also take this course. It will be taken in addition to the Grade 11 English course.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Journalism 10, 11 and 12

LEVEL OFFERED: This course is not leveled. 079

PREREQUISITES: Application and recommendation from present instructor.

DESCRIPTION: This yearlong course focuses on the production, writing and creation of the WMHS newsmagazine (*The Bull's Eye*). *The Bull's Eye* is published seven times a year. As a project based environment, the class expectations require a commitment to teamwork and open, honest and tactful communication, as well as near constant writing, editing and planning. You must be willing to accept instruction and advice from your peers. You will be expected to accept assigned articles to write, as well as write articles on subjects that you find interesting (including sports and current events, among others). While the intention is to keep the work in-class, there are those times when you might be required to do work on your own time in order to meet deadlines. This class is recommended only to those students who are committed to developing their writing skills on a consistent and intense level. If you are only interested in taking the course for one year, please wait until senior year to apply.

COURSE TITLE: Public Speaking (semester course)

LEVEL OFFERED: College Preparatory 058

PREREQUISITES: Available to juniors and seniors.

DESCRIPTION: This is a course that will emphasize the practical skill of delivering a speech or presentation to an audience. This class will include techniques to become more comfortable presenting in front of an audience, to effectively use visuals to enhance the speech, and to become more skilled speaking off script. The goal of the class is to prepare students for success in typical public speaking situations and to provide them with the basic principles of organization and research needed for impactful public speaking.

COURSE TITLE: SAT Prep (semester course)

LEVEL OFFERED: Grades 11/12; this course is not leveled. 053

PREREQUISITES: None

DESCRIPTION: This course will prepare students for the SAT and/or ACT by de-mystifying test questions and question types, reviewing basic principles of grammar and working on efficient expansion of vocabulary knowledge. Specific topics may vary based upon the needs of the individualized students. Students who take this course should expect to have at least 30 minutes of independent work outside of class time per day, most of which will be done using computer software, in order to personalize the class and achieve the desired results.

ENGLISH LANGUAGE LEARNERS

EL students should be aware that EL classes alone do not qualify them for entrance into four year colleges. A TOFEL exam is needed in addition to the EL class.

COURSE TITLE: EL 1 Grammar

LEVEL OFFERED: College Preparatory 070

DESCRIPTION: This course is designed for those non-English or very limited English proficient students in grades 9 – 12. The goal of literacy development is achieved by introducing vocabulary, grammar usage, listening, and speaking for the purpose of basic academic communication.

COURSE TITLE: EL 1 Reading/Writing

LEVEL OFFERED: College Preparatory 074

DESCRIPTION: This course is designed for non-English speakers and very limited English proficient students in grades 9 – 12. The goal of academic literacy development is achieved by introducing new authors through the use of the short story. Emphasis will be on reading comprehension. This course will also stress the principles of introductory writing and paragraph development.

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COURSE TITLE: EL 2 Grammar

LEVEL OFFERED: College Preparatory 071

PREREQUISITES: Access/W-APT level 2.0 – 2.9

DESCRIPTION: This course is designed for the limited English proficient students in grades 9 – 12. The goal of literacy development is achieved by introducing vocabulary, grammar usage, listening, and speaking for the purpose of optimum communication.

COURSE TITLE: EL 2 Reading/Writing

LEVEL OFFERED: College Preparatory 075

PREREQUISITES: Access/W-APT level 2.0 – 2.9

DESCRIPTION: This course is designed for limited English proficient students in grades 9 – 12. It is a continuation of EL 1 Reading/Writing with increased emphasis on developing communicative and critical thinking skills. This course will also stress the principles of paragraph development and essay writing. Students will read short stories, novels, and poetry. All students will be required to write a short essay and keep a writing folder. Preparation for the MCAS test will be a major component of this course.

COURSE TITLE: EL 3 Grammar

LEVEL OFFERED: College Preparatory 072

PREREQUISITES: Access/W-APT level 3.0 – 3.9

DESCRIPTION: This course is designed for non-native speakers of English grades 9 – 12. It is a continuation of EL 2 Grammar. Advanced grammar skills will be introduced as well as listening and speaking for the purpose of proficient fluency.

COURSE TITLE: EL 3 Reading/Writing

LEVEL OFFERED: College Preparatory 076

PREREQUISITES: Access/W-APT level 3.0 – 3.9

DESCRIPTION: This course is a continuation of EL 2 Reading/Writing with increased emphasis on academic communication and critical thinking skills. The necessary skills required to succeed academically will be developed through reading a variety of classic novels modified from the English curriculum. In addition, all students will be required to write essays and keep a writing folder. Preparation for the MCAS test will be a major component of this course.

COURSE TITLE: EL 4

LEVEL OFFERED: College Preparatory 083

PREREQUISITES: Access/W-APT level 4.0 – 4.9

DESCRIPTION: This course is designed for students who are close to transitioning out of EL, but still require some reinforcement and support to continue to be successful within the regular classroom environment in unmodified courses. It is a continuation of EL 4 coursework. Students will read a variety of class novels, short stories, plays, poems, informational texts, and more. Some literature will be modified from the English curriculum. There will be a stress on various types of advanced academic writing, across content areas.

COURSE TITLE: EL Biology 1 (ELL Science)

LEVELS OFFERED: Academic/College Prep Level 352

PREREQUISITES: For ELL students WIDA level 1 with recommendation from EL and science teachers and EL guidance counselor.

DESCRIPTION: This course covers the first semester of the College Prep Biology spread over the course of a full year. Topics covered will include characteristics of life, ecology, biochemistry, cell biology, and cell transport. A focus will be on building academic language vocabulary.

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COURSE TITLE: EL Biology 2 (ELL Science)

LEVELS OFFERED: Academic/College Prep Level 353

PREREQUISITES: For ELL students WIDA level 2 with recommendation from EL and science teachers and EL guidance counselor.

DESCRIPTION: This course covers the second semester of the College Prep Biology spread over the course of a full year. Topics covered will include cell division, genetics, evolution, human structure and function, review of Biology 1 and MCAS prep. A focus will be on building academic language vocabulary.

COURSE TITLE: Topics in American History (His/ELL)

LEVELS OFFERED: Academic/College Prep Level 152

PREREQUISITES: Access/W-APT level 1- 2

DESCRIPTION: Topics in American History is a survey course for English language learners who have little or no background knowledge of US History. The course covers geography of the United States as well as an introduction to civics and American government. Major topics studied include; the exploration and settlement of America, our nation's founding, western expansion, the Civil War and the turn of the century. Students are expected to practice reading, writing and gain a fundamental understanding of basic vocabulary and concepts in American History. The course is co-taught with a teacher from the EL department, and includes an added focus on vocabulary and English language skills.

COURSE TITLE: Mathematics for English Language Learners (Math/ELL)

LEVELS OFFERED: Academic/College Level Prep Level 252

PREREQUISITES: Access/W-APT level 1 – 2

DESCRIPTION: Pre-Algebra. This course prepares students to enter a standard Algebra 1 Academic course upon completion. It covers the major topics of Pre-Algebra, including applying properties of exponents and square roots, using scientific notation, solving linear equations and plane, transformational geometry, and finding area and volume of geometric figures. The course is co-taught with a teacher from the EL department, and includes an added focus on vocabulary and English language skills.

WOBURN MEMORIAL HIGH SCHOOL

HISTORY AND SOCIAL SCIENCE HOMEWORK CHART

Course Number	Earned Credits	Approximate Weekly Homework (hrs.)	Course Name	Available to Grades			
				9	10	11	12
115	5	.5	EC American History	x			
116	5	1	CP American History	x			
117	5	2	Honors American History	x			
125	5	.5	EC American History		x		
126	5	1	CP American History		x		
127	5	2	Honors American History		x		
128	5	3	AP U.S. History		x		
162	5	.5	EC World			x	
163	5	1.5	CP World			x	
164	5	2	Honors World			x	
130	5	3	AP World			x	
170	5	.5	EC American Government				x
171	5	1	CP American Government				x
172	5	2	Honors American Government				x
147	2.5	1.5	CP Sociology				x
145	2.5	2	Honors Sociology				x
153	5	1	CP School and Society				x
154	5	2	Honors School and Society				x
155	5		Intro to Psychology - Duel Enrollment			x	x
166	2.5	1	CP State And Local				x
174	2.5	2	Honors State and Local				x
168	5	3	AP Human Geography				x
169	2.5	1	CP Vietnam War				x
173	2.5	2	Honors Vietnam				x
109	2.5	2	Nazi Germany			x	x
110	2.5	2	US Women's History from 1600			x	x
111	2.5	2	Introduction to Philosophy & Ethics			x	x
108	2.5	2	Irish History 1798-1998				x

HISTORY and SOCIAL SCIENCE

The History and Social Science Program is designed to provide each student with a firm foundation in American History, American Government, and World History. It provides students with an understanding and appreciation of historical themes and trends as well as an appreciation of the diverse cultures that have an impact on our daily lives.

The History and Social Science Program is a five-year sequence that begins with the study of American History in grade eight. The study of American History and the documents on which our country was founded continues through grades nine and ten. Eleventh grade students will pursue the study of World History. Seniors may choose to study the inner workings of American Government, specifically our Constitution. Twelfth grade students will also have the opportunity to explore a variety of electives.

Students will complete map activities related to our nation's geography as well as identifying nations and key features of the world. Essay writing in all levels, throughout the curriculum, is required.

COURSE TITLE: American History 9

LEVELS OFFERED: Enhanced Competence 115, College Preparatory 116, Honors 117

PREREQUISITES: For the Honors level, students must have achieved an A average in grade eight social studies and have recommendation of present instructor.

DESCRIPTION: American History 9 students will study our nation's history from colonial settlement through World War I (1620-1919). Students will be introduced to the historical, cultural, geographical, economic, political, and social trends during this period. Students will read primary source material related to colonial settlement, causes/course/outcome of the American Revolution, the formation of the U.S. government, successes and failures of the early republic, westward expansion, industrialization, the causes/course/outcome of the Civil War, Reconstruction, Urbanization, Progressive Reforms, American Imperial Expansion, and the causes/course/outcome of World War I.

COURSE TITLE: AP United States History

LEVELS OFFERED: Advanced Placement 128

PREREQUISITES: The recommendation of present instructor, current AP instructor, and department chairperson are required. **This course is for Grade 10 students only.**

DESCRIPTION: The AP program in United States History is designed to provide students with the analytical skills and factual information necessary to deal critically with the problems and issues in American history. Students enrolled in the course are responsible for the assessment of historical materials with respect to their relevance to a given interpretive problem, their reliability, and importance. This course is the equivalent to a freshman course at a college or university. The AP US History exam is required to be taken. This course has a limited enrollment.

COURSE TITLE: American History 10

LEVELS OFFERED: Enhanced Competence 125, College Preparatory 126, Honors 127

PREREQUISITES: For the Honors level, students must have achieved a B or better in grade 9 Honors, or an A in grade 9 College Preparatory. Recommendation of present instructor is also required.

DESCRIPTION: American History 10 students will continue the study of our nation's history from the Roaring Twenties through the War on Terror (1920-2001). Students will be introduced to the historical, cultural, geographical, economic, political, and social trends during this period. Students will read primary source material related to the post-war social change of the 1920's, the Great Depression, the New Deal, the causes/course/outcome of World War II, 1950's American Society, the JFK/LBJ Years, the Civil Rights Movement, the Vietnam War, the Nixon/Ford/Carter Years, the Conservative Reagan Years, the Clinton Years and the 21st Century War on Terror.

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COURSE TITLE: World History

LEVELS OFFERED: Enhanced Competence 162, College Preparatory 163, Honors 164

PREREQUISITES: For the honors level the student must have achieved a B or better in American History 10 Honors, or an A in American History 10 College Preparatory, and have the recommendation of present instructor.

This course is for Grade 11 students only.

DESCRIPTION: This is a survey course that covers the period of time from Columbus to modern time. Students will study the history of major civilizations and major political leaders of this period. The causes and consequences of the great military events along with the political, economic, ethnic and religious developments and conflicts in the world today will be discussed.

COURSE TITLE: AP World History

LEVELS OFFERED: Advanced Placement 130

PREREQUISITES: The recommendations of present instructor, current AP instructor and department chairperson are also required. **This course is for Grade 11 students only.**

DESCRIPTION: The AP World History course will introduce the student to the understanding of the evolution of global processes and contacts in interaction with different types of human societies. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. There will be an emphasis on understanding political, social, economic, and religious development on a global scale. The course will cover the time period from 8000 B.C.E. to present time. The course is the equivalent to a freshman course at a college or university. The AP World History exam is required to be taken. The course has a limited enrollment.

COURSE TITLE: American Government

LEVELS OFFERED: Enhanced Competence 170, College Preparatory 171, Honors 172

PREREQUISITES: For the honors level a student must have achieved a B or better in honors level World History or have an A in college preparatory level World History. The recommendation of present instructor is also required. **This course is for Grade 12 students only.**

DESCRIPTION: American Government is designed for seniors who desire an in-depth study of American Government beginning with our founding fathers. World affairs and the problems related to citizenship are discussed. A familiarity with the immediate and long-range conflicts and problems in the current national scene and the cultural, social, and political forces that influence them are essential parts of the course.

COURSE TITLE: Sociology (semester course)

LEVELS OFFERED: College Preparatory 147, Honors 145

PREREQUISITES: **This course is for Grade 12 students only.**

DESCRIPTION: Sociology is a semester course that introduces the student to the study of human societies, their patterns and arrangements, their development, and change. The interplay of these factors with respect to the behaviors of individuals and groups are discussed. Students will study how their behaviors apply to families, communities, religious groups, political organizations, and professional and civic associations. This course has a limited enrollment.

COURSE TITLE: State and Local History (semester course)

LEVELS OFFERED: College Preparatory 166, Honors 174

PREREQUISITES: Successful completion of World History. **This course is for Grade 12 students only.**

DESCRIPTION: This semester course is designed to familiarize students with Massachusetts and Woburn history, with a focus on the physical, economic, and social changes throughout the city of Woburn. The organization, operation and functions of local government will also be studied. Guest speakers from various city departments, committees, boards, and commissions also visit the students. This course has a limited enrollment.

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COURSE TITLE: School and Society

LEVELS OFFERED: College Preparatory 153, Honors 154

PREREQUISITES: Recommendation of present instructor and department chairperson. **This course is for Grade 12 students only. This is a 5-credit course.**

DESCRIPTION: School and Society is a five (5) credit course that meets during periods two through six for two consecutive periods each day. The primary component of the course is to introduce seniors to a career in education through collaboration with assigned elementary school teachers. The student will work as an assistant to a teacher in a local elementary school. Each student will take an active role in the learning experiences of the assigned school as well as working with and teaching the elementary students in class. Students will learn to develop lesson plans and classroom projects. The current instructor will visit the schools to monitor the student's progress. In addition, students will keep a daily journal and learn from their textbook. They will meet with the current instructor during seminar classes to share their observations and common experiences. Admittance to the program will be based on academic transcripts, attendance records, a written application, a student's private means of transportation, and recommendation of the current instructor and department chairperson. This course has a limited enrollment.

COURSE TITLE: AP Human Geography

LEVELS OFFERED: Advanced Placement 168

PREREQUISITES: The recommendations of present instructor, current AP instructor, and the department chairperson are also required. **This course is for Grade 12 students only.**

DESCRIPTION: Advanced Placement Human Geography will introduce the student to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. The student will be taught the use of spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. The student will also learn about the methods and tools geographers use in their science and practice. This course is the equivalent to a freshman course at a college or university. The AP Human Geography exam is required to be taken. This course has a limited enrollment.

COURSE TITLE: The Vietnam War (semester course)

LEVELS OFFERED: College Preparatory 169, Honors 173

PREREQUISITES: **This course is for Grade 12 students only.**

DESCRIPTION: The Vietnam War is a semester course designed to give students an in-depth study into the modern history of the Vietnam conflict beginning with the French colonization. This course will focus on America's involvement in the Vietnam conflict and its effect on our American society. Political, cultural, and military aspects of the war will be discussed from both an American and Vietnamese perspective. America's role in the war and its links and comparisons to the wars in Iraq and Afghanistan will also be discussed. Students will be expected to take an active role in class discussions and debates. Weekly assignments for a portfolio project and outside reading are also requirements for the course. This course has a limited enrollment.

COURSE TITLE: Intro to Psychology

LEVELS OFFERED: History credit at AP level (dual enrollment) 155

PREREQUISITES: Open to Grades 11 and 12. (Priority to Grade 12) Must have 2.5 GPA, student in good standing, pass Accuplacer test. Cost associated with taking class, 3 credits at Middlesex Community College at reduced rate.

DESCRIPTION: An introduction to the study of how people behave and function. Topics covered include: physiology of the brain, memory, learning, language, perception, lifespan changes, normality and abnormality, social interactions, group influence on individuals, and therapies.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Nazi Germany: its beliefs, its followers, and its crimes (semester course)

LEVELS OFFERED: College Preparatory 109

PREREQUISITES: Open to Grades 11 and 12

DESCRIPTION: This course will detail the rise and fall of Nazi Germany, focusing on the people who supported Nazism and why they supported the regime that today is detested. The course will then apply this knowledge to today's world to identify neo-Nazi groups and why these groups have recently increased in popularity.

COURSE TITLE: US Women's History from 1600 to Present Day (semester course)

LEVELS OFFERED: College Preparatory 110

PREREQUISITES: Open to Grades 11 and 12

COURSE DESCRIPTION: This course seeks to take the role and experiences of women throughout US History and move it from the peripheral to the center of the narrative. This survey course will chronicle the experience of women in the United States from the Colonial Era through present day.

COURSE TITLE: Introduction to Philosophy and Ethics (semester course)

LEVELS OFFERED: College Preparatory 111

PREREQUISITES: Open to Grades 11 and 12

COURSE DESCRIPTION: This course is designed to explore the evolution of philosophical thought and the ethical reasoning that provides the structure for our realities. Students will be exposed, not only to the content of philosophy and ethics, but also to the structural framework behind what forms our thoughts and beliefs.

COURSE TITLE: Irish History 1798-1998 (semester course)

LEVELS OFFERED: College Preparatory 108

PREREQUISITES: Open to Grade 12

DESCRIPTION: The purpose of this course is to examine Irish history from the 1798 Rebellion through the Good Friday Agreement of April 1998. The course will cover the various independence movements from the 18th, 19th, and 20th centuries. Additionally, students will examine Irish emigration, famine and its consequences and the religious conflicts that arose out of British occupation. Particular focus will cover the period between the Easter Rising (1916) to limited independence and subsequent Civil War (1922). The final weeks of the course will explore British military occupation of Northern Ireland in 1969, the various paramilitary organizations (Catholic and Protestant), murals depicting "the troubles" and the peacemakers.

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MATH HOMEWORK CHART

Course Number	Earned Credits	Approximate Weekly Homework (hrs.)	Course Name	Available to Grades			
				9	10	11	12
205	5.0	1-2	Algebra 2 CP2			x	
206	5.0	2-5	Algebra 1CP	x			
208	5.0	1.5-2.5	Algebra 1 EC	x			
210	5.0	1.5-3	Algebra 1CP2	x			
220	5.0	1-2.5	Geometry CP2		x		
222	5.0	1	Geometry EC		x		
224	5.0	3-4.5	Geometry Honors	x	x		
225	5.0	1-5	Geometry CP	x	x		
231	5.0	1	Applied Math CP2				x
232	5.0	1-2	Algebra 2 EC			x	
233	5.0	1-3	Algebra 2 CP		x	x	
234	5.0	2-4	Algebra 2 Honors		x	x	
241	5.0	1-2	Applied Math CP			x	x
244	5.0	1-4	Pre-Calculus CP			x	x
246	5.0	2-4	Pre-Calculus Honors			x	x
252	5.0	0	Math for ELL	x	x		
253	5.0	1-2	Intro to Calculus				x
255	5.0	4-5	AP Calculus				x
256	5.0	3-5	Calculus Honors				x
202	1.25	0	Math MCAS Review	x	x	x	x
269	5.0	2-4	Statistics CP			x	x
270	5.0	4-8	AP Statistics			x	x
227	2.5	0	Computer Science 1	x	x	x	x
228	2.5	0	Computer Science 2	x	x	x	x
243	1.25	TBD	SAT Prep			x	x
280	5	1-2	AP Computer Science	x	x	x	x

WOBURN MEMORIAL HIGH SCHOOL

MATHEMATICS

The Mathematics Department provides courses to meet the needs of all students. At Woburn Memorial High School students study mathematics for the obvious intellectual rewards as well as to prepare themselves for our increasingly complex world. WMHS has a four-year mathematics requirement for graduation.

Honors Level

Students in the Honors program will take Algebra 1 (Grade 8), Geometry, Algebra 2, Pre-Calculus, and Calculus (if Pre-Calculus is completed in grade 11.) If students are not interested in Calculus, they will have the option of taking Statistics at the AP or CP level as well.

College Preparatory Level

Students in the College Preparatory (CP) program will take Algebra 1, Geometry, and Algebra 2, after which point they will have the opportunity to choose between Pre-Calculus, Statistics, or Applied Mathematics.

Students in the College Preparatory 2 (CP) program will take modified versions of Algebra 1, Geometry, and Algebra 2, after which they will have the opportunity to choose between different levels of Applied Mathematics, depending on comfort levels and recommendations of teachers.

COURSE TITLE: Algebra 1 CP2

LEVEL OFFERED: Enhanced Competence (EC) 208, College Preparatory (CP2) 210

PREREQUISITES: Successful completion of Pre-Algebra course or recommendation of present instructor.

DESCRIPTION: Algebra 1 CP2 is the first part in a series of Algebra courses that are continued in Algebra 2 CP2 and completed in Applied Mathematics CP2. The course covers selected topics from Algebra 1 as well as selected topics from geometry, statistics, and data analysis. This is a course for Grade 9 students only.

COURSE TITLE: Geometry CP2 (EC)

LEVEL OFFERED: Enhanced Competence 222, College Preparatory (CP2) 220

PREREQUISITES: Successful completion of Algebra 1 CP2 or recommendation of present instructor.

DESCRIPTION: Geometry CP2 will follow Algebra 1 CP2. The course will cover most traditional geometry topics and reinforce many algebra topics, with an emphasis on numerical and algebraic applications instead of formal proof.

COURSE TITLE: Algebra 2 CP2 (EC)

LEVEL OFFERED: Enhanced Competence 232, College Preparatory (CP2) 205

PREREQUISITES: Successful completion of Geometry CP2 or recommendation of present instructor.

DESCRIPTION: Algebra 2 CP2 is a continuation of Algebra 1 CP2. The course completes the coverage of topics traditionally covered in Algebra 1 and continues on to second year algebra topics. This is a course for Grade 11 students.

COURSE TITLE: Applied Mathematics CP2

LEVEL OFFERED: College Preparatory (CP2) 231

PREREQUISITES: Successful completion of Algebra 2 CP2 or recommendation of present instructor.

DESCRIPTION: This course is designed to reinforce a wide range of mathematical skills and concepts, specifically as they apply to financial topics and college/career placement exams. This is a course for Grade 12 students only.

COURSE TITLE: Algebra 1 CP

LEVEL OFFERED: College Preparatory (CP) 206

PREREQUISITES: A grade of C or better in Grade 8 mathematics and/or recommendation of present instructor.

DESCRIPTION: Algebra 1 CP includes a thorough treatment of the fundamental processes of elementary algebra as well as selected topics from statistics and discrete mathematics. Problem solving, reasoning, communication skills are emphasized.

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COURSE TITLE: Geometry

LEVEL OFFERED: College Preparatory (CP) 225, Honors 224

PREREQUISITES: For CP: Grade of C or better in Algebra 1 CP or recommendation of present instructor.
For Honors: Grade of B or better in Algebra 1 Accelerated (Grade 8), or permission of present instructor.

DESCRIPTION: Geometry develops the properties of geometric figures in two and three dimensions. Numerical applications are given considerable treatment. Although all results are derived using deductive methods, the emphasis on formal proof depends on the level of geometry taken.

COURSE TITLE: Algebra 2

LEVEL OFFERED: College Preparatory (CP) 233, Honors 234

PREREQUISITES: For CP: Successful completion of Geometry CP or recommendation of present instructor.
For Honors: Grade of B- or better in Geometry Honors or permission of present instructor.

DESCRIPTION: Algebra 2 is a continuation of the study of algebra begun in Algebra 1. It covers many topics of advanced algebra and includes the introduction of trigonometry. Algebra 2 emphasizes the development of algorithms as problem solving tools and the use of functions.

COURSE TITLE: Applied Mathematics CP

LEVEL: College Preparatory (CP) 241

PREREQUISITES: Successful completion of Algebra 2 or Algebra 2 CP2 or recommendation of present instructor.

DESCRIPTION: This course is designed for students who have completed Algebra 2 CP or Algebra 2 CP2, as an alternative to Pre-Calculus. The curriculum for this course emphasizes basic number sense and fluency, quantitative analysis, statistics, and financial applications, as it prepares students to use algebraic, geometric, and other mathematical concepts to model a range of situations and solve a wide variety of problems. The course also helps students with post-high school readiness as it focuses on specific work related to placement exams.

COURSE TITLE: Pre-Calculus

LEVEL OFFERED: College Preparatory (CP) 244, Honors 246

PREREQUISITES: College Preparatory: Grade of C or better in Algebra 2 CP or recommendation of present instructor. Honors: Grade of B or better in Algebra 2 Honors or permission of present instructor and/or department chairperson.

DESCRIPTION: Pre-calculus prepares students for a first course in calculus. It centers around the function concept and it provides a thorough treatment of the algebra of functions. Pre-calculus concentrates on two major topics – Analytic Geometry and Trigonometry. It discusses and extends the concepts of solid geometry. Pre-calculus proceeds rapidly and makes extensive demands on the student. Students electing the course must be willing to invest a substantial amount of time on homework assignments.

COURSE TITLE: Introduction to Calculus

LEVEL OFFERED: College Preparatory (CP) 253

PREREQUISITES: Successful completion of Pre-Calculus.

DESCRIPTION: Introduction to Calculus is a full year course for seniors who have completed Pre-calculus. Term one will consist of preparation for the SAT as well as a review of analytic geometry and trigonometry. The remaining three terms will introduce the study of calculus and its applications.

COURSE TITLE: Calculus

LEVEL OFFERED: Honors 256

PREREQUISITES: Successful completion of Pre-Calculus Honors or recommendation of present instructor.

DESCRIPTION: Honors Calculus provides students with knowledge of differential and integral calculus and their applications, utilizing topics covered in algebra, geometry, trigonometry, analytic geometry, and elementary functions. It is particularly concerned with the relationship between functions that describe a quantity and the function describing the rate at which a quantity changes. A review of key concepts such as trigonometric, exponential, and logarithmic functions is provided in this course, prior to applying the techniques of calculus.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: AP Calculus

LEVEL OFFERED: Advanced Placement (AP) 255

PREREQUISITES: A grade of A- or better in Pre-calculus Honors or recommendation of present instructor.

DESCRIPTION: AP Calculus provides students with knowledge of differential and integral calculus and their applications, utilizing topics covered in algebra, geometry, trigonometry, analytic geometry, and elementary functions. It is particularly concerned with the relationship between functions that describe a quantity and the function describing the rate at which a quantity changes. The course is the equivalent of a freshman calculus at the college level. The purpose of the course is to prepare students to take the AP Calculus AB exam in May to qualify for college credit. The AP exam requires use of a graphing calculator. College majors in which this course will be useful to students include, but are not limited to mathematics, engineering, physics, chemistry, biology, forensic science, architecture and economics. Students should consult with recommending teacher for further concerning course applicability.

COURSE TITLE: Statistics

LEVEL OFFERED: College Preparatory (CP) 269

PREREQUISITES: Successful completion of Algebra 2

DESCRIPTION: This is a mathematics course designed to follow Algebra 1, Geometry, and Algebra 2, as an alternative to Pre-Calculus. Curriculum for this course covers the basic concepts of Statistics and Probability. The purpose of this course is to introduce students to the major concepts and tools of Statistics that can be applied to multiple disciplines. The topics include exploring data by describing patterns and departures from patterns, sampling and experimentation which include planning and conducting a study, anticipating and analyzing patterns by exploring random phenomena using probability and simulation, and drawing conclusions using statistical inference to estimate population parameters and test hypotheses. Curriculum for this course requires strong analytical reading skills; clear and concise writing skills will benefit students in the course. Students who are considering future courses in economics, psychology, sociology, or life sciences are encouraged to consider this course. Active and collaborative learning, conceptual understanding, and mathematical communication are emphasized. Genuine real-world data will be used frequently, and graphing calculators and computers will be used as data analysis tools.

COURSE TITLE: AP Statistics

LEVEL OFFERED: Advanced Placement (AP) 270

PREREQUISITES: Juniors must have BOTH: Enrollment in Pre-Calculus Honors and a B+ or better in Algebra 2 Honors or the recommendation of present instructor. Seniors must have completed Pre-Calculus or have a B+ or better in Algebra 2 Honors or the recommendation of present instructor.

DESCRIPTION: AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1) exploring data: describing patterns and departures from patterns; 2) sampling and experimentation: planning and conducting a study; 3) anticipating patterns: exploring random phenomena using probability and simulation; 4) statistical inference: estimating population parameters and testing hypotheses. The course is intended to prepare the student to take the AP Statistics exam in May to qualify for college credit. The AP exam requires use of a graphing calculator. College majors in which this course will be useful to students include, but are not limited to mathematics, medicine, education, social sciences, criminal justice and business. Students should consult with recommending teacher for further concerning course applicability.

COURSE TITLE: Math MCAS Review

LEVEL OFFERED: This course is not leveled. 202

PREREQUISITES: None

DESCRIPTION: This is a one (1) semester course designed for students in grades 10, 11, and 12 who require a review of all subject matter in Algebra I and Geometry to help them in taking the MCAS test. This course should be taken by students who have already failed or are in danger of failing the grade 10 test.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: SAT Prep (semester course)

LEVEL OFFERED: This course is not leveled but is intended for juniors and seniors 243

PREREQUISITES: None

DESCRIPTION: This course will focus on preparing students specifically for the SAT/ACT test. Specific topics may vary based upon the needs of the individualized students. Students who take this course should expect to have at least 30 minutes of independent work outside of class time per day, most of which will be done using computer software, in order to personalize the class and achieve the desired results.

COURSE TITLE: Introduction to Computer Science 1 (TEALS)

LEVEL OFFERED: College Preparatory 227

PREREQUISITES: None

DESCRIPTION: Curriculum is based on the University of California at Berkeley CS 10 course, “Beauty and Joy of Computing” (BJC). Introduction to Computer Science I is an engaging course that explores a variety of basic computational thinking and programming concepts through a project-based learning environment. Every unit culminates in a comprehensive project and roughly 75% of student time is spent building projects and practicing skills they are learning. Visual and approachable Intro to CS uses Snap!, a block-based programming language with a robust tool set, perfect for introducing students to coding for the first time.

COURSE TITLE: Introduction to Computer Science 2 (TEALS)

LEVEL OFFERED: College Preparatory 228

PREREQUISITES: Intro to Computer Science 1

DESCRIPTION: Curriculum builds on that of the previous course, Introduction to Computer Science 1 (TEALS.) Introduction to Computer Science 2 is an engaging course that explores a variety of programming concepts to include Python: An Introduction to Text-Bases Programming. Topics include: Unit Project 1: Introduction to Python Mad Libs 2: Data types Text-based adventure game 3: Functions Oregon Trail 4: Loops Tic-tac-toe 5: Sounds in Python EarSketch: music based project 6: Dictionaries Guess Who? 7: Objects Python Pokémon 8: Final project student designed final project.

COURSE TITLE: AP Computer Science A

LEVEL OFFERED: AP

PREREQUISITES: Recommendation of instructor

DESCRIPTION: AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course introduces students to 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 problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

WOBURN MEMORIAL HIGH SCHOOL

SCIENCE AND TECHNOLOGY DEPARTMENT

Course Number	Earned Credits	Approximate Wkly. Homework	Course Name	Available to Grades			
				9	10	11	12
323	5	2	Biology CP		x	x	
324	5	3	Biology Hon		x	x	
326	5	3	Biology Accelerated	x			
330	5	1	Biology 1	x			
331	5	1	Biology 2		x		
348	5	1	Biotechnology			x	x
346	5	2	Anatomy CP				x
347	5	3	Anatomy Hon				x
349	5	1	Forensics CP & Hon				x
333	5	2	Chemistry CP			x	x
334	5	3	Chemistry Hon		x	x	x
320	5	2	Introductory Physics CP	x			
321	5	2	Introductory Physics Hon	x			
343	5	1	Physics CP			x	x
344	5	2	Physics Hon			x	x
335	5	4	AP Chemistry			x	x
340	5	4	AP Physics 1			x	x
341	5	4	AP Physics 2				x
355	5	4	AP Biology			x	x
371	5	4	AP Environmental Science			x	x
313	5	2	Earth Science CP			x	x
314	5	3	Earth Science Hon			x	x
373	5	1	Environmental Science CP			x	x
374	5	2	Environmental Science Hon			x	x
381	5	1	Engineering the Future CP			x	x
382	5	1	Engineering the Future Hon			x	x
365	2.5	0	AutoCAD + 3D Modeling/Printing		x	x	x
369	2.5	0	Drafting		x	x	x
304	5	0	Woodshop		x	x	x
305	5	0	Design and Manufacturing				x
307	2.5	1	Technology	x	x	x	x
327	2.5	1	Computer Science 1		x	x	x
328	2.5	1	Computer Science 2		x	x	x
336	2.5	1	Meteorology			x	x
338	2.5	1	Astronomy			x	x
302	2.5	1	Science MCAS Review		x	x	x

WOBURN MEMORIAL HIGH SCHOOL

**SCIENCE, TECHNOLOGY and ENGINEERING
SCIENCE**

The goal of the Science Department is to help students to develop a sense of the form and function of nature in all its variety. Through the use of logic, experimentation, and exposure to the modern-era knowledge base, students will study the underlying concept of any science - cause and effect.

Courses are offered in a variety of disciplines: Life Sciences, Analytic Sciences, Terrestrial Sciences, and Technology. Several academic options are offered to suit the needs and abilities of all students.

Graduation requires the successful completion of four years of Science and Technology. All students must pass the MCAS Science test.

COURSE TITLE: Grade 9 Introductory Physics

LEVEL OFFERED: Enhanced Competence 319, College Preparatory 320, Honors 321

PREREQUISITES: For Honors level (321) a student must have achieved a B or better in eighth grade science or have the recommendation of present instructor.

DESCRIPTION: This course introduces students to a variety of topics dealing with energy and the motion of objects. Specific topics include waves, heat, motion, electricity, energy, and momentum. Students will use simple mathematical analysis and experimentation to develop problem-solving skills.

COURSE TITLE: Grade 9 Accelerated Biology

LEVEL OFFERED: Honors 326

PREREQUISITES: A grade of B or better in Grade 8 Accelerated Algebra 1 and an A- or better in Grade 8 science or have the recommendation of present instructor.

DESCRIPTION: Biology is the study of the structure of living things and their ecological relationships, with an emphasis on molecular and cell biology. The course helps students develop an appreciation and understanding of the roles of classification, ecology, heredity, evolution, and it provides an introduction to human body systems. Students taking this course are expected to follow a science and math sequence that may lead to advanced placement study.

COURSE TITLE: Biology 1 Grade 9

LEVEL OFFERED: College Preparatory 330

PREREQUISITES: Available to grade 9 by invitation of grade 8 teacher.

DESCRIPTION: Biology 1 will cover topics including characteristics of life, scientific method, ecology, biochemistry, cell biology, and cell transport. These units will be reinforced with a combination of classroom activities, student inquiries, laboratory exercises, modeling, and building academic language vocabulary.

COURSE TITLE: Biology 2 Grade 10

LEVEL OFFERED: College Preparatory 331

PREREQUISITES: Biology 1

DESCRIPTION: Biology 2 will include the topics of heredity, anatomy and physiology, the inheritance and variation of traits, and biological evolution, the unity and diversity of organisms. These units will be reinforced through the development of models, construction explanations, using evidence to support a claim, communicating information, laboratory exercises, and building academic language vocabulary.

COURSE TITLE: College Preparatory Biology

LEVELS OFFERED: College Preparatory 323, Honors 324

PREREQUISITES: For Honors level (324) a student must have achieved a B or better in Grade 9 science.

DESCRIPTION: College Preparatory Biology is the study of the structure of living things and their ecological relationships, with an emphasis on molecular and cell biology. The course helps students develop an appreciation and understanding of the roles of classification, ecology, heredity, evolution, and it provides an introduction to human body systems. This course prepares the student to take the MCAS Biology Test in June.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

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COURSE TITLE: AP Biology

LEVELS OFFERED: Advanced Placement 355

PREREQUISITES: Submitted application to selection committee prior to due date; Biology 324 or 326 with a B or better; Chemistry 334 with a B or better; and approval of the selection committee. Anyone without these prerequisites is still invited to apply, but selections will come from qualified applicants first.

DESCRIPTION: This course is available to incoming juniors and seniors who have successfully completed Honors Chemistry. Advanced Placement Biology is a second year course in biology offered primarily for students who are planning a career related to biology. The course is intensive and its content corresponds to a college freshman biology course. Some colleges will permit the student to have advanced standing in biology after student has successfully completed the course and passed the AP exam. This course requires students to report to school as early as 6:45 a.m. once per week for a laboratory period.

COURSE TITLE: Recombinant DNA Biotechnology

LEVELS OFFERED: Honors 348

PREREQUISITES: Submitted application to selection committee prior to due date; Biology 324 or 326 with a B or better; Chemistry 333 and 334 with a B or better; and approval of the selection committee. Anyone without these prerequisites is still invited to apply, but selections will come from qualified applicants first.

DESCRIPTION: This course is available to incoming juniors and seniors who have successfully completed Honors Biology and Honors Chemistry. Recombinant DNA Biotechnology is a full year, lab-intensive course offered primarily for students who are planning a career related to biology. The course focuses on the basic techniques and principles of recombinant DNA used in the biotechnology industry. The material presented includes methods for preparing laboratory reagent, standard procedures used in a molecular biology laboratory, review of DNA structure and replication, the basics of gene expressions, and general recombinant DNA techniques. The course will culminate in a student-designed investigation of a gene of interest. Students will explore possible summer internship opportunities. Included in the curriculum, students will participate in the Amgen Biotech Experience (ABE) in conjunction with Harvard University. This program allows students to explore the steps involved in creating biotechnology therapies. Additionally, the ABE labs parallel some of the important steps taken by the biotechnology industry to develop medicines to treat a variety of diseases. The labs incorporate core technologies used by scientists in the discovery of human therapeutics so that students will better understand the role of biotechnology and the potential impact of this industry on our future. <http://www.amgenbiotechexperience.com/>

COURSE TITLE: Forensics

LEVELS OFFERED: CP and Honors mixed

PREREQUISITES: Seniors only; students must not be squeamish about dead animal parts, graphic photos or insects.

DESCRIPTION: This course is available to all incoming seniors who have always wanted to use science to conduct investigations to solve crimes. Students will learn the basics of many forensic techniques including DNA analysis, fingerprinting, blood spatter analysis, forensic entomology (using insects in forensic investigations), and forensic anthropology (bone analysis). Students will use their skills in laboratory activities to solve mysteries and simulated crimes. This is a mixed-level class with CP and Honors level students. Those who elect to take the course for Honors credit will have additional assignments.

COURSE TITLE: Chemistry

LEVELS OFFERED: College Preparatory 333

PREREQUISITES: C or better in College Preparatory Algebra 1 (206) and College Preparatory Biology (323)

DESCRIPTION: College Preparatory Chemistry surveys the concepts and principles of chemistry. Topics studied include measurement, matter and energy, atomic structure, nuclear chemistry, formulas, and equations, solutions, electrochemistry, acids and bases, and gases. However, the topics are covered in a less rigorous manner than they are in Honors Chemistry.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Chemistry

LEVELS OFFERED: Honors 334

PREREQUISITES: B or better in Honors Geometry (224) and Honors Biology (324)

DESCRIPTION: Honors Chemistry surveys the concepts and principles of chemistry with emphasis on the physical and mathematical analysis of chemical systems. Topics studied include measurement, matter and energy, atomic structure, nuclear chemistry, formulas, and equations, solutions, electrochemistry, acids and bases, and gases.

COURSE TITLE: AP Chemistry

LEVELS OFFERED: Advanced Placement 335

PREREQUISITES: A grade of B in Honors Chemistry (334) and a B or better in Honors Algebra 2 (234) or Pre-Calculus (246).

DESCRIPTION: Advanced Placement Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first year of college. This course is structured around the six big ideas articulated in the AP Chemistry curriculum framework provided by the College Board. A special emphasis will be placed on the seven science practices capturing aspects of real-world scientists using learning objectives which combine content with inquiry and reasoning skills. Students will be given an extensive amount of summer work and this course will prepare the students to take the SAT subject test.

COURSE TITLE: Earth Science

LEVELS OFFERED: College Preparatory 313, Honors 314

PREREQUISITES: None (Offered to grades 11 and 12)

DESCRIPTION: Why do we have seasons? Could we live on the moon? What causes a massive earthquake or a devastating tsunami? Find out these answers and uncover the physical mysteries of our planet in Earth Science. Enjoy visual-based lectures and apply your new expertise to real-life practice in geology, geography, oceanography, and meteorology through activities and class discussions. Current events in environmental science and astronomy are also explored.

COURSE TITLE: Physics

LEVELS OFFERED: College Preparatory 343

PREREQUISITES: College Preparatory Algebra 1 and College Preparatory Geometry with a C or better.

DESCRIPTION: Physics is the study of natural phenomena. This course presents a variety of topics such as motion, light (waves), heat, and electricity. Since some emphasis is placed on mathematical analysis and real-life problem scenarios, this course will help to develop individual problem-solving skills. This course will be helpful in the future study of the sciences.

COURSE TITLE: Physics

LEVELS OFFERED: Honors 344

PREREQUISITES: Honors Algebra 2 (234) or Honors Pre-calculus (246) with a B or better. This course requires strong algebra skills.

DESCRIPTION: This course is designed to introduce students to scientific investigation and computation of natural phenomena. This course presents a variety of topics such as motion, light (waves), heat, and electricity, and it is covered in great detail along with real-life problem scenarios. Electricity follows as time permits. All Honors topics are studied using mathematics as a scientific language; therefore, good algebra and trigonometry skills are a must. Above all, the course encourages logical thinking, and it stresses a cause-and-effect view of Nature's Laws.

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COURSE TITLE: AP Physics 1

LEVELS OFFERED: Advanced Placement 340

PREREQUISITES: B+ or better in Honors Algebra 2 (234) or Honors Pre-calculus (246); extremely powerful mathematical skills, especially algebra and graphing; desire to challenge yourself; a strong work ethic.

DESCRIPTION: This course simulates a first-semester college physics course at many universities and is designed for those students who plan to study physics or engineering or other physical sciences. We use mathematical analysis and interpretation to study a variety of topics in Mechanics, which is the study of motion, forces, and energy. Specific topics include kinematics, Newton's Laws, vectors, circular motion, torque, momentum, energy, and a few others. This course will prepare the student for AP Physics 1 test at the end of the school year, and also for the next segment of study: AP Physics 2. Note that this course will prepare the student for only 60 % of the SAT Physics subject test.

COURSE TITLE: AP Physics 2

LEVELS OFFERED: Advanced Placement 341

PREREQUISITES: B or better in AP Physics 1 (340); extremely powerful mathematical skills, especially algebra; desire to challenge yourself; a strong work-ethic.

DESCRIPTION: This course simulates a second-semester college physics course at many universities. We use mathematical analysis and interpretation to study a variety of topics in fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic/nuclear physics. This course will prepare the student for the AP Physics 2 test at the end of the year as well as complete the preparation for the SAT Physics subject test.

COURSE TITLE: Environmental Science

LEVELS OFFERED: College Preparatory 373

PREREQUISITES: Biology

DESCRIPTION: Environmental Science explores the effects of the ever increasing number of people who inhabit our planet. The various methods of preserving the earth's natural resources will be presented and studied. Special emphasis will be placed on water and air quality.

COURSE TITLE: Environmental Science

LEVELS OFFERED: Honors 374

PREREQUISITES: Honors Biology 324 and any Chemistry

DESCRIPTION: This course will use the fundamental elements of environmental science as a springboard to in-depth exploration of current environmental issues. Study will encompass local, state, national, and worldwide concerns, which will be analyzed, discussed, and debated using the Environmental Decision-Making Model as a foundation. A wide range of topics, including global warming, sustainability, and biodiversity will be covered.

COURSE TITLE: AP Environmental Science

LEVELS OFFERED: Advanced Placement 371

PREREQUISITES: A grade of B or better in any Chemistry and in any Biology

DESCRIPTION: This course provides students with scientific principles and methodologies to understand the interrelationships of the natural world and humanity. Environmental problems frequently have a cultural and social context which needs to be addressed, and human survival depends on developing practices that will achieve sustainable systems. Students will be able to identify and analyze natural and man-made problems, evaluate risks associated with those problems and evaluate solutions to resolve or prevent those problems.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Human Anatomy and Physiology

LEVELS OFFERED: College Preparatory 346, Honors 347

PREREQUISITES: For college preparatory level, students must have completed either College Preparatory or Honors Biology (323 or 324). For Honors level, students must have achieved a B or better in either Honors or AP Biology (324 or 326), and also a B or better in either College Preparatory or Honors Chemistry (333 or 334).

DESCRIPTION: Human Anatomy and Physiology explores the structure and function of the human body. Students should be aware that dissection is a mandatory requirement for this course, no exceptions will be made. Topics include the study of the skeletal, muscular, nervous, circulatory, immune, endocrine, and reproductive systems as well as current scientific literature. Human Anatomy and Physiology is designed to help prepare students for careers in the medical field, allied health, sports training, and biology as well as those who simply wish to develop a better understanding of their bodies.

COURSE TITLE: Meteorology (1/2 year course)

LEVELS OFFERED: College Preparatory 336

PREREQUISITES: None

DESCRIPTION: Weather factors will be discussed and evaluated. Weather station models will be developed leading to weather forecasting. The elements of climate will be discussed and climates of the world analyzed.

COURSE TITLE: Astronomy 1 (juniors and seniors only)

LEVELS OFFERED: College Preparatory 338

PREREQUISITES: None

DESCRIPTION: This course introduces students to the composition and structure of the universe, as well as the motions of bodies in space. The content includes historical astronomy, astronomical instruments, the celestial sphere, the solar system, earth/moon as a system in space, and the nature of stars. On some evenings, students will use telescopes to make observations of their own, and guest speakers in astronomy/physics may present their findings and techniques.

COURSE TITLE: Science MCAS Review (semester course)

LEVELS OFFERED: This course is not leveled. 302

PREREQUISITES: None

DESCRIPTION: This is a semester course designed for students in grades 10, 11, and 12, who require a review of the MCAS subject material in either Biology or Introductory Physics. This course should be taken by students who have failed the MCAS science test in Grade 9 and are preparing to retake the MCAS science test. The retake is currently given in both February and June.

COURSE TITLE: Introduction to Computer Science 1 (TEALS)

LEVEL OFFERED: College Preparatory 327

PREREQUISITES: None

DESCRIPTION: Curriculum is based on the University of California at Berkeley CS 10 course, “Beauty and Joy of Computing” (BJC). Introduction to Computer Science I is an engaging course that explores a variety of basic computational thinking and programming concepts through a project-based learning environment. Every unit culminates in a comprehensive project and roughly 75% of student time is spent building projects and practicing skills they are learning. Visual and approachable Intro to CS uses Snap!, a block-based programming language with a robust tool set, perfect for introducing students to coding for the first time.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Introduction to Computer Science 2 (TEALS)

LEVEL OFFERED: College Preparatory 328

PREREQUISITES: Intro to Computer Science 1

DESCRIPTION: Curriculum builds on that of the previous course, Introduction to Computer Science 1 (TEALS.) Introduction to Computer Science 2 is an engaging course that explores a variety of programming concepts to include Python: An Introduction to Text-Bases Programming. Topics include: Unit Project 1: Introduction to Python Mad Libs 2: Data types Text-based adventure game 3: Functions Oregon Trail 4: Loops Tic-tac-toe 5: Sounds in Python EarSketch: music based project 6: Dictionaries Guess Who? 7: Objects Python Pokémon 8: Final project student designed final project.

TECHNOLOGY & ENGINEERING EDUCATION

Technology education is an important part of the experience available at Woburn Memorial High School. The courses include career and occupational opportunities as well as developing interests and appreciation for consumer knowledge and enhancement through the application of scientific principles.

COURSE TITLE: Technology (1/2 year course)

LEVELS OFFERED: College Preparatory 307

PREREQUISITES: None

DESCRIPTION: Students will develop proficiency in the design process and in the usage and impact of technology in society. Some topics that are covered include the following: communications, construction, manufacturing ideas (including robotic mechanisms), transportation, electrical power, thermal systems, and fluid-power systems. This course will adequately prepare students for the Technology MCAS test as an alternative to the more traditional Biology MCAS test or the Introductory Physics MCAS test. Also, this course can be taken up to two times and count for 2.5 credits each towards the science requirement for graduation. Students taking it for the second time will have a modified curriculum to build upon what they learned previously.

COURSE TITLE: Drafting (1/2 year course – grades 10, 11 and 12 only)

LEVELS OFFERED: This course is not leveled. 369

PREREQUISITES: None

DESCRIPTION: Drafting provides students with hands-on experiences in reading blueprints, dimensioning, and drawing multi-view and 3-dimensional pictorials. Students will be prepared to complete floor plans and elevations of a home by the end of the course. This course is strongly recommended for students interested in engineering, design, architecture or any of the trades (carpenter, iron worker, electrician, etc.) It will also prepare the students to take AutoCAD/3D Modeling and Printing (365).

COURSE TITLE: AutoCAD/3D Modeling and Printing (1/2 year course)

LEVELS OFFERED: This course is not leveled. 365

PREREQUISITES: Drafting (369)

DESCRIPTION: In AutoCAD/3D Modeling and Printing, students will enhance their designs by building on what they have learned in Drafting. Projects will include designing, drawing, and printing of 3D models (using a Dimension 3D printer.)

COURSE TITLE: Woodshop

LEVELS OFFERED: This course is not leveled. 304

PREREQUISITES: Technology

DESCRIPTION: This course acquaints students with design and construction techniques through the use of every hand tool in the shop and the acquisition of entry-level skills involved with each tool and process.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Engineering the Future (full year course – grades 11 and 12 only)

LEVELS OFFERED: College Preparatory 381, Honors 382

PREREQUISITES: Course is offered to juniors and seniors

DESCRIPTION: Sponsored by the Museum of Science, Engineering the Future is a beginning engineering course that will introduce different types of engineers and basic skills necessary to succeed in the field of engineering. Through research about practicing engineers and through hands-on design activities (projects), students learn the role of engineers in society. Using math and science concepts, students will solve real-life problems, which is what engineers do. This course is designed to appeal to all students, whether or not they are interested in the field of engineering. Note that this course satisfies one year of the WMHS science requirement for graduation.

COURSE TITLE: Design and Manufacturing Process (grades 11 and 12)

LEVELS OFFERED: This course is not leveled. 305

PREREQUISITES: A grade of C or better in Design, Engineering, and Prototyping (304)

DESCRIPTION: This course provides students with extensive training in technology engineering work. The students will explore the job market and industrial conditions in construction and manufacturing. Plan development and machine operation are stressed.

WOBURN MEMORIAL HIGH SCHOOL

VISUAL AND PERFORMING ARTS HOMEWORK CHART

Course Number	Earned Credits	Approximate Wkly. Homework (hrs.)	Course Name	9	10	11	12
812	2.5	n/a	Art Foundations	x	x	x	x
813	2.5	.5-1	Design	x	x	x	x
814	2.5	as needed	Painting	x	x	x	x
815	2.5	.5-1	Drawing	x	x	x	x
816	2.5	1-2	Advanced Painting/Drawing		x	x	x
817	2.5	as needed	Ceramics			x	x
823	2.5	as needed	Advanced Ceramics		x	x	x
841	5	4 - 6	AP Studio Art			x	x
843	2.5	as needed	Computer Graphic Design		x	x	x
844	2.5	as needed	Introduction to Photoshop		x	x	x
848	2.5	as needed	Video Production		x	x	x
840	2.5	as needed	Advanced Video Production		x	x	x
804	2.5	.5-1	Photography Essentials		x	x	x
803	2.5	.5	Creative Photography		x	x	x
805	2.5	as needed	Intro to Guitar	x	x	x	x
807	2.5	as needed	Songwriting	x	x	x	x
806	2.5	as needed	Intro to Drums	x	x	x	x
886	2.5	2 to 2.5	History of Popular Music	x	x	x	x
872	2.5	as needed	Music Theory 1	x	x	x	x
873	2.5	as needed	Music Theory 2	x	x	x	x
874	5	as needed	Music Theory 3		x	x	x
891	2.5	2	Jazz Performance	x	x	x	x
868	5	as needed	Chorus	x	x	x	x
867	5	3	Band	x	x	x	x
885	2.5	as needed	Introduction to Piano	x	x	x	x
889	2.5	as needed	Piano 2	x	x	x	x
824	2.5	as needed	Drama I	x	x	x	x
825	2.5	as needed	Drama II	x	x	x	x
833	2.5	as needed	Advanced Computer Graphics		x	x	x
834	2.5	as needed	Advanced Photoshop		x	x	x
839	2.5	as needed	Web Design I		x	x	x
892	2.5	as needed	Freshman Band	x			
893	2.5	as needed	Freshman Chorus	x			
826	2.5	as needed	Stage Management	x	x	x	x

WOBURN MEMORIAL HIGH SCHOOL

VISUAL AND PERFORMING ARTS
VISUAL ART

All students are required to take at least one semester of a Fine Arts course in order to graduate.

Art education is essential to developing such 21st century thinking skills as creativity and collaborative thinking. These skills are critical in a rapidly changing job market. The Visual Art Department offers a variety of courses that accommodate both students who have a general interest in art and those who intend to pursue a career in the arts.

COURSE TITLE: Art Foundations (semester course)

LEVEL OFFERED: This course is not leveled. 812

PREREQUISITES: None

DESCRIPTION: Learn ways to express yourself visually. This course will focus on learning the language of art and developing an artistic voice. Students will be introduced to a wide variety of materials. This course satisfies the fine art requirement.

COURSE TITLE: Design (semester course)

LEVEL OFFERED: This course is not leveled. 813

PREREQUISITES: Art Foundations or equivalent

DESCRIPTION: Learn ways to create a powerful design by exploring pattern, balance and composition. Students will learn how to apply the ideas of design to create innovative projects that may include product design, clothing design, and brand design. Students will be introduced to a wide variety of materials. This course satisfies the fine art requirement.

COURSE TITLE: Painting (semester course)

LEVEL OFFERED: This course is not leveled. 814

PREREQUISITES: Art Foundations or equivalent

DESCRIPTION: Learn how to paint. This course will focus on color mixing and the unique characteristics of acrylic paint. Curriculum will include working from observation, as well as imagination. This course satisfies the fine art requirement.

COURSE TITLE: Drawing (semester course)

LEVEL OFFERED: This course is not leveled. 815

PREREQUISITES: Art Foundations or equivalent

DESCRIPTION: Learn to draw what you see. This course will focus on developing observational skills. Students will create art using a variety of drawing materials. Projects will include working from observation as well as imagination. This course satisfies the fine art requirement.

COURSE TITLE: Advanced Painting and Drawing (semester course)

LEVEL OFFERED: This course is not leveled. 816

PREREQUISITES: Open to all students who have taken BOTH Drawing (815) and Painting (814)

DESCRIPTION: Students will combine skills learned in Drawing and Painting to create works of art from: still life, portraits, and imagination. This class allows students greater self-expression and choice of tools to work with when creating their artwork.

COURSE TITLE: Ceramics (semester course)

LEVEL OFFERED: This course is not leveled. 817

PREREQUISITES: Open to juniors and seniors.

DESCRIPTION: Learn to build with clay. This course will focus on hand building techniques with an introduction to wheel throwing. Glazing and finishing techniques will also be included in the curriculum. This course satisfies the fine art requirement.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Advanced Ceramics (semester course)

LEVEL OFFERED: This course is not leveled. 823

PREREQUISITES: Open to juniors and seniors who have taken Ceramics 1 (817).

DESCRIPTION: This course will expand on the hand building and wheel-throwing techniques introduced in Ceramics. Exploration of additional glazing and finishing techniques will also be included in the curriculum.

COURSE TITLE: AP Studio Art (full year)

LEVEL OFFERED: This course is an AP level course. 841

PREREQUISITES: Application process. Open to juniors and seniors who have taken Art Foundations and Painting and Drawing.

DESCRIPTION: The AP Studio Art program consists of three portfolio exams – 2D Design, 3D Design, and Drawing – corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 2D Design portfolio addresses two-dimensional design issues and involves decision making about how to use the elements and principles of art in an integrative way. Students' portfolios demonstrate skills and ideas developed, refined, and applied through the course to produce visual compositions. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses.

MEDIA ARTS

COURSE TITLE: Computer Graphic Design (semester course)

LEVEL OFFERED: This course is not leveled. 843

PREREQUISITES: Open to sophomores, juniors, and seniors.

DESCRIPTION: Learn how to draw and design with the Adobe Illustrator software. Students will learn the principles of design as they create images on the computer. They will also acquire knowledge of advertising and marketing while creating projects that may include magazine covers, fashion pieces, corporate logos, posters, product packages, and school and community projects. This course satisfies the fine art requirement.

COURSE TITLE: Advanced Computer Graphics (semester course)

LEVEL OFFERED: This course is not leveled. 833

PREREQUISITES: Open to sophomores, junior and seniors who have taken Computer Graphics (843). Instructor consent.

DESCRIPTION: This course will build on the skills acquired in the first course Computer Graphics into more advanced projects to include higher design thinking which will include advanced real world applications. Adobe Illustrator will be reviewed and Photoshop & InDesign will be taught. Students will keep daily design blogs in addition to their Adobe Spark web portfolios.

COURSE TITLE: Introduction to Photoshop (semester course)

LEVEL OFFERED: This course is not leveled. 844

PREREQUISITES: Open to sophomores, juniors, and seniors.

DESCRIPTION: Learn how to change photographs and design real world projects using Adobe Photoshop software. This course is a great way to learn layer basics, photo retouching and image editing. Projects may include movie posters, billboards, self-portraits, family history, and photo restoration. This course satisfies the fine art requirement.

COURSE TITLE: Advanced Photoshop (semester course)

LEVEL OFFERED: This course is not leveled. 834

PREREQUISITES: Open to sophomores, juniors, and seniors who have taken Intro to Photoshop. Instructor consent.

DESCRIPTION: This course will build on the skills acquired in the first course, Intro to Photoshop, into more advanced real world applications. Adobe Photoshop will be reviewed and Illustrator & InDesign will be introduced. Students will keep daily design blogs in addition to their Adobe Spark web portfolios.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Video Production (semester course)

LEVEL OFFERED: This course is not leveled. 848

PREREQUISITES: Open to sophomores, juniors, and seniors.

DESCRIPTION: Students will learn how to plan, film and edit their own videos. Course includes the basics on how to create a script outline, storyboard, film and the editing process on Sony Vegas Pro software. Special effects, sound effects, voice over and music tracks will also be included. Projects may include a commercial, music video, interview or a short film. This course satisfies the fine art requirement.

COURSE TITLE: Advanced Video Production (semester course)

LEVEL OFFERED: This course is not leveled. 840

PREREQUISITES: Open to sophomores, juniors and seniors who have taken Video Production (848).

DESCRIPTION: Advanced Video Production focuses on creating short films and learning about the history of film. Students will develop their ability to present information and stories through a growing appreciation of cinematography. In addition, students will learn about creating video blogs and create YouTube channels that will enhance their portfolio.

COURSE TITLE: Web Design I (semester course)

LEVEL OFFERED: This course is not leveled. 839

PREREQUISITES: None.

DESCRIPTION: Introduction to the design, creation, and maintenance of web pages and web sites. Students will learn how to critically evaluate website quality, learn about web standards, and how to create and maintain quality web pages. At the end of this course, you will have the skills and project based experience necessary to pursue further education in web design and development. You will also be able to use a variety of tools and strategies to create websites, read, and write basic HTML code. Students will also demonstrate an understanding HTML through the customization of a WordPress blog & Photoshop Website Creation.

PHOTOGRAPHY

COURSE TITLE: Photography Essentials (semester course)

LEVEL OFFERED: This course is not leveled. 804

PREREQUISITES: Open to sophomores, juniors, and seniors.

DESCRIPTION: Learn how to effectively use your camera to create better photographs. This course will focus on how to use a SLR camera, how to compose better photographs; and how the history of photography influences photography today. Projects will use digital cameras along with Adobe Lightroom, a computer program most professional photographers utilize. It is expected that students have access to a digital SLR. Access to an off-camera flash is helpful. This course satisfies the fine art requirement.

COURSE TITLE: Creative Photography (semester course)

LEVEL OFFERED: This course is not leveled. 803

PREREQUISITES: Open to sophomores, juniors, and seniors.

DESCRIPTION: Learn how to create photographs with or without a camera. This course will focus on using innovation, historic inspiration and creativity to capture photographs. Students will use camera phones, plastic cameras, homemade cameras, the traditional darkroom and alternative processes to create works of photographic art. This course satisfies the fine art requirement.

PERFORMING ART - MUSIC

Music is many things. It is part science, part math, part history and even part physical education. But, most of all music is art. Music allows us to create. Everyone who takes a music course will become more appreciative of the beauty in the world around us.

COURSE TITLE: Intro to Guitar (semester course)

LEVEL OFFERED: This course is not leveled. 805

PREREQUISITES: None

DESCRIPTION: This course is designed for students with no guitar experience. Students will learn the fundamentals of music theory and will learn to play chords and basic melodies on a guitar. This course satisfies the fine art requirement.

COURSE TITLE: Songwriting (semester course)

LEVEL OFFERED: This course is not leveled. 807

PREREQUISITES: None

DESCRIPTION: Students will learn basic concepts of writing songs. Different types of existing songs will be analyzed and used as a model for students to write their own songs. Basic music theory concepts will be studied as well. This course satisfies the fine art requirement.

COURSE TITLE: Intro to Drums and Percussion (semester course)

LEVEL OFFERED: This course is not leveled. 806

PREREQUISITES: None

DESCRIPTION: Students will learn basic playing techniques and reading music notation on a variety of drums and percussion instruments, including marching band drums, orchestra percussion, Latin American percussion, and African drums. This course satisfies the fine art requirement.

COURSE TITLE: The History of Popular Music in the United States (semester course)

LEVEL OFFERED: This course is not leveled. 886

PREREQUISITES: None

DESCRIPTION: In this course students will analyze the history of popular music in the United States. Included will be an examination and discussion of the social, economic, and political influences that shaped music in America beginning in the 1920's and concluding with current events. This course satisfies the fine art requirement.

COURSE TITLE: Music Theory 1 (semester course)

LEVEL OFFERED: This course is not leveled. 872

PREREQUISITES: None

DESCRIPTION: A course for students with little or no music reading ability who have an interest in writing or performing music of any style. Students will learn the basics of notation, rhythmic and melodic sight reading and will learn to play introductory songs on a piano. This course satisfies the fine art requirement.

COURSE TITLE: Music Theory 2 (semester course)

LEVEL OFFERED: This course is not leveled. 873

PREREQUISITES: Music Theory 1

DESCRIPTION: Music Theory 2 is a continuation of concepts learned in Music Theory 1. This course is for students with some basic music reading ability who have an interest in writing or performing music of any style. Students will learn more advanced concepts of notation, rhythmic and melodic sight reading, and will learn to play more advanced songs on the piano. Students will also learn basic songwriting techniques. This course satisfies the fine art requirement.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Music Theory 3 (full year course)

LEVEL OFFERED: This course is not leveled. 874

PREREQUISITES: Music Theory 1 and Music Theory 2

DESCRIPTION: Music Theory 3 is an advanced course open to students who have taken Music Theory I and Music Theory II. In this course students will learn how to analyze harmonic structures in music and learn to write their own harmonization. The study of rhythmic and melodic sight reading will continue as well as acquiring proficiency in Level I piano pieces. This is an ideal course for students who want to learn how to write their own music or who want to study music after high school. This course satisfies the fine art requirement.

COURSE TITLE: Jazz Performance and Improvisation (semester course)

LEVEL OFFERED: This course is not leveled. 891

PREREQUISITES: Music Theory 1

DESCRIPTION: Through performance and study of different styles of music, students will learn performance, improvisation, harmony, style, and form. This class will be open to students who play any instrument, including guitar, bass, or piano. This course satisfies the fine art requirement.

COURSE TITLE: Chorus (full year course)

LEVEL OFFERED: This course is not leveled. 868

PREREQUISITES: None

DESCRIPTION: Chorus is a select group of male and female voices from Grades 9 to 12 whose objective is to practice the finest types of choral music culminating in public performances. Students will learn proper singing techniques and good rehearsal habits. Students must receive approval from their middle school choral teachers to take this class. If students did not take chorus at the middle school level they may sign up for the course but must contact the WMHS choral director during the first week of school in September. This course satisfies the fine art requirement.

COURSE TITLE: Freshmen Chorus (semester course)

LEVEL OFFERED: This course is not leveled. 893

PREREQUISITES: Freshmen only.

DESCRIPTION: Elective for freshmen who would like to participate in chorus during one semester and need to fulfill the requirement for physical education the other semester. This would allow students to be able to perform in the chorus and satisfy two requirements.

COURSE TITLE: Band (full year course)

LEVEL OFFERED: This course is not leveled. 867

PREREQUISITES: Ability to read and understand musical notation.

DESCRIPTION: Band instrument playing skills will be taught through performance of marching and concert band music. Students will be active participants in school and community performances including concerts, patriotic holidays, football games, and music festivals. This course satisfies the fine art requirement.

COURSE TITLE: Freshmen Band (fall semester only)

LEVEL OFFERED: This course is not leveled. 892

PREREQUISITES: Ability to read and understand musical notation. Freshmen only.

DESCRIPTION: Elective for freshmen who would like to participate in band during fall semester and need to fulfill the requirement for physical education in the spring semester. This would allow students to be able to perform in the band and satisfy two requirements.

COURSE TITLE: Introduction to Piano (semester course)

LEVEL OFFERED: This course is not leveled. 885

PREREQUISITES: None

DESCRIPTION: Students will learn how to perform on a piano. This includes acquiring the ability to read music, attaining an understanding of basic music theory and training in fundamental practice techniques. This course is intended for students with little or no experience in piano performance. This course satisfies the fine art requirement.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

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COURSE TITLE: Piano 2 (semester course)

LEVEL OFFERED: This course is not leveled. 889

PREREQUISITES: Intro to Piano (885)

DESCRIPTION: Students will continue to learn how to perform on a piano. This includes acquiring the ability to read music, attaining an understanding of basic music theory and training in fundamental practice techniques. This course is intended for students with little or no experience in piano performance. This course satisfies the fine art requirement.

THEATRE ARTS

COURSE TITLE: Drama I – Beginning Theatre Arts (semester course)

LEVEL OFFERED: This course is not leveled. 824

PREREQUISITES: None

DESCRIPTION: This course provides a general overview of all the various aspects of theatre. In this introduction class, students will learn by doing through various class projects in performance and technical sides of theatre: set, costume, lighting design, as well as the elements necessary to cast a play, create properties, sound design, and basic play writing.

COURSE TITLE: Drama II – Theatre Production and Performance (semester course)

LEVEL OFFERED: This course is not leveled. 825

PREREQUISITES: Drama I – Beginning Theatre Arts

DESCRIPTION: Building on the background established in Drama I, Drama II students will begin their course with a unit on musical theatre where students will write and produce their own plays. Students will study acting techniques and basic theatrical devices which include character and script analysis. Students will learn the value of critique by assessing both their own and the work of others.

STAGE MANAGEMENT: Stage Management (semester course)

LEVEL OFFERED: This course is not leveled. 826

PREREQUISITES: None

DESCRIPTION: Go behind the scenes to see how it all comes together on the stage. This course is intended to provide students with a basic knowledge of stage management for theater. Students will learn to run an event/production with school and outside community groups during auditions, rehearsals, and the final event. This will include working in the tech booth managing audio and lights. Additionally, students will work as backstage crew and learn effective communication tools across many types of theater making, stage management paperwork, and technical rehearsals.

WOBURN MEMORIAL HIGH SCHOOL

WPMC Television Production

Available to Grades

Course Number	Earned Credits	Approximate Wkly. Homework	Course Name	9	10	11	12
845	2.5	As needed	Television Production I	x	x	x	x
846	2.5	As needed	Television Production II	x	x	x	x

WOBURN PUBLIC MEDIA CENTER

Students have the opportunity to take courses with the Woburn Public Media Center. Please note courses are pass/fail. Students will not receive a grade but will receive credit if they pass. **These courses do NOT count as a fine art requirement for graduation.**

COURSE TITLE: Television Production 1 (semester course)

LEVEL OFFERED: This course is not leveled. 845 (Pass/Fail)

PREREQUISITES: Open to all students.

DESCRIPTION: This introductory course will offer students the opportunity to learn television production. It will inform students of the techniques of television production through application of theory and methods. Students will implement all aspects of television production from camera operation, lighting, producing, directing, and on camera talent. Students will also learn basic elements of production such as scriptwriting, set design, interview techniques, preparing scripts for the teleprompter, and generating graphics for productions.

COURSE TITLE: Television Production 2 (semester course)

LEVEL OFFERED: This course is not leveled. 846 (Pass/Fail)

PREREQUISITES: Television Production 1. Must have a passing grade in Television Production 1(845).

DESCRIPTION: This advanced course offers the student more comprehensive opportunities to assist in the direction and production of instructional television programs. Students will also learn the basic parts of editing their own projects that are produced in class.

WOBURN MEMORIAL HIGH SCHOOL

WELLNESS/HEALTH/PHYSICAL EDUCATION

Course Number	Earned Credits	Approximate Weekly Homework	Course Name	Available to Grades			
				9	10	11	12
912	2.5	0-30 minutes/Alt. Projects	Wellness 9	x			
915	1.25	Occasional 0-1 hour in a semester	Physical Education 10		x		
930	1.25	Occasional 0-1 hour in a semester	Physical Education 11			x	
930	1.25	Occasional 0-1 hour in a semester	Physical Education 12				x
927	1.25	Occasional 0-1 hour in a semester	Personal Fitness			x	x
928	1.25	Occasional 0-1 hour in a semester	Weight Training			x	x
929	1.25	Occasional 0-1 hour in a semester	Advanced Physical Education			x	x
953	2.5	0-30 minutes	P.E. Leadership			x	x
913	2.5	0-30 minutes	Health 10		x		
934	1.25	0-30 minutes	Health 11			x	
934	1.25	0-30 minutes	Health 12				x
749	2.5	0-30 minutes	FNW 1			x	x
756	2.5	0-30 minutes	FNW 2			x	x
954	3.0 College	1-2 hours	Early Childhood Education Dual Enrollment			x	x
926	2.5	1 hour	CPR/Safety & Injury Prevention		x	x	x

WOBURN MEMORIAL HIGH SCHOOL

WELLNESS

PHYSICAL EDUCATION – FRESHMAN and SOPHOMORE

(1 semester required every year)

Physical Education is a required course for all members Woburn Memorial High School. All students are required to have four semesters (6.25 credits) to graduate. Students are expected to change into physical education attire and participate in all class activities to the best of their ability. Our goal is for students to acquire the skills necessary to promote and maintain the concept of wellness in their daily lives. Wellness will capture physical activities, fitness, and a healthy lifestyle.

COURSE TITLE: Wellness Grade 9 - 2.5 credits per semester (semester course / daily)

COURSE NUMBER: This course is not leveled. 912

PREREQUISITES: None

DESCRIPTION: This is a required course for freshman that meets five (5) days a week for one semester (20 weeks). Through carefully arranged Wellness lessons and experiences, students will divide their time equally between Physical Education and in the classroom with lessons on Life Skills. This foundational course will connect physical education, nutrition, life skills, and health sexuality education. The Wellness department's goal is for students to acquire the skills necessary to integrate and maintain the concept of wellness in their daily lives.

COURSE TITLE: Physical Education Grade 10 - 1.25 credits per semester (semester course/3 days in six day cycle)

COURSE NUMBER: This course is not leveled. 915

PREREQUISITES: None

DESCRIPTION: Students will work to achieve this goal by demonstrating a wide variety of team and individual sports, lifelong fitness activities, and cooperative games.

PHYSICAL EDUCATION – JUNIOR and SENIOR

(1 semester required every year)

COURSE TITLE: Physical Education Grade 11/12 - 1.25 credits per semester (semester course/3 days in six day cycle)

COURSE NUMBER: This course is not leveled. 930

PREREQUISITES: None

DESCRIPTION: Students will achieve this goal through a wide variety of individual fitness and lifelong activities and experiences.

COURSE TITLE: Physical Education /Personal Fitness - 1.25 credits per semester (semester course/3 days in six day cycle.)

COURSE NUMBER: This course is not leveled. 927

PREREQUISITES: This class is for juniors and seniors only.

DESCRIPTION: This elective course will address individual fitness needs based on the student's ability level. Activities that will be offered are cardiovascular fitness (treadmill, bike, and Stairmaster), core training (abdominal, stability and balance), resistance training (free weights and resistance bands), and circuit training for a full body workout and flexibility (stretching).

COURSE TITLE: Physical Education Weight Training – 1.25 credits per semester (semester course/3 days in a six day cycle.)

COURSE NUMBER: This course is not leveled. 928

PREREQUISITES: This class is for juniors and seniors only.

DESCRIPTION: This elective course will address strength training based on the student's individual needs and level of ability. The activities will include upper and lower body strength training with a variety of free weights. This course is a great way to increase muscular strength and muscular endurance.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Advanced Physical Education – 1.25 credits per semester (semester course/3 days in a six day cycle)

COURSE NUMBER: This course is not leveled. 929

PREREQUISITES: Completion of prior Physical Education courses. Available to juniors and seniors only.

DESCRIPTION: This elective course is offered to students who have displayed a high level of skills in prior physical education classes. It will consist of challenging individual, team, and lifelong activities (examples: volleyball, eclipse ball, badminton, strength training, and cardiovascular fitness).

COURSE TITLE: Physical Education Leadership – 2.5 credits per semester (semester course/meets daily)

COURSE NUMBER: This course is not leveled. 953

PREREQUISITES: Available to juniors and seniors only. Students must have parent permission as well as department chair approval.

DESCRIPTION: The primary component of this course is to introduce upper classmen to career in Health and Wellness and education through the direct connection with elementary age students and the Boys and Girls Club of Woburn. Each student will take an active role in the design and implementation of lessons, activities, and programming that have a goal of increasing the elementary students' activity time by approximately 140 minutes a week. On Friday, they will meet with their teacher for the seminar portion to share their observations, experiences, and their needs to make the next week's lesson successful. Admittance to this program will be based on a written application, positive participation in past wellness courses, and department chairperson approval. **This course has limited enrollment.** The Boys and Girls Club of Woburn will provide a paid instructor who is located at the Shamrock School. The equipment will be provided by the Shamrock and Malcolm White Elementary Schools and the Boys and Girls Club of Woburn.

COURSE TITLE: Early Childhood Education – Middlesex Community College credits 3.0 and WMHS credits 2.5
(semester course 5 days per week.)

COURSE NUMBER: 954

PREREQUISITES: Open to juniors and seniors only, prerequisite 2.50 grade point average and Accuplacer/Middlesex Community College

DESCRIPTION: (Sent by Middlesex Community College) This developmental course will provide students with an overview of early care and education programs and an introduction to the developmental milestones, developmentally appropriate, practice, guiding children's behaviors, effective care giving/teachers and age appropriate child-centered curriculum and environments.

HEALTH AND NUTRITION – SOPHOMORE, JUNIOR and SENIOR ELECTIVES

*all courses are semester length and offered daily

COURSE TITLE: Health 10 – 2.5 credits per semester (semester course)

LEVEL OFFERED: This course is not leveled. 913

PREREQUISITES: Available to sophomores

DESCRIPTION: Through class discussion, research projects, and use of the Internet, students will learn about mental health, emotional feelings, peer pressure, harassment, stress, life skills and health sexuality education. Positive decision-making skills and responsible relationships are emphasized. Current topics and up-to-date information is the foundation to this successful course. In all aspects of the program emphasis is placed on the development of the whole child through self-concept enhancement and life skills lessons. The key is to distribute information and have students develop self-responsibility to make effective decision making choices in their daily lives.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Health 11/12 – 1.25 credits per semester (semester course/3 days in a six day cycle)

LEVEL OFFERED: This course is not leveled. 934

PREREQUISITES: This class is for juniors and seniors only

DESCRIPTION: Health 11/12 focuses on health literacy, self-management skills, health promotion and health sexuality education. Health literacy focuses on acquisition of information, comprehension of information, and understanding of health services. Healthy self-management enables students to integrate and apply knowledge and skills to health decisions, actions, conduct, assume health responsibilities, and demonstrate competence in using the health resources and services with the ability to respond to health emergencies. Basic lesson on CPR is taught. This course prepares students to acquire the skills necessary for their future.

COURSE TITLE: Food, Nutrition, and Wellness 1 – 2.5 credits per semester (semester course)

LEVELS OFFERED: This course is not leveled. 749

PREREQUISITES: Available to juniors and seniors.

DESCRIPTION: Food, Nutrition and Wellness 1 introduces the concept that each person's food, nutrition and wellness needs are unique and individual. The main focus will be on understanding the dietary guidelines, navigating nutrition labels and basic food preparation and kitchen skills. Meal planning, budgeting, stress and stress management strategies will also be introduced. Students will be encouraged to examine their own lifestyle habits, to set healthy goals based on the six dimensions of wellness and to improve their habits for healthier living.

COURSE TITLE: Food, Nutrition, and Wellness 2 – 2.5 credits per semester (semester course)

COURSE NUMBER: This course is not leveled. 756

PREREQUISITES: Successful completion of a B or better in Food, Nutrition, and Wellness 1.

DESCRIPTION: Food, Nutrition and Wellness 2 further examines the basic principles of nutrition. The focus of this course will be on whole food nutrition for healthy living and disease prevention. Students will continue to learn how to add in healthy lifestyle choices based on the different dimensions of wellness. Whole foods based nutrition will be emphasized in the kitchen through practicing basic cooking skills. Career planning and resume writing will also be included.

COURSE TITLE: CPR/Safety and Injury Prevention – 2.5 credits per semester

COURSE NUMBER: This course is not leveled. 926

PREREQUISITES: Grade of B or better in Wellness 9 (available to grades 10, 11, 12)

DESCRIPTION: Students will gain the knowledge and skills to administer first aid and carry out emergency procedures, including cardiopulmonary resuscitation and will assess the factors that contribute to intentional and unintentional injury, including motor vehicle accidents, fire safety and weapons safety. Through the study of Hazardous Prevention, students will explain the connection between accidents and injuries. Through the study of Self Protection students will evaluate home safety conditions, including the presence and proper use of smoke detectors, carbon monoxide detectors and fire extinguishers. Through the study of Emergency Intervention students will demonstrate appropriate first aid for cardiac arrest (cardiopulmonary resuscitation), allergic reactions, stings, bites, broken bones, bleeding, choking, shock, poisoning and burns. Students will be offered the opportunity to obtain a Certification in Cardiopulmonary Resuscitation.

WOBURN MEMORIAL HIGH SCHOOL

WORLD LANGUAGE

Course Number	Earned Credits	Approximate Weekly Homework (hrs.)	Course Name	Available to Grades			
				9	10	11	12
491	5	1	Italian 1 Honors	x	x	x	
492	5	1	Italian 2 Honors		x	x	x
493	5	1.5	Italian 3 Honors			x	x
494	5	1.5	Italian 4 Honors				x
410	5	1	Latin 1 Honors	x	x	x	
413	5	1	Latin 2 Honors		x	x	
415	5	1.5	Latin 3 Honors			x	x
417	5	1.5	Latin 4 Honors			x	x
432	5	1	French 2 CP	x	x	x	
434	5	1.5	French 3 CP		x	x	x
436	5	1.5	French 4 CP			x	x
431	5	1.5	French 5 CP				x
433	5	1.5	French 2 Honors	x	x	x	
435	5	1.5	French 3 Honors		x	x	
437	5	2	French 4 Honors			x	x
438	5	2	French 5 Honors				x
439	5	3	AP French Language & Culture				x
461	5	1	Spanish 1 CP	x	x	x	
476	5	1	Spanish 2 CP	x	x	x	
459	5	1	Spanish 3 CP		x	x	x
470	5	1.5	Spanish 4 CP			x	x
480	5	1.5	Spanish 5 CP				x
477	5	1.5	Spanish 2 Honors	x	x	x	
460	5	1.5	Spanish 3 Honors		x	x	
471	5	2	Spanish 4 Honors			x	x
472	5	2	Spanish 5 Honors				x
473	5	3	AP Spanish Language & Culture				x
420	5	50 minutes	Spanish Language and Culture 1 CP	x	x	x	
421	5	50 minutes	Spanish Language and Culture 2 CP	x	x	x	
422	5	1	Spanish Language and Culture 3 CP		x	x	x

WOBURN MEMORIAL HIGH SCHOOL

WORLD LANGUAGE

The study of a world language is considered essential to the student's high school experience. There are general educational values as well as practical values to be considered. The United States is a multicultural community and on an everyday basis we need to foster the development of students who are tolerant and knowledgeable of other cultures. Our international interests require citizens who are able to deal with linguistic and cultural differences. Most of the topics that students will be dealing with in the future have global implications, again requiring citizens who are able to move beyond a limited national perspective to make decisions concerning wider issues.

Communication in a foreign language requires that a student accept differences. Coupled with the study of the foreign language culture, it is hoped the student will develop tolerance and strategies for dealing with differences as well as accept the opportunity to look at his/her own language and culture from a different perspective.

All students must pursue at least 2 years of study in one foreign language at the high school level in order to graduate. Foreign Language study is part of the core curriculum of both the Massachusetts Frameworks and the Federal Elementary and Secondary Education Act.

SUGGESTIONS FOR COURSE SELECTION:

- A. A student should continue to study the language in which he/she has built a satisfying experience at the middle school level.
- B. The student who has experienced satisfaction with the study of one foreign language is encouraged to start a second foreign language.
- C. Some students who have been very successful in the study of one foreign language during their middle school experience may consider starting a second Foreign Language Honors Program as freshmen.
- D. Honors level courses work at a faster pace and encompass more sophisticated oral and reading components, projects, and compositions.

NOTE:

- A. A student may begin French, Spanish, or Latin in Grades 9 through 11, provided the order chosen is sequential, i.e. French 1 before French 2. A senior requires special permission to start Level 1 of a language.
- B. A language course will not be offered unless there is a sufficient enrollment.

PREREQUISITES FOR ALL LANGUAGES:

In order to proceed to the next level of the language sequence, unless otherwise stated, for the COLLEGE PREPARATORY level, the student must have a C or better or recommendation of present instructor. To enter the HONORS level, the student must have an A- and to continue in the HONORS level, the student must have a B or better or recommendation of present instructor.

WOBURN MEMORIAL HIGH SCHOOL

**CLASSICAL LANGUAGE
LATIN**

COURSE TITLE: Latin 1

LEVELS OFFERED: Honors 410

PREREQUISITES: None

DESCRIPTION: This course is designed for students interested in learning the basic fundamentals of the Latin language. The study of Roman history, mythology, and derivatives fill out the picture of Rome and its people. The study of derivatives will also supplement the study of English vocabulary in other courses.

COURSE TITLE: Latin 2

LEVELS OFFERED: Honors 413

PREREQUISITES: Latin 1 or the recommendation of present instructor.

DESCRIPTION: This is a continuation of the approach begun in Latin 1. Constant vocabulary growth and usage are presented to coincide with the literature. Knowledge of culture and mythology is expanded through readings.

COURSE TITLE: Latin 3

LEVELS OFFERED: Honors 415

PREREQUISITES: Latin 2 or recommendation of present instructor.

DESCRIPTION: This course continues the basic foundation established in Latin 2. Readings from various Roman authors of prose form the framework of the course. The readings have, as a backdrop, the history, times, and people during the Roman Republic.

COURSE TITLE: Latin 4

LEVELS OFFERED: Honors 417

PREREQUISITES: Latin 3 or recommendation of present instructor.

DESCRIPTION: Latin 4 completes the study of the advanced forms in grammar and develops vocabulary so that students can read the original works of Roman poets and authors and become familiar with various literary styles and genres of the imperial period.

**MODERN LANGUAGES
FRENCH**

COURSE TITLE: French 2

LEVELS OFFERED: College Preparatory 432, Honors 433

PREREQUISITES: Grade 8 French or recommendation of present instructor.

DESCRIPTION: This course is designed to help the student attain proficiency in expressing himself/herself using basic vocabulary and grammatical structures to discuss present and past events. Short readings and limited composition exercises will be introduced.

COURSE TITLE: French 3

LEVELS OFFERED: College Preparatory 434, Honors 435

PREREQUISITES: French 2 or recommendation of present instructor.

DESCRIPTION: The French 3 program continues to develop the student's ability to understand the spoken language and to speak it accurately and fluently. The student completes the basic grammatical concepts and increases his/her reading comprehension and vocabulary through the use of supplementary materials. Through controlled writing exercises the student's writing skills are developed. French is the language of the classroom.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: French 4

LEVELS OFFERED: College Preparatory 436, Honors 437

PREREQUISITES: French 3 or recommendation of present instructor.

DESCRIPTION: This course continues to develop the student's reading, writing, listening, and speaking skills. There is a review of grammar with emphasis on the more difficult structures. The student reads for comprehension, vocabulary building, and discussion. Various selections concerning French culture, geography, history, literature, music, and art are used. French is the means of communication in the classroom. In French 4 Honors, the students will engage in activities that will prepare them for the French 5 AP program.

COURSE TITLE: French 5

LEVELS OFFERED: College Preparatory 431, Honors 438

PREREQUISITES: French 4 or recommendation of present instructor.

DESCRIPTION: This course emphasizes the use of French for active communication. Students electing the course should have a reasonable proficiency in the basic listening comprehension, speaking, reading, and writing skills. The readings will be taken from various sources reflecting aspects of French culture and society.

COURSE TITLE: AP French Language and Culture

LEVELS OFFERED: Advanced Placement 439

PREREQUISITES: Final grade of A- or better in French 4 Honors and recommendation of present instructor.

DESCRIPTION: The Advanced Placement Program is a highly intensified French Language Course equivalent to that offered in the French intermediate course in college in structure and content. French is the language of the classroom. Projects, written and oral, are required. The course is designed to prepare students for the Advanced Placement Language Examination.

SPANISH

COURSE TITLE: Spanish 1

LEVELS OFFERED: College Preparatory 461

PREREQUISITES: None

DESCRIPTION: This course is designed for the beginner in Spanish, who has a strong academic background. The fundamental sound patterns of Spanish will be presented along with vocabulary and grammatical structures that will allow the student to communicate on a basic level. Related aspects of Hispanic culture will also be studied.

COURSE TITLE: Spanish Language and Culture 1

LEVELS OFFERED: College Preparatory 420

PREREQUISITES: None

DESCRIPTION: This course is for those who have never studied a foreign language or who need a review of the basic principles. It will develop the student's reading, writing, listening, and oral skills using Spanish as the target language. A great emphasis will be placed on the study of cultures where Spanish is the primary spoken language through a multi-media approach.

COURSE TITLE: Spanish 2

LEVELS OFFERED: College Preparatory 476, Honors 477

PREREQUISITES: Middle School Spanish program or recommendation of present instructor.

DESCRIPTION: This program is designed to allow the student to build on skills acquired in the Middle School Spanish program or Spanish 1. The students will learn to communicate past and future experiences. They will develop reading and writing skills based on new and familiar vocabulary and sentence structures.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Spanish Language and Culture 2

LEVELS OFFERED: College Preparatory 421

PREREQUISITES: A grade of C or better in Spanish Language and Culture 1

DESCRIPTION: This course is a continuation of Spanish Language and Culture 1. It will build on the reading, writing, listening, and oral skills developed in Spanish Language and Culture 1, and again, a great emphasis will be placed on the study of cultures where Spanish is the primary spoken language through a multimedia approach. The grammar will be more complex and there will be a greater development of vocabulary to aid in everyday communication.

COURSE TITLE: Spanish 3

LEVELS OFFERED: College Preparatory 459

PREREQUISITES: Spanish 2 or recommendation of present instructor.

DESCRIPTION: At this level, the student completes the introduction to the basic Spanish grammatical structures and increases his/her reading comprehension and vocabulary through the use of supplementary materials. Through controlled writing exercises, the student's writing skills are developed. Spanish is the principal means of communication in the classroom so that the student's oral and listening comprehension skills are further enhanced. The student will continue to explore the culture of the Hispanic world.

COURSE TITLE: Spanish Language and Culture 3

LEVELS OFFERED: College Preparatory 422

PREREQUISITES: A grade of C or better in Spanish Language and Culture 2 or Spanish 2 College Prep.

DESCRIPTION: Spanish Language and Culture 3 is an initial review and continuation of Spanish Language and Culture 2. Students will be introduced to an expanded vocabulary designed to foster every day communication in the target language. The ability to situate actions in time will be enhanced by further study of the past, present, and future in Spanish. Readings will be at a more in depth level than Spanish Language and Culture 2.

COURSE TITLE: Spanish 3

LEVELS OFFERED: Honors 460

PREREQUISITES: Final grade of A- in Spanish 2 Honors or recommendation of present instructor.

DESCRIPTION: At this level, basic Spanish grammatical structures are reviewed and more advanced grammar structures are implemented. Reading exercises are put into practice and students' knowledge base of vocabulary is enhanced. Through controlled, in class writing exercises the student's writing skills are developed. Additionally, students will make presentations in front of the class in Spanish only. Specific focus is placed on preparing students for advanced language study. Students will continue to explore the culture of the Hispanic world.

COURSE TITLE: Spanish 4

LEVELS OFFERED: College Preparatory 470

PREREQUISITES: Final grade of B- in Spanish 3 or recommendation of present instructor.

DESCRIPTION: This course is designed to continue development of the student's listening, comprehension, speaking, reading, and writing skills. There is a review of grammar with emphasis on more advanced structures. The student reads for comprehension, vocabulary building, and discussion. A variety of sources concerning Hispanic culture, geography, history, literature, music, and art are used. Spanish is the principal means of communication.

COURSE TITLE: Spanish 4

LEVELS OFFERED: Honors 471

PREREQUISITES: Final grade of A- in Spanish 3 Honors or recommendation of present instructor.

DESCRIPTION: In the Spanish 4 Honors program, the student will continue to develop knowledge of the formation and use of the Spanish subjunctive. The student will also review other important grammatical structures, with the goal of increased written, oral and interpretive proficiency. This course contains many pre-AP activities including oral and written presentations. Spanish IS the language in the classroom.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Spanish 5

LEVELS OFFERED: College Preparatory 480

PREREQUISITES: Final grade of B- in Spanish 4 College Preparatory or Honors or recommendation of present instructor.

DESCRIPTION: This course emphasizes Spanish for active group communication. At this level, grammar is no longer the main focus; rather, students will utilize their previously learned skills to analyze various works and to creatively explore diverse aspects of the Hispanic culture. The students electing the course should be proficient in basic listening comprehension, speaking, reading, and writing skills. The course is organized around contemporary discussion topics. To develop the topics, students will engage in dialogues, critique literary works, write essays, and make presentations in front of the class.

COURSE TITLE: Spanish 5

LEVELS OFFERED: Honors 472

PREREQUISITES: Final grade of A- in Spanish 4 College Preparatory or B/B+ in Spanish 4 Honors; or recommendation of present instructor.

DESCRIPTION: This course emphasizes Spanish for active communication. Group discussion is emphasized. The students electing the course should be proficient in basic listening comprehension, speaking, reading and writing skills. The course is organized around discussion topics such as stereotypes, human rights, and family. Vocabulary, grammar, reading, writing, cultural, and project activities are used to develop the topics.

COURSE TITLE: AP Spanish Language and Culture

LEVELS OFFERED: Advanced Placement 473

PREREQUISITES: Final grade of A- in Spanish 4 Honors or recommendation of present instructor.

DESCRIPTION: The Advanced Placement Program is an intensified Spanish language course equivalent to that offered at a university. The focus is on preparation for the AP Language exam in May. Throughout the year students will complete readings, conversations, and listening exercises that explore six major themes of the Spanish speaking world. It is a total immersion classroom. Every student is expected to take the AP exam.

ITALIAN

COURSE TITLE: Italian 1

LEVELS OFFERED: Honors 491

PREREQUISITES: A- in Middle School Spanish or French; B+ at High School honors level and recommendation of present instructor.

DESCRIPTION: This course is designed to introduce students to the basic structures and vocabulary of Italian. Students will also become familiar with the significant areas of Italy.

COURSE TITLE: Italian 2

LEVELS OFFERED: Honors 492

PREREQUISITES: Italian 1 Honors or recommendation of present instructor.

DESCRIPTION: Through Italian 2 students continue their study of the basic sentence structures and vocabulary of Italian. Students read articles from Italian magazines and begin the study of Italian literature. The culture of Italy is emphasized.

COURSE TITLE: Italian 3

LEVELS OFFERED: Honors 493

PREREQUISITES: Italian 2 Honors or recommendation of present instructor.

DESCRIPTION: Italian 3 continues to develop the student's ability to understand the spoken language and to speak and write accurately in Italian. There is a greater emphasis on reading, writing, and speaking.

WOBURN MEMORIAL HIGH SCHOOL

COURSE TITLE: Italian 4

LEVELS OFFERED: Honors 494

PREREQUISITES: Italian 3 Honors or recommendation of present instructor.

DESCRIPTION: This course is for students who have successfully completed Italian 3 Honors with a B- or above. This course will concentrate on the communicative skills of speaking, reading, and writing. The readings for this course will be chosen for their value as authentic insights into Italian culture and history. Emphasis will be placed on Italy's contributions to the arts. Grammar will be studied as an aid to more accurate communication. Students will be expected to use the target language in class and in all of their assignments.

WOBURN MEMORIAL HIGH SCHOOL

ALTERNATIVE EDUCATION PROGRAM

The Alternative Education program is offered for those students who, for various reasons, find the mainstream class setting difficult. A self-contained program, the goal is to contribute to positive student growth in attendance, content knowledge, attitude and self-esteem. An important standard of the Alternative Education program is to provide students with the necessary tools to become productive members of society. The student-teacher ratio enables a family-like environment that instills values and morals on a daily basis. The students follow the current curriculum in place at the high school, as well as the practical application of life skills. The work study component is an integral part of the program. Entrance to the program is determined through an application process. The selection committee is comprised of the Administration and staff of Alternative Education. Students can be referred by Guidance or other WMHS staff members. Students must maintain employment to remain enrolled.

WOBURN MEMORIAL HIGH SCHOOL CREDIT RECOVERY/SUMMER SCHOOL

The Woburn Memorial High School Credit Recovery/Summer School program provides a wide range of courses for all students. All credit recovery offerings are open to any high school student who needs to pursue credit to graduate. Course registration will be completed only after meeting with a guidance counselor. Meeting with your counselor will help alleviate any confusion surrounding courses that a student may or may not need to graduate.

Credit Recovery/Summer School grades are recorded on each student's official school transcript. The original grade given will not be changed. The credit recovery grade may upgrade the original grade on a transcript by one grade.

Anyone with questions concerning credit recovery may contact Ed Maguire, Assistant Principal at WMHS, by phone at 781-937-8210 ext. 10301 or by emailing emaguire@woburnps.com.

The following conditions must be met in order to register:

1. Student must be in good standing at his/her school
2. Student can only register for a course that he/she has failed
3. Student must pay all tuition prior to entering first class

Credit recovery is offered Monday, Tuesday, Wednesday and Thursday afternoon at Woburn Memorial High School. Offerings include ELA, Science, Math and History.

Fall Semester: October – January

Spring Semester: February – May

Summer School runs for approximately 4 – 5 weeks in the summer two and a half hours per day, five days per week.

WOBURN MEMORIAL HIGH SCHOOL

STUDENT SERVICES

The Keith Callahan Learning Center

The Woburn Memorial High School Learning Center is an academic support facility designed to help students reach their highest levels of academic achievement. The Learning Center provides a sense of community, and guides students toward creative and independent thinking. Innovative educational strategies and technologies are incorporated into the Learning Center to compliment these efforts.

By promoting communication and collaboration among students, staff, and faculty, the Learning Center strives to inspire educational excellence to ensure the success of each of its students, both during high school and beyond.

The Learning Center promotes academic success by combining the efforts of a diverse team of faculty members with the benefits of peer modeling. Support is available on a drop-in basis during the school day (during a student's study period) and/or after school (from Monday through Thursday until 2:25). Support is provided in the following areas:

- Reading Comprehension
- The Writing Process
- Math Computation and Application
- Fundamentals of Science and Technology

The Learning Center also provides:

- Academic Support
- Computer Stations (with access to library databases and the internet)
- A Library of Curriculum Textbooks
- Exam Review

The Learning Center, with its low student: teacher ratio, can help students maximize their academic performance. Students have the opportunity to learn, develop, and enhance study skills such as:

- Research Paper Development
- Memory Strategies
- Organization Skills
- Listening and Note-taking
- Test Taking Strategy
- Homework Strategies

SPECIAL EDUCATION

The Woburn Public Schools, in accordance with Federal Individuals with Disabilities Education Act (IDEA-04) and the Code of Massachusetts Regulations (CMR)-Title 603 P.L. 94-142 and Chapter 766, offer a diversified and comprehensive network of special education services to students with special needs. Access to special education programs is determined by the Evaluation Team. Referrals for a team evaluation may come from school personnel, parents, or a physician. Federal and state regulations govern the procedures of the evaluation team.

The High School also has a Student Support Team comprised of administration, guidance, regular education and special education staff. The team meets weekly to discuss student issues. Parents are encouraged to first use this process if they have a concern regarding their child's progress. Referrals should be made directly to the building principal.

WOBURN MEMORIAL HIGH SCHOOL

Programs and Services

Special Education services are offered in three ways: teaming with general education, individualized special education classes and programs, and the Learning Center.

Team teaching is offered through the Enhanced Competence (E.C.) and College Preparatory courses in grades 9 – 11. The Enhanced Competence program is for those special and general education students who require assistance with remedial skills as well as organizational and study skills. Courses are offered in the areas of English, Math, History, and Social Science, as well as Science and Technology. Recommendation for student placement is made at the student's team meeting.

The Learning Center is a general and special education offering. The Learning Center provides a support in all areas with a specific focus on study skills and strategies. A more specific description is provided under Student Services.

The **Transition/Launch Program** for grades 9 through 12 and post graduates to age 22, is offered for those students with cognitive special needs who require a pre-vocational program. Students receive academics, including pre-vocational programming, in a small group setting. Students may also participate in regular education offerings including the team-taught enhanced courses. Entrance to the program is by recommendation of the Evaluation Team. Students have the opportunity to participate in the pre-employment placements with the support of a job coach.

High Expectations is offered for those students who, because of psychological and/or emotional needs, require a small home based therapeutic placement. The program provides students with a strong academic and emotional component within both the general education classroom and within the High Expectations Program. Parent and student involvement is one of the key components of the program. There is a process to determine entrance into the program. Entrance is determined by a Special Education Evaluation as well as an outside documented emotional/mental health diagnosis. Also, the Special Education Team, along with the High Expectations Program Director and the building principal have input into the student's placement within the High Expectations Program.

The Academic Support Center (TASC)/Next Wave Program is designed for students with language based learning disabilities (verbal and nonverbal) who require academic, social, and vocational support. Students work with special educators, in small groups, to build upon their academic skills that will support them in becoming independent learners. Our students work with a social worker to build decision making skills that will enhance their ability to make and maintain social connections with their peers. Juniors and seniors meet with a job coach and participate in prevocational training, social pragmatics, and job coaching. Most students continue their vocational education as postgraduates in the Next Wave Program.

Remedial reading is also available as a specialized class for recommended students.

More information regarding the TASC, High Expectations, and Transition/Launch Program, can be obtained from the Woburn Memorial High School Chairperson, Ms. Christine O'Neill.

Special Education students are expected to take the same number of credits per year for graduation as non-special education students. Further, they are expected to take required courses for graduation, except when stated in the IEP. Federal and State regulations require that all students participate in the general education program to the extent that their abilities allow. Through the student's IEP, accommodations will be made that are commensurate with the student's abilities, and disabilities, thereby promoting successful participation in the general education program.

WOBURN MEMORIAL HIGH SCHOOL

WORK STUDY PROGRAM

COURSE TITLE: Work Study

LEVEL OFFERED: This course is not leveled. 991 (Pass/Fail)

PREREQUISITES: Available to seniors in good standing. Underclassmen in special or extenuation circumstances may also be admitted. Students must elect four full-time subjects including English.

DESCRIPTION: The Work Study Program permits high school students to prepare for the world of work and future careers. Through the program, students gain valuable experience and job skills as they explore possible careers.

Work Study students are required to fill out the work study application online in Google Classroom. Students will take a picture for the parent, student and employer's signature from the original PDF document. Through Goggle Classroom, students will electronically submit the evaluation once a month with a copy of a current pay stub. The mid-year and final exam grades will be the student's current resume.

Note: Work Study students are not eligible for High Honors and Honors unless they are enrolled in five full time subjects/30 credits.

DRIVER EDUCATION NON-CREDIT BEARING COURSE

This eight-week course offers instruction in the classroom and behind the wheel in a dual controlled automobile. It emphasizes safety and demands familiarity with requirements for the legal operation of motor vehicles. Certificates issued by the Registry of Motor Vehicles are granted to those who successfully complete the course. Driver Education is offered on a tuition basis. The class meets after school. No academic credit is given.

HARLOW LIBRARY

The Harlow Library is the library/media center of Woburn Memorial High School. It is named in memory of Dr. John Harlow, a prominent physician during the nineteenth century, who was involved in a famous case in which a railroad worker, Phineas Gage, had a metal rod blown through his head. This man lived, but his personality changed greatly. Dr. Harlow correlated Gage's behavioral changes with the area of frontal damage to the brain. (*Science*, 20 May 1994, p.1102.) Dr. Harlow and his wife left bequests in their wills to buy books for the high school library.

The Harlow Library contains a variety of print and non-print information. The library has 34 on-line computers (work stations) and 3 printers. The library has access to many on-line services as well as the resources of the Woburn Public Library. As a member of the Massachusetts Library System, the library computers provide access to many databases that can be used for class research projects. These resources are also available for home use by students and faculty through the library website.

The library has a variety of audio visual equipment such as CD players, televisions with DVD/VCR combination and projectors to be loaned to classes. The library facility is also equipped with a video projector with a computer. Teachers and students are able to do Power Point, show DVDs or videos to classes. There are also two Smart Boards for project use as well as four small project rooms used for small class assignments. The library has also added a professional collection of materials for staff use. These materials feature the latest handbooks and manuals on a variety of subjects for teachers to use with their classes.

The library is open Monday through Thursday from 7:00 a.m. to 3:00 p.m., and on Friday from 7:00 a.m. to 1:50 p.m. Students may use the library during study periods or before or after school. Classes also come to the library to work on projects. A major goal of the library/media center is to provide materials and individualized instruction to help develop the research and critical thinking skills of students. Another purpose of the library/media center is to encourage reading. To support this endeavor, the library has many books and magazines for pleasure reading. The Harlow Library is a busy place.

EXCELLENCE IN ACADEMICS, ATHLETICS, AND ACTIVITIES

WOBURN MEMORIAL HIGH SCHOOL

POLICY STATEMENT OF WOBURN PUBLIC SCHOOLS

It is the policy of Woburn Public Schools not to discriminate on the basis of race, color, sex, religion, national origin, or handicap in its educational programs, activities or employment practices as required by title IX, Chapter 622 and section 504 of the Public Law 94-142. Title IX of the Education Amendments of 1972 says, "No person...shall, on the basis of sex, be excluded from participation in, be denied benefits of, or be subjected to discrimination under and education program or activity receiving federal financial assistance...Chapter 622 of the Acts of 1971 Massachusetts General Laws states...Every person shall have a right to attend the public schools of the town where he actually resides, subject to the following section. No person shall be excluded from or discriminated against in admission to a public school of any town, or obtaining the advantages, privileges, courses of study, extracurricular activities or services of such school on account of race, color, sex, religion, or national origin. Section 504 of Public Law 94-142 assures non-discrimination of handicapped students in the public schools.

Inquiries regarding compliance with above-mentioned laws may be directed to:

Mr. James Duran
Woburn Memorial High School
88 Montvale Avenue
Woburn, MA 01801
781-937-8210 ext. 10119

Or you may contact the following:

Chapter 622
Bureau of Educational Opportunity
178 Tremont Street
Boston, MA 02111

Title IX and Section 504

The Office of Civil Rights
Department of Health Education and Welfare
Washington, D.C. 20201

WOBURN MEMORIAL HIGH SCHOOL

ATHLETIC TEAMS

We offer a variety of athletic teams for your student to participate in. The fall teams start practicing the last two weeks in August. They have try outs the first week of school. The winter teams typically have try outs the first week in December. The spring teams usually have try outs the last week in March.

Fall

- Soccer - Boys Varsity
- Soccer - Boys JV
- Soccer - Boys Freshman
- Soccer - Girls Varsity
- Soccer - Girls JV
- Soccer - Girls Freshman
- Football -Varsity
- Football - Freshman
- Golf
- Cross Country – Boys/Girls
- Field Hockey - Varsity
- Field Hockey - JV
- Field Hockey - Freshman
- Cheering - Football
- Swimming -Varsity
- Volleyball

- Roy Gomes
- Robert Campbell
- Dana Seitz
- Jenna Fralick
- Brittany Murphy
- Patrice Higgins
- John “Jack” Belcher
- Adam Lapon
- Brian Keeley
- James Fletcher
- Barbara Locke
- Elizabeth Miller
- TBD
- Judy Borselli
- Courtney Eisenberg
- Scott Roy



Winter

- Hockey - Boys Varsity
- Hockey – Boys JV
- Indoor Track - Boys
- Indoor Track - Girls
- Hockey - Girls Varsity
- Basketball - Girls Varsity
- Basketball - Girls JV
- Basketball - Girls Freshman
- Basketball - Boys Varsity
- Basketball - Boys JV
- Basketball - Boys Freshman
- Wrestling
- Gymnastics

- Jim Duran
- Tom O’Grady
- Joseph Curran
- James Fletcher
- Bob MacCurtain
- Steve Sullivan
- Mike Fowle
- Adam Lapon
- Thomas Sullivan
- Zach Friedman
- Randy Parker
- Mike Parziale
- Colleen Morrison



Spring

- Baseball - Varsity
- Baseball - JV
- Baseball - Freshman
- Softball -Varsity
- Softball - JV
- Track - Boys
- Track - Girls
- Lacrosse - Girls Varsity
- Lacrosse - Girls JV
- Lacrosse - Girls Freshman
- Lacrosse - Boys Varsity
- Lacrosse - Boys JV
- Tennis - Boys Varsity
- Tennis - Girls Varsity

- Joe Wells
- Doug Connolly
- Robert Campbell
- Courtney Sigsbury
- TBD
- Mike Fowle
- Jacqui Barrett
- Maggie Meagher
- Amanda Chase
- Adam Lapon
- TBA
- TBA
- Sean Murphy
- Steve Sullivan



Bell Schedule

7:00 am	Administration on duty
7:15 am	Teachers on duty
7:27 am	Warning bell to go to period 1
7:30 am to 8:17 am	Period 1
8:21 am to 9:13 am	Period 2
9:17 am to 10:04 am	Period 3
10:08 am to 10:55 am	Period 4
10:59 am to 11:21 am	Period 5 first lunch block
11:23 am to 11:45 am	Period 5 second lunch block
11:47 am to 12:09 pm	Period 5 third lunch block
12:13 pm to 1:00 pm	Period 6
1:04 pm to 1:51pm	Period 7
2:00 pm	Extra help, athletics, after school activities

Advisory Program

What is Advisory?

Advisory is a weekly program to strengthen communication among students, between faculty and students, and to develop communication links between school and home. It encompasses every student and faculty member.

Who is an Advisor?

Advisors are homeroom teachers who are teamed up with other faculty members to lead the assignments.

Where will this take place?

Advisory takes place in homeroom on Fridays. The block is 20 minutes, between periods two and three.

How does the program work?

Advisors will have access to the Advisory Google classroom that has a main calendar with dates and assignments. Advisors have assignment and submit results into the classroom after the advisory period.

Advisory Themes

- Grade 9 – Orientation - Adjustment to high school environment
- Grade 10 – Exploration - Careers and life's opportunities
- Grade 11 – Action - Planning for post high school experience
- Grade 12 – Transition - Ready for life after high school