

**PROGRAM OF STUDIES
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Mission Statement

Learning is the central purpose of Framingham High School. The school community provides a rigorous comprehensive program, which reflects the core beliefs of the Framingham Public Schools. The fundamental role of the staff is to foster effective thinking and learning and to provide opportunities for all students to become independent learners.

Accreditation Statement

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

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

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the Association at 209 Burlington Road, Bedford, Massachusetts 01730, telephone number (781) 271-0022.

Non-Discrimination Policy

The Framingham Public Schools does not discriminate on the basis of sex in the educational programs or activities which it operates and is required by Title IX not to discriminate in such a manner. In addition, no child shall be excluded from or discriminated against in admission to a public school or in obtaining the advantages, privileges, and courses of the study of such public schools on account of race, color, sex, religion, national origin or disability.

INTRODUCTION TO THE PROGRAM OF STUDIES

Welcome to the Framingham High School Program of Studies. The years you spend here at FHS are very important to your future. It is imperative that you make conscientious choices about your four-year academic program. There are certain goals and competencies that you will want to achieve in your time here. The program of studies will provide you with all the information you need to make thoughtful choices about your academic future.

Use this guide to understand the opportunities available to you. Inside you will find pertinent information regarding completion of the FHS graduation requirements. There are also helpful materials regarding scheduling and course selection, including narratives of the diverse array of courses offered. Finally, there are sections devoted to special programs and college standards.

Your guidance counselors are available to advise you on your four-year program planning and all aspects of this program of studies. The guidance department consists of eight counselors and two secretaries. All students are assigned to counselors alphabetically and the assignment will be maintained throughout the high school years. The relationship that grows between the student and counselor is the paramount factor in guidance. We strongly encourage students to access this service as counselors work with students on college and career planning, decision-making, selection of the academic program, personal and developmental issues, and referrals. Contact with counselors may be established via phone, e-mail, or through the guidance secretaries, ext. 1801 and 1802. In terms of course selection, it is important to note that the counselor is the student's advocate. He/she has an overall view of the student's educational history, current level of achievement, goals and aspirations.

GRADUATION REQUIREMENTS

The Framingham High School diploma is awarded in recognition of the completion of certain academic requirements. The diploma also signifies that the student has, in the opinion of the School Committee, achieved standards of conduct during the period up to and including the time of graduation that will include him/her as a successful graduate of the Framingham Public Schools. Academic requirements for the high school diploma shall be attached to this policy and at the request of the School Administration, these requirements shall be reviewed by the School Committee. A minimum of 22 credits is required for graduation. During the senior year (Grade 12) full-time students must pass a total of 5 credits for graduation. The following class requirements must be met in order to graduate:

English	4 credits
History and Social Sciences¹ (1 credit in Modern World History, USI and USII)	3 credits
Mathematics	3 credits
Science	3 credits
World Languages	2 credits
Practical Arts²	1 credit
Fine Arts³	1 credit
Physical Education⁴	1.5 credits
Health	.5 credit

¹ History and Social Science mandated course requirements. Changes are due to alignment with new 2002 Massachusetts DOE Curriculum Framework.

² Practical Arts includes all courses in Technology Education, Family and Consumer Sciences and Computer Sciences.

³ Fine Arts include all courses in Art, Music, Theatre, Humanities, Graphics, Desktop Publishing, Architectural Design, Photography, TV Production, Interior Design, and Fashion Design.

⁴ Each semester course is worth .5 credit.

Courses that meet the Practical and Fine Art requirement for graduation
(credits in parenthesis)

Practical Arts	Fine Arts	Either
<u>Technology Education</u>	<u>Art</u>	<u>Technology Education</u>
581 Yearbook Production (.5)	649 Introduction to Art (.5)	540 Graphic Communications 1 (.5)
582 Yearbook Production (1)	641 Art 2 (1)	541 Graphic Communications 2 (.5)
533 Electronics/Robotics 1 (1)	644 Art 3 (1)	542 Graphic Communications 3 (.5)
534 Electronics 2 (.5)	654 Art 4 (1)	543 Production Graphics (.5)
530 Introduction to Networking (.5)	645 A.P. Studio Art (1)	544 Computer Graphics 1 (.5)
531 Web Design/HTML (.5)	444 History of Art (.5)	558 Computer Graphics 2 (.5)
565 Advanced Web Design/Flash (.5)	630 Ceramics 1 (.5)	539 Digital Photography with Photoshop (.5)
556 Robotics and Automation (.5)	631 Ceramics 2 (.5)	545 Introduction to Photography (.5)
537 Computer Science (1)	633 Sculpture (.5)	546 Advanced Photography Concepts(.5)
560 Engineering Drawing & Design 1 (.5)	634 Multi-Media Imaging (.5)	549 Television Production 1 (.5)
561 Engineering Drawing & Design 2 (.5)	655 Painting 1 (.5)	550 Television Production 2 (.5)
562 Pre-Engineering (Science option) (.5)	635 Painting 2 (.5)	532 Desktop Publishing (.5)
563 Engineering Technology (.5)	657 Art in the Theater (.5)	551 Architectural Design (.5)
570 Introduction to Manufacturing (.5)	636 Fiber and Textiles (.5)	552 Advanced Architectural Design (.5)
571 Advanced Manufacturing (1)	646 Cartooning and Illustration(.5)	
553 Construction Technology (1)		<u>Art</u>
572 Transportation Technology (.5)	<u>Music</u>	651 Crafts A (.5)
573 Power and Energy Technology (.5)	664 Music Theory 1 H (1)	652 Crafts B (.5)
590 Ind. St. in Technology/Engineering (.5)	665 Music Theory 2 AP (1)	
575 ESL Technology/Engineering (.5)	660 Introduction to Music (.5)	<u>Theater</u>
	661 Music of the Twentieth Century (.5)	696 Performance Workshop A (.5)
<u>Family and Consumer Science</u>	662 Instrumental Ensemble (1)	698 Performance Workshop B (.5)
600 Foods 1 (.5)	663 Chorus (1)	695 Advanced Acting (1)
606 Clothing 1 (.5)	676 Piano/Keyboard I (.5)	
601 Advanced Foods (.5)	677 Piano/Keyboard I (.5)	<u>Family and Consumer Sciences</u>
602 World Foods (.5)	674 Guitar A (.5)	614 Interior Design (.5)
603 Chef's Course (.5)	675 Guitar B (.5)	608 Fashion Design (.5)
607 Advanced Clothing (.5)	672 Jazz Workshop I (.5)	
604 Diet for Health and Fitness (.5)	673 Jazz Workshop II (.5)	
610 Psychology for Living (.5)		
611 Contemporary Living (.5)	<u>Theater</u>	
612 Child Growth and Development (1)	680 Acting I (.5)	
613 Early Childhood Education (1)	681 Acting II (.5)	
616 Women's Health Part I (.5)	684 Music Theatre I (.5)	
617 Women's Health Part II (.5)	685 Music Theatre II (.5)	
615 Fashion Retailing (.5)	697 Resiliency for Life Theater (.5)	
622 Introduction to Health Care Careers (.5)	691 Acting and Play Study I (.5)	
623 Infant & Toddler Care (1)	692 Acting and Play Study II (.5)	
<u>Business Education</u>		
505 Introduction to Business (1)		
502 Accounting I CPI (1)		
501 Introduction to Accounting (.5)		
514 Keyboarding and Business Applications (.5)		
518 Word Processing (.5)		
523 Introduction to Microsoft Office (.5)		
506 Banking and Finance (.5)		
520 Personal (Micro) Computer (.5)		
522 Advanced Computer Applications (.5)		
507 Business and Personal Law (.5)		
508 Principles of Marketing (.5)		
509 Entrepreneurship(.5)		
<u>Math</u>		
243 C++ (1)		
240 Intro to Java (1)		
266 AP Computer Science (1)		

SCHEDULING

Course Selection

Planning an educational program is an ongoing process and should involve as many people as possible, including the student, parents, teachers and guidance counselors.

1. Attend the Orientation for Parents and Students - This is usually held in mid-winter for the purpose of providing information and assistance in the course selection process. Department chairs, teachers, counselors and administrators will be participating in this process.

2. Gather Information – A major part of the process of course selection involves the gathering of information. Classroom teachers and guidance counselors are valuable resources at this stage.

This course selection booklet has been prepared with YOU in mind. Read it first to obtain information on the entire high school curriculum and then read the course selection booklet a second time, more carefully, to obtain specific information on those courses which are either required for next year or those in which you have a particular interest and may elect.

The classroom teacher has in-depth knowledge of the content of various courses taught within his/her department. In addition, he/she is usually aware of the level of expectation within each course. Knowing you as a student and the kind of work of which you are capable, your teacher can make valid recommendations as to which courses to take within the department.

Your guidance counselor has a broad overview of the entire curriculum. Besides having a strong sense of the student's performance and ability level, the counselor is very much aware of courses necessary to fulfill graduation requirements. Your guidance counselor is also able to provide good advice about the kind of program and courses which will be helpful as you prepare to pursue post-high school plans, whether these be a four/two year college/technical school or immediate entry into the world of work. A student conference can be arranged by coming to the guidance office to make an appointment. A parent-counselor conference can be arranged by calling the school at 508-620-4963, extension 1801. Not all student choices can be accommodated because of scheduling constraints and school placement policies. Final placement can be discussed with the principal.

3. Work Together to Select Courses - Course selection marks the beginning of responsible decision-making for many students. Parents should be involved in giving both help and direction as a student works through his/her decisions.

Level Selection

All course levels are designed to provide maximum intellectual challenge for each student. Parents/guardians make placement decisions based on past academic performance, and teacher recommendations. Placement assumes that ability will allow success, but student effort is assumed; low grades are not automatically a basis for dropping levels. It is also assumed that students and teachers will anticipate upward movements in level placements based upon intellectual growth over years of schooling. Placement levels may vary in different subject areas, and trial attempts at upward placement are encouraged. **The Honors, College Prep 1, and College Prep 2 levels are differentiated by the degree of difficulty, intensity of study, and pace.**

Course levels are designated as follows:

Advanced Placement-AP: A course culminating in a national examination that can lead to advanced placement and/or credit in college. These courses will follow the syllabi suggested by The College Board.

Honors-HON: An intense course that demands independent learning as well as critical, creative, and analytic thinking.

College Prep-CP1: This is the traditional preparation for four year colleges.

College Prep-CP2: These courses will meet minimal requirements for some colleges.

Unweighted: These courses will meet minimal requirements. Represents courses that are not computed into rank or GPA. These courses may be very challenging, but they are not considered to be predictors of college success.

Course Changes

The course selection process is one that should be a cooperative venture among the student, the parent, the teacher, and the counselor. It is expected that when these course selections are made, the student will have the fortitude to stick with the decision. If schedule changes are necessary, time-lines are as follows:

- 1. All schedule changes for a semester course must be initiated within the first ten school days of the year.**
- 2. All schedule changes for a year-long course must be initiated within the first fifteen school days of the year.**

Please note, however, that any such change must be discussed with the student's parents/guardians, teachers involved in the change, and the guidance counselor. Although some changes may be made, it should be clearly understood that the reason has to be valid and that the requests will not be automatically honored. **Any student withdrawing mid-year from a full-year course will not receive credit.**

GRADING SYSTEM

Grade	Numerical Equivalent	Grade	Numerical Equivalent
A+	4.25	C+	2.75
A	4.0	C	2.50
A-	3.75	C-	2.0
B+	3.50	D+	1.75
B	3.25	D	1.50
B-	3.0	D-	1.0
		WP	
		WF	

Defining letter grades

Grade A:

This grade is received by students who demonstrate superior achievement in the attainment of course objectives.

Grade B:

This grade is received by students who consistently meet the objectives of the course.

Grade C:

This grade is received by students who have demonstrated an acceptable level of achievement for the course objectives with some demonstrable deficiency in performance.

Grade D:

This grade represents a deficiency in student achievement. While credit is awarded, a final grade of D indicates a minimal and unsatisfactory level of achievement for the course objectives.

Grade P:

This grade is used in circumstances where standard grading practices do not apply. Credit is awarded.

Grade F:

This grade indicates that the student had failed to meet the minimum objectives of the course. No credit is awarded for this final grade.

Grade I:

This grade indicates that the student must complete some assignment(s) in order to receive a grade for credit. It is expected that student and teacher will establish a timetable for the completion of this work and consider the implications for not meeting the timetable.

Grade WP/WF:

This grade indicates that the student withdrew from a course after the add/drop review and was passing/not passing at the time of withdrawal.

Grade Point Average: weighted according to level/GPA factor.

Class Rank: weighted based on weighted GPA. Rank is reported in percentile bands.

Course Level	Transcript Designation	GPA Factor
Advanced Placement	AP	+0.75
Honors	HON	+0.50
College Prep - 1	CP1	+0.25
College Prep - 2	CP2	+0
Unweighted	U	Not included in rank

FRAMINGHAM HIGH SCHOOL RUBRICS
Used for Learning Assessment

LISTENING

<u>Learning Standard</u>	<u>Notations</u>
Makes a rudimentary response	
Requests clarification	
Paraphrases to check understanding	
Expresses feelings and ideas	
Displays a willingness to incorporate new ideas objectively	
Analyzes, compares and contrasts information	
Draws conclusions, makes judgments based on the analysis of facts	

SPEAKING

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not Observed
Demeanor	Polished delivery	Confident and at ease	Shy, but makes an adequate presentation	Nervous, reticent, hesitant to the degree that it distracts the audience
Content	Full development, exhibiting unique or creative use of material	Full comprehension of subject matter; logical presentation' appropriate length	Understanding of subject matter. Presentation is organized	Lack of understanding of the subject matter, poorly organized, inappropriate length
Delivery	Spirited, passionate, and vivid use of language	Volume and rate are clear and appropriate	Either volume or rate is inadequate	Volume and rate are inadequate (i.e. too fast or too slow)
Rapport with Audience	Excellent eye contact; clear, dynamic and highly engaging	Consistent eye contact; focused delivery	Some eye contact and enthusiasm	No eye contact; little enthusiasm

READING

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not Observed
Word Analysis Vocabulary Acquisition (decoding strategies including phonics, prior knowledge, structure, and context)	Reads fluently. Understands literal and interpretive grade/language proficiency level vocabulary.	Successfully decodes most grade/language proficiency level vocabulary and creates meaning for key concepts.	Relies on only one decoding strategy and is unable to identify key words and concepts.	Demonstrates no effective strategies for decoding.
Connecting (relating text to one's knowledge, personal experience or other texts)	Uses personal experiences and/or outside materials to make insightful connections related to the topic or theme. Connection and aid to comprehension is explained.	Uses personal experiences and/or outside materials to make thoughtful connections, related to information. Connection is explained.	Relates background knowledge/experience to text. May include superficial connections unrelated to theme or topic.	An irrelevant, non-textual connection.
Predicting (thinking about what one knows, using text features to make predictions about what the text is about)	Develops predictions, interpretations, and/or conclusions about the text that include connections between the text and the reader's background knowledge of ideas and beliefs. Explains how predicting enhances	Draws conclusions and/or makes predictions and can explain the source of the conclusion or prediction.	Draws conclusions or makes predictions that are consistent with text or background knowledge.	Attempts a prediction or conclusion. Prediction is inaccurate or unsubstantiated with textual information.

	comprehension.			
Questioning (generating questions before, during and after reading)	Poses and answers questions to enhance the meaning of text. Explores the ideas and/or issues in the text. Can explain how posing and answering questions deepens comprehension	Asks questions to clarify understanding and indicate higher level of thinking.	Asks questions that refer to literal aspects of the selection.	Asks questions that are inappropriate for the selection.
Summarizing (the process of determining important events or information into a central theme or idea)	Identifies multiple key ideas/concepts/events	Identifies at least one key concept as important in overall text meaning, and clearly explains why by citing support, and/or text structure.	Identifies part of the important information, or just lists facts without explanation.	Random guessing, inaccurate attempt to identify important information from the text.
Inferring (using what is stated in a text in order to interpret what is implied)	Develops interpretations and/or conclusions about the text that include connections between the text and the reader's background knowledge or ideas and beliefs. Can explain how the inference enhanced comprehension.	Draws conclusions and/or creates interpretations and can explain the source.	Draws conclusions or creates interpretations that are consistent with text or background knowledge.	No response/inference or inaccurate response or unsubstantiated with text information.

WRITING

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not Observed
Thesis/Hypothesis and Focus	Unique thesis/hypothesis clearly stated. Focus evident throughout.	Thesis/hypothesis clearly stated. Focus evident but contains some extraneous information.	Thesis/hypothesis poorly developed, limited and/or vague. Focus is unclear.	No clear thesis/hypothesis. Lacks focus.
Organization and Transition	Clear, logical, well-planned organization with effective transitions.	Organization is evident but not consistent. Transitions are used.	Inconsistent organization. Ineffective transitions.	Lacks organization. Little to no evidence of transitions.
Support, Elaboration, Evidence and Analysis	Specific and sufficient examples and details support thesis/main idea. Interpretation of evidence leads to logical and unique conclusions.	Most examples and details support thesis/main idea. Interpretation of evidence leads to logical and obvious conclusions.	Some examples and details support thesis/main idea. Interpretation of evidence leads to faulty conclusions.	Most examples and/or details do not support thesis/main idea. Illogical and/or no conclusions.
Word choice, Language, Tone	Effective and rich choice of language including content specific vocabulary. Language appropriate for intended audience or task.	Appropriate choice of language and content specific vocabulary. Evidence of awareness of audience or task throughout most of the work.	Limited choice of appropriate language and content specific vocabulary. Limited awareness of audience or task.	Inappropriate and vague choice of language and content specific vocabulary. Little to no awareness of audience or task.
Mechanics and Usage (grammar, spelling, sentence structure) Proofreading	Mechanics are correct. Sentences patterns are varied. Proofreading has resulted in effective editing and revision.	Mechanics are mostly correct; errors do not affect comprehension. Sentences are complete, and show variation in structure. Proof-reading shows evidence of editing with some revision.	Mechanical errors are evident. Some sentence fragments and/or run-ons. Word choice is not always acceptable. Proofreading shows evidence of some editing, but no revision.	Frequent mechanical errors that confuse the reader. Sentences are mostly fragments or run-ons. Word choice is vague and unacceptable. Evidence of proofreading is lacking.

PROBLEM SOLVING

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not Observed
Understanding the problem	Demonstrates a superior understanding of multiple facets	Demonstrates basic understanding	Demonstrates partial understanding	Demonstrates no understanding of problem
Choosing and implementing a solution strategy	Chooses a correct strategy that addresses multiple facets of the problem both obvious and subtle	Chooses a correct strategy that effects many aspects of the problem	Chooses a strategy that does not effectively address all elements of the problem	Unable to begin to solve problem, or uses totally inappropriate strategy
Arriving at a solution	Resolves all aspects of the problem	Resolves the overall problem	Achieves partial resolution	Incorrect resolution
Explanation of resolution	Gives a clear, sequential explanation that addresses both the obvious and subtle aspects of the problem	Gives a clear sequential explanation that omits some subtle aspects of the problem	Gives an incomplete explanation	Unable to explain

INFORMATION LITERACY

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not

				Observed
Formulates questions based on identified information needs	Revises, adds and deletes questions as information needs change	Poses both broad and specific questions to help in finding information	States only broad questions	Unable to pose a question or poses one broad question
Locates and uses information sources	Locates and uses a full range of electronic, print and other sources to meet differing information needs	Locates and uses information from a variety of electronic, print and other sources (including primary and secondary) to meet an information need	Locates and selects information from only one or two appropriate sources to meet an information need	Unable to locate or select information from an appropriate source to meet an information need
Evaluates information	Supports judgments of relevance, accuracy currency and completeness of information sources in relation to a range of topics and information needs; supports judgments of inaccurate misleading or biased information	Compares and contrasts information sources to determine which are more relevant, accurate, current and complete; distinguishes between fact and opinion; recognizes inaccurate, misleading or biased information.	Recognizes relevance of a source to an information need	Unable to determine relevance of a source to an information need
Applies information	Integrates previous knowledge with information from a variety of sources to create new meaning. Demonstrates flexibility in organizing and presenting information for a variety of purposes or audiences.	Draws conclusions by combining what is already known about a topic with new information. Organizes and presents information in a way that is appropriate for a purpose or audience.	Recognizes and understands new information and ideas Understands multiple ways to organize information (e.g. chronological, topical, hierarchical)	Does not recognize or relate new information to previous knowledge or experience Unable to organize information gathered from one or more sources
Respects information sources	Acknowledges intellectual property rights (copyright, trademark, etc.)	Avoids plagiarism; determines when to directly quote or paraphrase information; follows MLA format to cite sources	Recognizes the need to cite sources; attempts to follow MLA format	Copies material directly from source without citation

STUDY SKILLS

Criteria	4 Always	3 Usually	2 Sometimes	1 Never/not Observed
Time Management				
Participates in all class activities				
Makes a "to do" list for day and week				
Allows sufficient time to complete homework and assignments				
Budgets time to work on two or more projects or responsibilities at once				
Organization				
Arrives on time for classes				
Brings proper tools to class/home (e.g. covered textbook, pen/pencil, etc.)				
Writes assignments in an assignment notebook (or consistent place)				
Sets goals and meets guidelines				
Accesses FHS academic support resources				

(e.g. after-school help sessions with teacher, library)				
Seeks out teachers if absent to make up missed work				
Note-Taking				
Maintains an organized notebook				
Uses active listening and reading skills (e.g., takes notes, asks questions, uses mental imagery)				
Takes notes that include what is important: main ideas, supporting details, key terms				
Test Taking				
Prepares for quizzes, tests, midterm exams and final exams				
Uses test preparation strategies (e.g. a mnemonic device, study guide, study partner)				
Follows test-taking procedures (e.g. read question, check work, follow directions)				
Uses form and content specific test-taking strategies (e.g. multiple choice, open response questions, graphic organizers)				

TECHNOLOGY

Criteria	4	3	2	1
	Always	Usually	Sometimes	Never/Not Observed
Use of computers	Consistently selects appropriate hardware and software tool for the task	Alternates between multiple applications within a project	Demonstrates file management skills	Uses efficient keyboarding techniques
Computer applications	Imports/exports and links data between various applications	Uses basic functions of software such as database, spreadsheet and graphics	Effectively uses a variety of search engines	Uses necessary features of word processing
Responsible use of technology	Evaluates all electronic sources for validity and accuracy	Consistently cites electronic sources correctly	Demonstrates appropriate use and care of software and hardware	Observes the district's "Acceptable Use Policy"
Use of computers to communicate	Creates a multi-media presentation, desktop published report or web page incorporating data from several sources	Collects, organizes, analyzes, and graphically presents data	Expresses ideas with graphics, photos, and other digital media	Utilizes a variety of web sites for research and communication
Use of technologies for content	Effectively uses a variety of technologies	Uses one or two technologies independently	Uses technology with peer or teacher assistance	Unable to use technology

***Note: In order to attain a higher level, evidence of previous skill must be demonstrated.**

Summer School Regulations

In the Framingham Summer School, students are able to take courses for either original or make-up credit. In order to receive make-up credit for a course, a student needs to have completed the full course with good attendance during the school year, even though the student still received a failing grade. To receive credit, the signature of the student's vice-principal must be obtained before summer school registration begins.

Early Graduation

There are a number of alternative methods for students to pursue early graduation. It is the policy of the Framingham School Committee that:

Upon the written request of a student and with the approval of the student's parents/guardians, guidance counselor and appropriate grade administrator, a junior may be considered for early graduation at the completion of his/her junior year if he/she has been accepted to an institution of higher learning or actively employed, engaged in independent study or some form of acceptable community activity. If a junior meets the above criteria and has completed the requirements for the diploma, the School Committee will, upon recommendation of the Superintendent of Schools, award the diploma.

Any student who has completed three years of high school and has been accepted to an institution of higher learning but who has not met all the requirements for the diploma, with the approval of his/her parents, guidance counselor and appropriate administrator may request that the School Committee accept the successful completion of the first year of post secondary study as the equivalent of the fourth year of high school. The diploma will be awarded at that time.

POST-SECONDARY REQUIREMENTS

Massachusetts State College and University Admissions Standards

Required Courses

To be considered for acceptance to a Massachusetts state college or any of the four university campuses, you need to successfully complete the following 16 courses in high school. A course is equal to one full school year of study.

English	4 courses
Mathematics	3 courses (algebra I & II and geometry or trigonometry or comparable course work)
Science	3 courses (including two with laboratory work)
History and Social Studies	2 courses (including one in US history)
World Languages	2 courses (in the same language)
Electives	2 courses (from the above subjects or from the arts & humanities or computer sciences)

These courses must be college preparatory level – if you are not sure whether a course is college preparatory, check with your guidance counselor to be sure it will count toward the 16 courses that you need.

NCAA Requirements for Student Athletes

Students who plan to participate in varsity athletics at a National Collegiate Athletic Association Division I or II institution must satisfy the following requirements:

1. Graduate from high school.
2. Earn the equivalent of a C average in a core curriculum of thirteen college preparatory courses. These courses must be completed before graduation.
3. Achieve a minimum score of 820 on the SAT. For Division I schools, this score will vary according to an eligibility index that includes grade point average.

Students who have these aspirations should check with their guidance counselors and complete the NCAA application process in the fall of senior year.



Bilingual, ESL and Sheltered English Programs

The ESL/Bilingual and Sheltered English Program provides a full range of academic classes for students with limited English proficiency. Classes are offered in Spanish, Portuguese and English. All classes meet the requirements for graduation.

The purpose of the program is to prepare English language learners for high school graduation and opportunities for post-graduate study. Content classes in math, science and the social sciences are offered in Spanish and Portuguese. Content area courses are also taught in English using sheltered techniques. Six levels of English as a Second Language, ranging from beginning to advanced, are also offered. This allows students to study high school level curriculum while developing their proficiency in all four areas of the English language: listening, speaking, reading and writing. A comprehensive language and literature program is also offered in Spanish and Portuguese. A literacy component, Let's Get Ready! has been added. MCAS preparation classes in English, Math and Biology are also offered.

COURSE OFFERINGS

English as a Second Language

- ESL 1A for Newcomers
- ESL 1A/1B Science, Math and Technology
- ESL 1A/1B Social Studies
- ESL 1A Home, School and Community
- ESL 1B Experiences in Am. Living
- ESL 2A/2B Social Studies and Literature
- ESL 2A/2B Math, Science and Technology
- ESL 3A Literature
- ESL 3A Reading and Writing in the Content Areas
- ESL 3B Transition
- ESL Freshmen Seminar
- Newcomer Seminar

ESL Content

- ESL Earth Science
- ESL Biology
- ESL Chemistry
- ESL Algebra
- ESL Geometry
- ESL Math I
- ESL Modern World History
- ESL US History 1
- ESL US History 2

Bilingual Content

- Spanish Earth Science
- Portuguese Biology
- Portuguese Algebra
- Portuguese US History 1
- Spanish Integrated Math
- Portuguese Integrated Math
- Portuguese Modern World History
- Spanish US History 1

Language and Literature

- Spanish Reading and Writing
- Portuguese Reading and Writing
- Port. Language and Literature
- Spanish Language and Literature
- Let's Get Ready

MCAS Prep

- ESL MCAS English, Math, Biology

Electives

- College Entrance Prep
- ESL Health
- Creative Writing for the ELL Student



**ESL/Bilingual and Sheltered English Program
Sequence of Courses**

Due to the various language and/or educational needs of our students, individual programs will be adjusted by the department chair and guidance director.

ESL Level 1 (Beginner)	ESL Level 2 (Intermediate)	ESL Level 3 (Advanced)
ESL 1A Home, School, and Community ESL 1A Social Studies ESL 1A Math, Science and Technology or ESL 1B Experience in American Living ESL 1B Social Studies ESL 1B Math, Science and Technology ESL Freshmen Seminar (9th) Newcomer Seminar	ESL 2A Math, Science and Technology ESL 2A Social Studies or ESL 2B Social Studies ESL 2B Math, Science and Technology ESL Freshmen Seminar (9th) Newcomer Seminar	ESL 3A Reading and Writing in the Content or ESL 3B Transition and Standard Curriculum English as appropriate ESL Freshmen Seminar (9th) Newcomer Seminar
Gym	Gym	Gym
Content classes in Portuguese or Spanish*	Content classes in ESL	Content classes in the Standard Curriculum
Spanish Integrated Math Spanish Earth Science Spanish United States History 1 Portuguese Modern World History Portuguese United States History Portuguese Integrated Math Portuguese Algebra Portuguese Biology	ESL Algebra ESL Geometry ESL Math I ESL Biology, ESL Earth Science ESL Chemistry ESL Modern World History ESL US History 1 ESL US History 2 ESL Health	Content Electives in the Standard Curriculum
Electives	Electives	Electives
Language and Literature Span. Language and Literature 1 Spanish Language and Literature 2 Spanish Language and Literature 3 Spanish Culture and the Media Portuguese Language and Lit. 1 Portuguese Language and Lit. 2 MCAS Prep MCAS Preparation (Math, English, Biology) as appropriate to level and grade Other electives **Let's Get Started Program *Spanish Reading and Writing *Portuguese Reading and Writing **Dept. Chair permission	Language and Literature Spanish Language and Literature 1 Spanish Language and Literature 2 Spanish Language and Literature 3 Spanish Culture and the Media Port. Language and Literature 1 Port. Language and Literature 2 MCAS Prep MCAS Preparation (Math, English, Biology) Other electives College Test Prep Creative Writing for the ELL Student **Let's Get Started Program *Spanish Reading and Writing *Portuguese Reading and Writing ** Dept. Chair permission	Language and Literature Spanish Language and Literature 1 Spanish Language and Literature 2 Spanish Language and Literature 3 Spanish Culture and the Media Portuguese Language and Literature 1 Portuguese Language and Literature 2 MCAS Prep MCAS Preparation (Math, English, Biology) Other electives College Test Prep Creative Writing for the ELL Student **Let's Get Started Program *Spanish Reading and Writing *Portuguese Reading and Writing **Dept. Chair permission

*Parental bilingual waiver required for these classes

BILINGUAL, ESL and Sheltered English Program
Genoveffa Grieci, Department Chair

ESL courses are aligned with Massachusetts English Language Proficiency Benchmarks and Outcomes and the FHS ESL curriculum.

800 ESL1A for Newcomers H/S/C CP2

801 ESL1A for Newcomers M/S/T CP2

.5 credit

This course is designed for the beginning ESL student who enters school after the beginning of the year. Emphasis is placed on developing the four language areas (Listening, Speaking, Reading, and Writing). (Semester II course, open to grades 9,10,11)

803 ESL 1A Science, Math and Technology CP1

1 credit

This is a beginning English as a Second Language course in basic grammar and the four language areas (Listening, Speaking, Reading, and Writing). Themes and vocabulary are related to Math, Science and Technology. (Full year course, open to grades 9,10,11)

805 ESL 1A Social Studies CP1**1 credit**

This is a beginning English as a Second Language course in basic English grammar and the four language areas (Listening, Speaking, Reading, and Writing). Themes and vocabulary are related to Social Studies. The course is framed around major American holidays to provide students with culture awareness of American life. Other themes will include family, literature and world geography and cultures. (Full year course, open to grades 9,10,11)

807 ESL 1A Home, School & Community CP1**1 credit**

This is a beginning English as a Second Language course in basic English grammar and the four language areas (Listening, Speaking, Reading, and Writing). Themes and vocabulary are related to Home, School and Community. Through an experience-based approach, students acquire language that will enable them to function in school and in the community. (Full year course, open to grades 9,10,11)

809 ESL 1B Math, Science, and Technology CP1**1 credit**

This is a high beginning English as a Second Language course in basic grammar and the four language areas of Listening, Speaking, Reading, and Writing. The themes and vocabulary are related to math, science, and technology. Texts include Exploring the Titanic and Memory Boy. (Full year course, open to grades 9,10, 11)

811 ESL 1B Social Studies CP1**1 credit**

This is a high beginning English as a Second Language course in basic English grammar and the four language areas (Listening, Speaking, Reading and Writing) with thematic vocabulary related to Social Studies. (Full year course, open to grades 9, 10, 11)

813 ESL 1B Experiences in America Living CP1**1 credit**

This course allows the ESL/Bilingual student the opportunity to expand on his/her basic vocabulary, emerging writing skills, understanding and knowledge of the English language and American culture here in the United States. The student develops skills in reading comprehension, process writing, listening, and speaking through themes and topics related to the student's current circumstances in the United States. (Full year course, open to grades 9, 10, 11)

815 ESL 2A Math, Science, and Technology CP1**1 credit**

This course is designed for students who possess an intermediate level of English comprehension in both written and oral work. It is a continuation of ESL 1. The students use math, science, and technology themes and vocabulary to develop their listening, speaking, reading, and writing skills. Themes include: World Population, Recycling and Garbage, Media Awareness, and Sleep, Dreams, and the Biological Clock. (Full year course, open to grades 9, 10, 11, 12)

817 ESL 2A Social Studies and Literature CP1**1 credit**

This course is for the English language learner who possesses an intermediate level of English comprehension in both oral and written work. Students are introduced to the short story, novel, poetry and drama along with thematic units in social studies exploring the complexities of today's society. (Full year course, open to grades 9, 10, 11, 12)

857 ESL 2B Math, Science, and Technology CP1**1 credit**

This course is designed for students who possess a high intermediate level of English comprehension in both oral and written work. Students continue to perfect reading, writing, listening, and speaking skills in areas of math, science, and technology. Themes include: Astronomy, Memory and Learning, Inventions, and Economy.

859 ESL 2B Social Studies and Literature CP1**1 credit**

This course is for students who possess a high intermediate level of English comprehension in both oral and written work. Representative literary selections from all the genres are studied, focusing on continued development of reading skills and vocabulary. Special emphasis will be placed on some of the social factors, which shape and mold our society. (Full year course, open to grades 9, 10, 11, 12)

819 ESL 3A Reading and Writing in Content Areas CP1**1 credit**

This advanced ESL course is for students who have completed ESL 2 or who enter on an advanced level. Students continue perfecting all aspects of the English language: listening, speaking, reading and writing as it pertains to the content areas of math, science and social studies. Reports and a research paper will be required. This course is designed to prepare students for standard curriculum classes. (Full year course, open to grades 9, 10, 11, 12)

821 ESL 3A Literature CP1**1 credit**

This ESL 3A course is designed for English language learners, on the verge of taking an all-standard curriculum course of study. Students further their acquaintance with a variety of literary forms, including drama, novels, poems and short stories, and seek to integrate all the language areas of reading, writing, speaking, and listening. Reports and a research paper are required. (Full year course, open to grades 9, 10, 11, 12)

823 ESL 3B Transition CP1**1 credit**

This course is designed for the Advanced ESL student who is simultaneously scheduled in this course and one Standard Curriculum English course. Through various genres of literature the student approximates native language proficiency in reading comprehension, writing essay forms, research writing skills, and the "standard curriculum" culture. (Full year course, open to grades 9, 10, 11, 12)

ESL Content Courses

Courses are aligned with the Massachusetts Curriculum Frameworks and standard curriculum at Framingham High School.

799 ESL Math I

1 credit

This course is designed for English language learners to learn, recognize and appreciate the role mathematics plays in the real world. Students will be exposed to pattern recognition, language of algebra, collecting, displaying and analyzing data, basic number theory, probability, statistics and problem solving. The course will be taught using practical applications to everyday life. (Full year course, open to grades 9, 10)

831 ESL Algebra I CP1

1 credit

This course is designed for Bilingual/ ESL students with limited English proficiency to understand the concepts of algebra as a means of representation and as a problem-solving tool. Areas of emphasis include Language and Tools of Algebra, the Real Number System, Operations with Real Numbers and Polynomials, Factoring, Functions, Solving Linear and Systems of Equations, Graphing using tables, and Quadratic Equations. This course prepares students for more advanced math courses. (Full year course, open to grades 9, 10)

833 ESL Geometry CP1

1 credit

Designed for students with limited English proficiency enrolled in ESL or Bilingual programs, this is the sequential course to Algebra I. Students will develop techniques of logical reasoning through the study of geometric figures; use inductive and deductive processes in the study of plane and solid figures; use applications of Algebra to solve problems with circles, polygons, area and volume. Required: Pass Algebra I (Full year course, open to grades 10, 11,12)

861 ESL Biology CP1

1 credit

This course is intended for students from the ESL/Bilingual program who need support in the English language. The course emphasizes the science of living things through class discussions, investigative processes and laboratory experiences. Content covered will range from Biochemistry, Cytology, Genetics, Human systems, Evolution, and Ecology. Dissection may occur in this course. The textbook *Biology* by Millar and Levin will be used will be used. (Full year course, open to grades 9, 10)

825 ESL Earth Science CP1

1 credit

This course, designed for intermediate English language learners, is laboratory centered, with emphasis on students' investigations of the earth through hands-on experiments and analysis of lab data. Major concepts and principles in the field are presented and reinforced by investigations. (Full year course, open to grades 9,10)

895 ESL Health Education

.5 credit

The Health Education Program provides students with the knowledge and skills to make informed, responsible decisions and assist them in living healthy lifestyles. The health instruction will consist of wellness, communication skills, non-infectious and infectious diseases, and social and emotional health. These topics include sexually transmitted diseases, HIV/AIDS, sex and family life education, violence prevention, and substance free lifestyles. The ESL Health Education course parallels the mainstream health curriculum with modifications relative to the students' levels of English language proficiency. (Semester II course, open to ESL students, level 2, in grades 11, 12)

830 ESL Chemistry CP1

1 credit

This chemistry course is intended for students from the Bilingual and ESL programs who still have limitations in English. This laboratory course will cover atomic structure, bonding, mole concept, gas laws, and more as they apply the nature of matter and energy in our world. (Full year course, open to grades (10,11,12)

840 ESL Modern World History CP1

1 credit

This course, for intermediate English language learners, starts c. 1800; students will continue to interpret and analyze the impact of significant world events. The course revisits revolutions in Europe and the Americas and ends with a study of world affairs today. Study will include units on the Enlightenment, industrialization, imperialism, totalitarianism, and the Cold War. Students will improve vocabulary, speaking, and writing skills. (Required full year course, open to grade 9)

892 ESL US History 1 CP1

1 credit

This course, designed for English language learners, will place emphasis on the Constitution, citizens' rights, and democratic governmental form so students may apply this knowledge to successfully function as citizens of the United States. This course represents a social, political, and economic survey of the United States before the arrival of Columbus and continuing to 1877. Units of study include sectionalism, westward expansion, urban development, and the formation of our democratic system. The forces shaping American thinking and society will be a focus. Reports, research papers and outside readings will be required. (Full year course, open to grades 10, 11, 12)

893 ESL US History 2 CP1

1 credit

This course is for intermediate English language learners. The course has a special emphasis in developing the students' proficiency in English. This course covers the time period from 1877 to present-day. Changes in social, political, and economic issues and policies are highlighted as the United States moves from an agrarian society in the 1800's to an industrial society and a world leader into the 20th century. In-depth treatment of pivotal events will include, but are not limited

to, Reconstruction, Industrialization, Immigration, the New Deal, Cold War, Civil Rights Movement, Détente, and the Gulf War. Reports, research papers and outside readings will be required. (Full year course, open to grades 11, 12)

Bilingual Content Classes

836 Portuguese Algebra I CP1

1 credit

This course uses the Portuguese language to help understand the following Algebra concepts: the Real Number System and Operations with Real Numbers and Polynomials, finding solutions to Linear and System Equations, Functions, Factoring, Graphing and Quadratic Equations. (Full year course, open to grades 9,10,11,12)

875 Portuguese Integrated Math CP2

1 credit

This course will cover material outlined in the Mathematics Curriculum Frameworks. Students will use problem solving, communicating, reasoning and connecting to explore, develop, investigate and comprehend the “strands” of algebra, geometry and statistics. Particular areas of emphasis include graphical displays of data; coordinate graphs, linear functions, solving linear equations and inequalities. This course is taught in the native language, Portuguese. (Full year course, open to grades 9,10)

874 Spanish Integrated Math CP2

1 credit

This course will cover material outlined in the Mathematics Curriculum Frameworks. Students will use problem solving, communicating, reasoning and connecting to explore, develop, investigate and comprehend the “strands” of algebra, geometry and statistics. Particular areas of emphasis include graphical displays of data; coordinate graphs, linear functions, solving linear equations and inequalities. This course is taught in the native language, Spanish. (Full year course, open to grades 9,10)

863 Portuguese Biology CP1

1 credit

This course is taught in the native language, Portuguese. The course emphasizes the science of living things through class discussions, investigative processes and laboratory experiences. Content covered will range from Biochemistry, Cytology, Genetics, Human systems, Evolution, and Ecology. Dissection may occur in this course. The text, *Biologia*, will be used. (Full year course, open to grades 9,10)

881 Spanish Earth Science CP1

1 credit

This course, designed for native Spanish-speaking students, is laboratory centered, with emphasis on students’ investigations of the earth through hands-on experiments and analysis of lab data. Major concepts and principles in the field are presented and reinforced by investigations. (Full year course, open to grades 9,10)

854 Spanish US History 1 CP1

1 credit

This course, taught in Spanish, focuses on the Constitution, citizens’ rights, and democratic governmental form so that students may apply this knowledge to successfully function as citizens of the United States. This course represents a social, political, and economic survey of the United States before the arrival of Columbus and continuing to 1877. Units of study include sectionalism, westward expansion, urban development, and the formation of our democratic system. The forces shaping American thinking and society will be a focus. Reports, research papers and outside readings will be required.

846 Portuguese US History 1 CP1

1 credit

This course is taught in Portuguese. This course represents a social, political, and economic survey of the United States before the arrival of Columbus and continuing to 1877. Units of study include sectionalism, westward expansion, urban development, and the formation of our democratic system. The forces shaping American thinking and society will be a focus. Other topics will feature changes in attitudes toward race, ethnicity, women, and family issues in context of the dynamic American landscape. Reports, research papers and outside readings will be required. (Full year course, open to grades 10, 11, 12)

891 Portuguese Modern World History CP1

1 credit

This course is taught in Portuguese with special emphasis in developing the students’ proficiency in English as well as increasing their knowledge of world history. Starting c. 1800, students will interpret and analyze the impact of significant world events. The course revisits revolutions in Europe and the Americas and ends with a study of world affairs today. Study will include units on the Enlightenment, industrialization, imperialism, totalitarianism, and the Cold War. The use of primary documents will be emphasized in attempts to understand historical events. Reports, research papers and outside readings will be required. (Required full year course, open to grade 9, 10)

Language and Literature Courses

185 Spanish Language and Literature 1 H

1 credit

This course is primarily for students whose first language is Spanish and those continuing from the Two-Way Bilingual program. Students will work with Spanish literature at an accelerated pace, focusing on short stories by a variety of authors. They will continue developmental work in grammar and writing skills as well as preparing oral projects, which will be used to support the language learning at Framingham High School. Required: Demonstrated reading and writing at least seventh grade level. (Full year course, open to grades 9, 10, 11)

186 Spanish Language and Literature 1 CP1

1 credit

This course is primarily for students whose first language is Spanish. Students will read and discuss Spanish-language authors. They will prepare written assignments to improve grammar and orthographic skills and prepare projects demonstrating understanding and involvement with the course content. All class work and assignments will be done in Spanish. Required: Demonstrated reading and writing at least seventh grade level. (Full year course, open to grades 9,10,11)

188 Spanish Language and Literature 2 H

1 credit

This is an accelerated course primarily for students whose first language is Spanish and those continuing from the Two-Way Bilingual program. Students will work with Spanish literature at an accelerated pace, focusing on drama and poetry by a variety of authors. They will continue to develop skills in grammar and writing at a more sophisticated level. Term projects will be produced to demonstrate students' achievements. Required: Successful completion of Spanish Language and Literature 1 or teacher recommendation. (Full year course, open to grades 10, 11, 12)

189 Spanish Language and Literature 2 CP1

1 credit

This course is primarily for students whose first language is Spanish. Students will continue to explore the Latin-American heritage and traditions as reflected in Spanish-language authors and contemporary sources, particularly focusing on excerpts from novels. Weekly writing exercises and term projects will be required. All class work and assignments will be in Spanish. Required: Language and Literature 1 or teacher approval. (Full year course, open to grades 10, 11,12)

190 Spanish Language and Literature 3 H

1 credit

This is an accelerated course primarily for students whose first language is Spanish and those continuing from the Two-Way Bilingual program. This course is conducted entirely in Spanish. Students will work on literature at an accelerated pace, concentrating on short stories and novels. Grammar will continue to be developed and students will be prepared for the SAT II examination. In addition to other assessments, term projects will be used to assess students' achievements. Required: Successful completion of Spanish Language and Literature 2 or teacher recommendation. (Full year course, open to grades 11,12)

191 Spanish Language and Literature 3 CP1

1 credit

This course will allow students to move toward more sophisticated reading levels in Spanish. Emphasis will be on the reading and interpretation of novels and written fluency. Extensive vocabulary development will also be a focus. Advanced grammar will be enhanced through reading and writing. Required: Language and Literature 2 or teacher approval. (Full year course, open to grade 11)

855 Spanish Culture and the Media

.5 credit

This course is for students who are participating or have participated in the two-Way Spanish bilingual Program in grades 10-12. It is designed to look at Latino culture through media produced and presented by Latinos. Students will view and analyze media to sift through the concepts of stereotype and individuality and create their own understanding as to what it means to be Latino. In addition, students will view media that looks at the Latino culture from its own lens or perspective to demonstrate what is important in the Latino community and how Latinos present themselves. (Semester course open to Two-Way Spanish Bilingual students only)

849 Portuguese Languages and Literature I CP1

1 credit

This course is taught in Portuguese. It provides an in-depth study of Portuguese language literature, grammar and composition. Students will prepare written assignments demonstrating understanding and involvement with the course content. It is designed for fluent Portuguese speakers. (Full year course, open to grade 9)

851 Portuguese Language and Literature 2 CP1

1 credit

This course covers the different literary periods in Brazil, from the colonial period to the present. Students will read several books and prepare written assignments and multimedia oral presentations that will demonstrate understanding of course content. The course is taught in Portuguese and is designed for fluent Portuguese speakers. Pre-requisite: Portuguese Language and Literature 1 (Full year course, open to grade 10)

848 Portuguese Reading and Writing CP2

1 credit

This course is designed for native Portuguese speakers who are recent immigrants to the United States and either have a low native language literacy level and/or have gaps in schooling. This course will develop students' abilities in all areas of reading and writing and will serve as a support system for all other classes taken in the native language as well as ESL.

847 Spanish Reading and Writing CP2

1 credit

This course is designed for native Spanish speakers who are recent immigrants to the United States and either have a low native language literacy level and/or have gaps in schooling. This course will develop students' abilities in all areas of reading and writing and will serve as a support system for all other classes taken in the native language as well as ESL. (Full year course, open to students in grades 9, 10, 11, 12)

876 Let's Get Started!

1 credit

This course supports native language literacy and math instruction in Spanish/Portuguese for newly placed ELL students. Department Head recommendation only.

MCAS Preparation

993 ESL MCAS English***.5 credit**

This course helps Intermediate English language learners prepare for the MCAS, the exam that all students must pass in order to receive a fully credited high school diploma. The course aims to help the students who have not yet passed the MCAS and/or students who would like to specifically prepare for this state required exam. The students will develop skills that will help them pass the exam and improve their general reading and writing skills. Emphasis will be on reading comprehension and short and long essay writing. (Semester I and II, open to grades 10,11,12)

888 ESL MCAS Math ***.5 credit**

This course helps Intermediate English language learners prepare for the math portion of the MCAS, the exam that all students must pass in order to receive a fully credited high school diploma. The course aims to help the students who have not yet passed the MCAS and/or students who would like to specifically prepare for this state required exam. (Semester I and II, open to grades 10,11,12)

822 ESL MCAS Biology**.5 credit**

This course helps Intermediate English language learners prepare for the Biology portion of the MCAS, the exam that all students must pass in order to receive a fully credited high school diploma. The course aims to help the students who have not yet passed the Science MCAS and/or students who would like to specifically prepare for this state required exam. (Semester I and II, open to grades 10, 11, 12)

**These courses do not count toward the English/Math/Science graduation requirement for Framingham High School.*

ESL Electives**856 Bilingual Program Tutorial****.5 credit**

This course is an individualized course offered to students whose first language is other than Spanish or Portuguese. Students receive content area instruction and support in their native language. (Semester opportunity, open to grades 9-12)

871 Teacher's Aide, ESL/Bilingual Department**.5 credit**

The function of the ESL/Bilingual Dept. teacher's aide is to assist the teacher that they are assigned to. Students must have approval of the teacher in the class. (Semester opportunity, open to grades 11, 12)

878 Creative Writing for the English Language Learner**.5 credit**

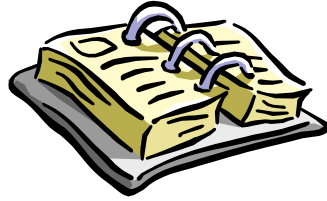
In this class students will be able to develop their writing skills through poems, short stories and writings about their life. Students will read examples of creative writing selected by the teacher and then write their own. Students should be open to share their writing and listen to the writings of others. Each student will create a portfolio of his or her best work at the end of the semester for a grade. The goal of this class is for students to write about experiences in their life, share them with others and then publish them. (Semester course, open to students in the ESL/Bil. Dept.)

837 ESL Freshman Seminar**.5 credit****862 Newcomer Seminar**

This course for ELL newcomers orients students to their new school and new community. Students will receive information on scheduling, graduation requirements, sports, clubs and activities currently being offered at Framingham High School. Development of students' learning, studying and thinking skills are also interspersed throughout the semester within the various topics being studied. (Semester course open to ESL/Bilingual newcomers in grade 9-11)

868 ESL Support**.5 credit**

This individualized course supports students with their ESL, Bilingual and Sheltered English content classes. Students will work on improving their study skills and learning strategies. (semester course open to ESL/Bilingual students in grades 9-11)



Course Offerings

Freshman English

English 1 H
English 1 CP1
English 1 CP2

Sophomore English

English 2 H
English 2 CP1
English 2 CP2

Junior English

AP English Language and Composition
American Literature H
American Literature CP1
American Literature CP2

Senior English

AP English Literature
World Literature H
World Literature CP1
World Literature CP2

Electives

MCAS English
Creative Writing CP1
Humanities 1 CP1
Humanities 2 CP1
Journalism CP1
Looking Through the Lens CP1
Writers Workshop CP2
Public Speaking CP1 or CP2
Business English CP1 or CP2
Women's Literature CP1 or CP2
Short Story CP1 or CP2

ENGLISH

The English curriculum is designed to improve reading, writing, listening, speaking, and thinking skills for students of all abilities. All students are required to earn four credits in English to graduate. Throughout the curriculum students are introduced to a variety of literature, including novels, short stories, plays, poems, and non-fiction. They are expected to do an extensive amount of writing, including both creative and analytical essays. Each year every student must complete a significant research paper incorporating a variety of sources and adhering to the format of the Framingham High School Research Guide, which is based on the Modern Language Association guidelines. All student writing is kept on file in the classroom for the duration of the year, so that students can monitor their own progress. Class discussions and cooperative learning are major components of English classes, and all students are expected to participate fully. A variety of elective courses are offered for those students who wish to go beyond the standard departmental requirements or who are interested in exploring specific areas of literature or writing.

**English Department
Sequence of Courses**

Grade 9	Grade 10	Grade 11	Grade 12
English 1 H	English 2 H	English Language and Composition AP	English Literature AP
English 1 CP 1	English 2CP 1	American Literature H	World Literature H
English 1 CP2	English 2 CP2	American Literature CP1	World Literature CP1
		American Literature CP2	World Literature CP2
		All Electives	All Electives

ENGLISH

Will Cook, Department Chair

012 English 1 H

1 credit

This course is designed for students who excelled in middle school language arts and have demonstrated advanced reading and writing skills. Special attention is given to writing precisely and correctly, mastering grammar and usage, and acquiring a more mature vocabulary. The students also become acquainted with a variety of literary genres, including the play, the novel, the essay, the epic, and the short story. Students will learn literary terms and will be asked to apply those terms as they develop a critical attitude toward what they read. At the honors level students must be able to read and to comprehend complex texts. Students who select this course should be recommended by their eighth-grade teacher and should have a genuine appreciation for the study of English. (Full year course, open to grade 9)

013 English 1 CP1

1 credit

This course is designed to help students strengthen the skills developed in middle school language arts. It also provides a foundation for the courses that are to follow. Students are taught the rules of grammar and usage, and will be expected to write clearly, concisely, and correctly. Students will learn literary terms and will learn to apply these terms. They will develop their vocabularies and will improve their reading skills while becoming acquainted with a variety of literary genres, including the play, the novel, the essay, the epic poem, and the short story. Students who select this course should have a solid background in reading and writing. (Full year course, open to grade 9)

014 English 1 CP2

1 credit

This course is designed to help students who need to improve their reading and writing skills in order to be successful at the high school level. Students will read some abridged editions of the major books that are read in CP1 and honors, as well as other unabridged books. The reading will include novels, short stories, non-fiction essays, at least one play, and an epic poem. Students will be expected to write essays with well-organized paragraphs, complete sentences, correct grammar, and proper punctuation. They will be introduced to literary terms and learn how to use them to increase their understanding of what they read. (Full year course, open to grade 9)

022 English 2 H

1 credit

In this course, representative literary selections from all the genres are studied. Students also further develop the ability to analyze the text critically using literary terms. Writing assignments continue the emphasis on literary analysis and on composition skills with attention to grammar, usage, and mechanics. Students who enter into English 2-Honors should have a strong work ethic and genuine love for literature along with the recommendation of the previous teacher. (Full year course, open to grade 10)

023 English 2 CP1

1 credit

This course builds on the skills taught in English 1. Students read selections from several genres with attention to the continuing development of reading skills and vocabulary. Writing assignments continue the emphasis on literary analysis and on composition skills with attention to grammar, usage, and mechanics. In conjunction with English 1, successful students in this course should be well prepared for the MCAS exam. (Full year course, open to grade 10)

024 English 2 CP2

1 credit

This course is for students who struggle with any or all of the English skills, including reading, writing, speaking, and listening. Students are introduced to a variety of types of literature and a variety of writing assignments. The skills focused on in this class will help the student improve in all other classes and will help in preparation for the MCAS exam. (Full year course, open to grade 10)

040 Advanced Placement English Language and Composition AP

1 credit

This course is designed for juniors who are already capable of doing college-level work. In keeping with the junior year curriculum, the emphasis is on American writers. Students read and analyze a broad and challenging range of prose selections from a wide variety of genres, extending beyond the traditional realm of literature to include writing from other fields, such as science, politics, philosophy, advertising, etc. Through close reading and frequent writing, students develop their

awareness of how language works. The emphasis of the course is on language and how it is used for particular audiences, and for particular purposes. Students who elect this college-level course should be recommended by past teachers and must have previously demonstrated strong writing, reading, and analytical skills. Success on the AP exam in the spring may lead to college credit. (Full year course, open to grade 11)

035 American Literature H

1 credit

Studies in twentieth century American literature as well as a survey of early American writers provide the nucleus for this advanced course for inquiring and self-motivated students. Discussion and analysis are required. Students will write expository essays based on the literature. Vocabulary study and a brief grammar review provide background for the writing program, as well as the SAT. Students who elect the course should have the recommendation of a previous English teacher. (Full year course, open to grade 11)

033 American Literature CP1

1 credit

This course consists of a thematic and historical approach from the Puritan Ethic to the concept of the American Dream. The authors range from Anne Bradstreet to Maya Angelou. Many literary genres are included, such as the short story, the novel, the play, and poetry. In addition, presentations, individual projects, and SAT preparation will be integrated into the course. (Full year course, open to grade 11)

036 American Literature CP2

1 credit

This course is for students who have successfully completed English 2 – CP2. The content will provide for experience and skill development in reading (novels, short stories, plays, essays, and poems by American authors), in writing, in speaking, and in listening. (Full year course, open to grade 11)

041 Advanced Placement English Literature

1 credit

This course is intended for seniors who have a deep interest in literature and are already capable of doing college-level work. An exploration of the greatest works of world literature will be supplemented by outside reading, research, and composition work. Reading and analyzing poetry is an integral part of this course. A seminar-type atmosphere will prevail, in which each student will be expected to participate fully. Success on the AP exam in the spring may lead to college credit. (Full year course, open to grade 12)

037 World Literature H

1 credit

This course is designed for self-motivated students who are interested in reading and analyzing challenging literature without the rigor of preparing for the A. P. exam. Students' writing will be held to a high level of expectations appropriate for earning honors credit. The reading will focus on classic and influential works of literature from around the world. (Full year course, open to grade 12)

043 World Literature CP1

1 credit

This course presents a survey of world literature from the ancient Greek epic to the modern novel. Selections will be taken from folk, classical, and contemporary literature of Europe, the Middle East, Japan, China, India, Africa, and South America. The course will encompass the genres of poetry, short story, essay, the play, and novel. (Full year course, open to grade 12)

038 World Literature CP2

1 credit

This course is designed for college-bound students and will cover material of literary interest, international in flavor. Students will improve writing, reading and vocabulary skills and will enhance their appreciation of literature. (Full year course, open to grade 12)

Electives

060 Looking Through the Lens CP1

.5 credit

Film is an important element in American culture. Interestingly, it often has a literary influence that is not readily "seen". In this class, students will view films with the goal of becoming critical observers, able to determine how literary elements are present and used to tell the film's story. The course will require that students read books that have been adapted into films, and also require written analyses that ask students to voice their own opinions regarding the use of literary and film devices, and their effectiveness. It is hoped that student opinions will formulate interesting discussions and debates, and that students will gain a new appreciation for what they are viewing. (Semester course, open to grades 11,12)

062 Humanities 1 CP1

.5 credit

This course explores the relationships among art, music, literature, history, and popular culture within the theme of "generations." Students begin the semester investigating their own generation and then look back at our recent American culture through the generations of the 40's to the 80's. Each student will take part in an oral history project that will gather interviews from older people reflecting on their teenage years. Art history and art projects will include collage, abstract expressionism, and pop art. Students' understanding of literature, music, and visual arts will be enhanced through film/video, and performances. (Semester course, open to grades 11,12)

063 Humanities 2 CP1

.5 credit

This course focuses on creativity and the artist through the exploration of literature, art, music, film, and social history. Students will explore various writers, visual artists, musicians, and filmmakers by investigating what, how, when, and why they

created. In addition, students will explore their own creativity through group and individual projects. The course includes library and internet research, formal and creative writing assignments, and film analysis. (Semester course, open to grades 11,12)

083 Creative Writing CP1

.5 credit

This course will help students become more creative, develop an individual writing style, and develop facility in written communication. Many writing assignments stimulate students to observe the world around them and to incorporate their impressions and ideas into their writing. Students will be asked to write poems, journals, short stories and plays. Good writing skills are a prerequisite for this course. (Semester course, open to grades 11,12)

067 Journalism CP1

.5 credit

This course is designed to give students an introduction to the many facets of contemporary journalism. Students focus on the impact of the media in American society, learn how to write news articles, editorials, and feature stories, examine and create editorial cartoons, and explore the history and use of photojournalism. Students regularly read newspapers and a variety of magazine articles, plus view broadcast news programs in order to examine how journalism is used in the professional world. Students will submit some of their own work to *The Eagle's Eye* and *Flyer News*. (Semester course, open to grades 11,12)

084 Writer's Workshop CP2

.5 credit

This course offers students the opportunity not only to improve and develop their basic writing skills, but also to enhance their creativity. Many of the assignments are creative in nature, but the emphasis is on developing specific skills, including organization, paragraph unity and cohesiveness, sentence structure and variety, and precise word choice. Narrative, descriptive, expository, and persuasive writing samples will be created. Students will write short stories, poetry, one-act plays, children's anthologies, and character sketches. (Semester course, open to grades 11,12)

068 Women's Literature CP1

.5 credit

078 Women's Literature CP2

.5 credit

This course will focus on literature by and about women. We will discuss a range of issues involving the changing depiction of women and women's writing style in poetry, plays, novels and non-fiction. This course will focus on reading, journal writing and group discussion. Women's Literature may be taken for either CP1 or CP2 credit. Both levels will be expected to read the same amount and participate equally in class discussions - the difference in level will be in the volume and expectations for writing assignments. (Semester course, open to grades 11,12)

070 Public Speaking CP1

.5 credit

076 Public Speaking CP2

.5 credit

This course will assist students in developing practical speaking and listening skills for more effective communication. Students will examine basic techniques for preparation, organization and delivery of a variety of speech forms. Speeches will include (but are not limited to) informative, persuasive, and extemporaneous speeches, and an extensive sales pitch. Famous speeches and speakers will be studied and evaluated to help the students with this process. Students will complete written work on a regular basis, covering topics such as, the proper way to write a speech, critiques of famous speeches, and self-assessment papers evaluating their own progress throughout the semester. The course will require students to use primary and secondary research skills in preparing speeches. (Semester course, open to grades 11,12)

065 Short Story CP1

.5 credit

082 Short Story CP2

.5 credit

In this course students will have the opportunity to read a large selection of short stories by many writers. There will be extensive and intensive readings, with attention both to the ideas developed in the stories and to the techniques of short story writing. Class discussions, reports of individual readings, and analytical essays will be parts of the course. This class can be taken for either CP1 or CP2 credit. Both levels will be expected to read the same amount and participate equally in class discussions - the difference in level will be in the volume and expectations for writing assignments. (Semester course, open to grades 11,12)

081 Business English CP2

.5 credit

088 Business English CP1

.5 credit

This course is designed for the preparation of students for the world of work, either immediately after high school or after college. Students will learn job-getting skills, such as cover letters, resumes and interviewing techniques as well as skills needed on the job, such as technical reading and writing and the use of spreadsheets, business letters and memos. (Semester course, open to grades 11, 12)

994 MCAS English

.5 credit

This course helps students who have not passed or are in danger of not passing the MCAS, an exam all students must pass to graduate. Students learn skills that will help them not only pass the exam, but also improve their general English education. Emphasis is placed on reading comprehension, mechanics, writing and grammar. (Semester course, open to grades 9-12)

Note: Students can elect this course for more than one semester, but it does not count towards fulfilling the four-credit English requirement.



Course Offerings

Foods 1
Advanced Foods
World Foods
Food, Health and Fitness

Clothing 1
Advanced Clothing
Fashion Design

Psychology for Living

Child Growth and Development
Early Childhood Education Honors

Interior Design

Fashion Retailing and Merchandising

Women's Health Part I
Women's Health Part II

Student Laboratory Aides Food, Clothing, Early
Childhood Education

Introduction to Health Care Careers

Infant & Toddler Care

Lab Aide Day Care Center

FAMILY & CONSUMER SCIENCES

The Family and Consumer Sciences program of studies at Framingham High School has been recognized for excellence at the state and national levels. We offer courses in all the major areas of Family and Consumer Sciences. Any of these courses will fulfill the student's graduation requirement in Practical Arts.

In order to prepare students for family life, work life, and careers, we provide opportunities to elect courses from the five major areas of: Foods, Nutrition, Clothing and Textiles, Human Development, and Housing. Each of these courses will develop the knowledge, skills, attitudes, and behaviors needed for:

- Strengthening the well being of individuals and families
- Becoming responsible citizens and leaders in family, community, and work settings
- Promoting optimal nutrition and wellness across the life span
- Managing resources to meet the material needs of individuals and families
- Balancing personal, home, family, and work lives
- Using critical and creative thinking skills to address problems in diverse family, community and work environments
- Successful life management, employment, and career development
- Functioning effectively as providers and consumers of goods and services
- Appreciating human worth and accepting responsibility for one's actions and success in family and work life

Family and Consumer Sciences education empowers individuals and families across the life span to manage the challenges of living and working in a diverse global society. Our unique focus is on families, work and their inter-relationships. It is our hope that every student takes full advantage of the opportunity to explore and learn within our department during his or her time at Framingham High School

FAMILY AND CONSUMER SCIENCES SCOPE AND SEQUENCE

ENTRY GRADE LEVEL
(STUDENTS MAY ENTER AT OR ABOVE ENTRY GRADE LEVEL)

MAJOR AREAS	GRADE 9	GRADE 10	GRADE11	GRADE 12
CHILD CARE AND HUMAN DEVELOPMENT *TECH PREP CREDIT AVAILABLE	INTRODUCTION TO HEALTH CARE CAREERS CHILD GROWTH AND DEVELOPMENT CP1	* *PSYCHOLOGY FOR LIVING *INFANT AND TODDLER CARE	*EARLY CHILDHOOD EDUCATION HONORS WOMEN'S HEALTH PART 1	*INDEPENDENT STUDY IN EARLY CHILDHOOD *LAB AIDE EARLY CHILDHOOD *LAB AIDE DAY CARE CENTER
CLOTHING AND TEXTILES	CLOTHING 1 ADVANCEDCLOTHING	ADVANCED CLOTHING FASHION DESIGN FASHION RETAILING	INDEPENDENT STUDY CLOTHING LAB AIDE CLOTHING	
FOODS AND NUTRITION	FOODS 1	ADVANCED CULINARY SKILLS WORLD FOODS	FOOD, HEALTH AND FITNESS LAB AIDE FOODS	
HOUSING AND INTERIORS	INTERIOR DESIGN			

Career Pathways Completion of all courses in these career pathways will earn a certificate of completion for students. These certificates can help students enter post-secondary programs with advanced knowledge and preparation for learning in their chosen career field. Each Pathway is interdisciplinary and involves cooperative interdepartmental planning to provide opportunities for students to make informed plans for future education.

Early Education and Care

1. Child Growth And Development
2. Early Childhood Education
3. CPR and First Aid
4. Infant and Toddler Care

Health Care Careers

- | | |
|--|----------------------|
| 1. Health Education | 4. Anatomy |
| 2. Biology | 5. Biology |
| 3. Introduction To Health Care Careers | 6. CPR and First Aid |

FAMILY AND CONSUMER SCIENCES

Ellen Makynen, Department Chair

(Most courses are non-weighted level)

Child Growth and Development is CP1 and Early Childhood Education is Honors

600 Foods 1

.5 credit

This course is designed as an introduction to foods and nutrition. Students will learn to plan and prepare foods that enhance health and follow the guidelines of the United States Department of Agriculture food pyramid. Experiences in preparing foods for snacks, meals, and entertaining are integral parts of this one semester course. The skills necessary for planning, cooking and serving nutritious meals will be practiced in the foods laboratory. Nutrition, food science, appliance technology, current food trends, and food safety will be the focus of lessons and activities. (Semester course, open to grades 9,10,11,12)

624 Advanced Culinary Skills

.5 credit

This course is designed for students who enjoy the work of food preparation and want more in depth culinary skills. Students will learn advanced food preparation, storage and serving skills while using advanced equipment, skills and food science technology. They will also learn basic business and marketing skills. The focus of the course will be an introduction to college level culinary arts with time spent helping students to explore the school to career possibilities of the culinary industry, with guest speakers from food institutions and colleges with majors in culinary arts. If time permits students will visit a university with a major in Culinary Arts. Required: Foods 1 and recommendation of teacher (Semester course, open to grades 10,11,12)

602 World Foods**.5 credit**

This semester course offers the student the opportunity to explore the customs and methods of food preparation used in other countries and in regional sections of the United States. Foods and holidays of a variety of ethnic groups will be studied. Geography and its relation to the production of foods and ethnic diets will be explored. Students will have the opportunity to share and prepare their ethnic food favorites with member of the class and invited guests.

Required: Foods 1 and recommendation of teacher (Semester course, open to grades 10, 11, 12)

604 Food, Health, and Fitness**.5 credit**

A food science course designed to provide the student with an understanding of the nutrients and their functions in maintaining a healthy body. Sports nutrition and recent developments in food technology will be areas of focus, along with food analysis using computer software. Students will plan and prepare delicious foods relative to special diets and explore and practice alternative fitness techniques as part of their study. (Semester course, open to grades 10,11,12)

606 Clothing 1**.5 credit**

In this project-based course, students will learn the basics of clothing construction using commercial patterns and regular and serger sewing machines. The consumer skills of pattern selection, fabric selection, and care of fabrics are emphasized as the basis for a successful sewing project. Basic construction techniques will be taught throughout this semester course. Each student will begin a portfolio of construction techniques. This portfolio will be completed in the subsequent Advanced Clothing and Fashion Design courses if students choose to continue to study in the clothing department. A fashion show of students' projects will be held in the spring. (Semester course, open to grades 9,10,11,12)

607 Advanced Clothing**.5 credit**

This is a course designed for those students who desire to learn advanced clothing construction techniques. Students will construct a challenging garment which incorporates techniques which the teacher and student determine are appropriate for the student's skill level. Students will also continue to build the clothing portfolio of construction techniques, and prepare and deliver lesson presentations on advanced construction skills and techniques. Students will be required to participate in the annual Fashion Show. Required: Clothing 1 (Semester course, open to grades 9,10,11,12)

608 Fashion Design**.5 credit**

This is an advanced course designed for those who enjoy creating fashion garments with challenging designer patterns. Students will select projects that will challenge them to learn and perfect construction skill, which are appropriate for individual skill levels. Historic costume as well as the world of modern fashion design will be studied. After studying basic fashion drawing skills, students will complete an illustration project, which will show the impact of style, color, and fabric design on the consumer appeal of a garment. In addition to continuing to develop a portfolio of construction skills, students will direct and produce the annual department "Fashion Show." Required: Clothing 1 (Semester course, open to grades 9,10,11,12)
Approved for Fine Arts credit

610 Psychology for Living**.5 credit**

An introduction to modern psychology directed toward the understanding and development of the individual. Areas of exploration will include a basic study of the history of psychology, the schools of psychology, social relationships, mental health, and the basic processes of human behavior. Social psychology and its implications on the family and individuals will also be stressed. Career awareness and reaching optimum development in life will be common strands of each unit. Current events and the psychological impact of these events on the individual, family, workplace and society will be integrated throughout the course. Major units will be: career exploration, communication, consumer choices, conflict resolution, relationships, money management, getting and finding a job, and balancing life work and leisure. Approved for Social Studies credit. (Semester course, open to grades 10,11,12)

614 Interior Design**.5 credit**

This course is designed to broaden the student's understanding of concepts in housing so that they may better select, creatively design, and live in tomorrow's habitats. Areas of emphasis include house design, consumer choices, furniture identification and selection, decorating principles, and original plans. Field trips to furniture stores, designer workshops, and newly developed housing options in the Framingham community will showcase career options for students interested in this field. Approved for Fine Arts credit

612 Child Growth and Development**CP1 *tech prep credit available****1 credit**

This course studies the physical, social, emotional, psychological, and intellectual growth of the child from ages 0 to 6 years. Included will be in-depth child study. As a result of this course, the student should develop self-understanding and knowledge of child development and its place in the family unit. Through field trips and special programs, students will have an opportunity to observe and interact with children of varying ages. Children with special needs will also be studied. Students will study the growing field of Early Childhood Education as a career, and will have the opportunity to participate in the high school articulation with local colleges. Students will do formal observations, go on field trips to local childcare settings, and develop a repertoire of creative activities for interacting with children. (Full year course is open to grades 9,10,11,12)

621 Early Childhood Education H**1 credit**

This course is designed for students who have successfully completed Child Growth and Development. The course components are: a full year in a practicum setting working with preschoolers in the high school BLOCKS classrooms; planning and teaching lessons using the Massachusetts Curriculum Frameworks for Early Childhood Education; completing 40 Children's literature reviews; development of a professional portfolio of their work, including a resume; completing the

requirements and application to be a Massachusetts Early Education and Care office licensed child care provider; earning articulation credit with the local community colleges. Students will do formal observations, go on field trips to local childcare settings, and develop a repertoire of creative activities for interacting with children.

Pre-requisite: Successful completion of Child Growth and Development and recommendation of teacher (Full year course is open to grades 11,12)

615 Fashion Retailing and Merchandising

.5 credit

As part of the school-to-career work being done nationally, this course will prepare students to enter the retailing industry upon graduation or as a career path in college. The skills necessary to enter a career track position will be the focus of the course: understanding job descriptions and responsibilities, resume writing, interviewing, company organization, customer service, loss prevention, safety on the job, product knowledge and floor allocation, where products come from, seasons in retailing, and careers in manufacturing, wholesaling, and retailing. Guest speakers and field trips will be part of this course. This course will be a pre-requisite for a planned work-study internship beginning in the fall of 2001. (Semester course, open to grades 10,11,12)

619 Student Laboratory Aides Food, Clothing, Early Childhood Education

.5 credit

The function of an aide is to assist the teacher in the Clothing 1A, Foods 1A and Early Childhood Education classes. Students in the program must have completed the basic course for which they will be an aide with a grade of "B" or better and have approval of the teacher of the class. One period per day per semester (Semester opportunity, open to grades 11,12)

616 Women's Health Part I

.5 credit

This first semester course will be team taught by a Family and Consumer Sciences teacher and a Health Education teacher. This first semester course for students in grades 11 and 12 will offer the beginning of in-depth study of women's health issues. The course will focus on the development and practice of skills necessary to become healthy, independent women. The activities will include fitness, self-defense, learning about the health care industry, healthy eating labs, guest speakers from the health and fitness community, field trips, and health promotion activities in the school and community. The history of women's health and the effect that the women's movement has had on the health of women will be studied. Students will contribute to the health of the community through participation in a community service project as part of a unit of building healthy adolescent relationships. Pre-requisite: Successful completion of Grade 10 Health (First semester course, open to grades 11,12)

617 Women's Health Part II

.5 credit

This course will be offered second semester and will be open to grade 11 and 12 students who have successfully completed grade 10 health. The units on fitness will explore a variety of lifelong activities that can improve a woman's health. Units on the history of women and disease, preventative medicine, pregnancy, nutrition through the life cycle, accessing the health care industry, women and the media, and relationship building skills, will be the focus of this Part II course. Students will contribute to the health of the community through participation in a community service-learning project that involves sharing health skill with others in the community. (Second semester course, open to grades 11,12, no part 1 pre-requisite)

622 Introduction to Health Care Careers

.5 credit

Introduction to Health Care Careers is a component of the interdepartmental Health Care careers pathway. The course has been designed by a faculty team of Family and Consumer Sciences, Health, and Science teachers to prepare students to work in health careers of the 21st century. The goal of this course is to introduce interested students to a variety of careers in health care, the requirements for admission to programs and colleges with these career majors, and the expectations of those working in the careers. We will study health care today, health insurances, work behaviors for success, media literacy and communication in health care settings. Units include body systems, medical terms, cultural competency and medical ethics. Students will visit college facilities, which offer certificates and degrees in a variety of career choices. Field trips and guest speakers representing community health facilities will also enhance the coursework. Students will also learn and participate in resume writing, career outlook search, college searches, job interviews, and job application writing. Students can then make an informed decision as they begin their college and career searches. (Open to grades 9-12, recommended as part of the health care career pathway)

623 Infant and Toddler Care

1 credit

Students in this course will examine the specialized needs of infants and toddlers. Students will work in small groups to plan and provide activities that promote the development of intelligence, language skills, safe physical exploration, and social skills of the infants and toddlers in the day care setting. Students will study types of programs serving, infants, toddlers and their families and will focus their work on the design of optimum environments and curricula. Students will become familiar with the regulations of the EEC (Massachusetts Office of Early Education and Care) and use them as guidelines when they work as teacher assistants in the onsite staff day care center. Prerequisite: Successful completion of Child Growth and Development and recommendation of Child Growth and Development teacher. (Open to grades 10,11,12)

Fine and Performing Arts Department



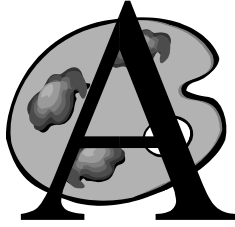
The objective of the Fine and Performing Arts program is to train accomplished and passionate arts students. Interested students should possess a strong work ethic and an appreciation of artistic discipline. The Fine and Performing Arts Department challenges students both creatively and academically and approaches each course with an eye towards hands on learning in the hopes of creating students with a life long passion for the arts as a part of the global world.

Within well-equipped art studios, a state of the art theatre, professional quality music rooms and keyboard labs, students explore a wide variety of arts techniques and approaches. Serious art students have the opportunity to work towards acceptance for admission to a variety of college arts programs while curious art students are introduced to an array of techniques particular to that individual art. All students develop an appreciation for the fundamental and integral tenants of all the art forms.

Course Offerings

Visual Art
Photography
Theater Arts
Vocal Music
Instrumental Music

ART



Course Offerings

Introduction to Art
Art 2
Art 3
Art 4

A.P. Studio Art
History of Art

Crafts A

Ceramics 1
Ceramics 2

Multi-Media Imaging

Painting 1
Painting 2
Painting 3

Photography 1
Photography 2
Photography 3

Art courses offer students opportunities to learn about and experience art creation. The emphasis is on the processes involved in creating visual works, which are produced utilizing a wide variety of media and materials. Students learn to classify art works by historical period, style and genre, and to view and understand them within a historical perspective. Student artwork is prominently displayed in our school and community. Students build art skills and acquire appreciation concepts, which can be used independently throughout their lives.

**Art
Sequence of Courses**

Grade 9	Grade 10	Grade 11	Grade 12
Introduction to Art History of Art Crafts A Ceramics 1 Painting 1 Photography 1 Photography 2	Introduction to Art Art 2 History of Art Crafts A Ceramics 1 Ceramics 2 Multi-Media Imaging Painting 1 Painting 2 Painting 3 Photography 1 Photography 2	Introduction to Art Art 2 Art 3 History of Art Crafts A Ceramics 1 Ceramics 2 Multi-Media Imaging Painting 1 Painting 2 Painting 3 Photography 1 Photography 2 Photography 3	Introduction to Art Art 2 Art 3 Art 4 AP Studio Art History of Art Crafts A Ceramics 1 Ceramics 2 Multi-Media Imaging Painting 1 Painting 2 Painting 3 Photography 1 Photography 2 Photography 3

ART

(All courses are non-weighted except as noted.)

649 Introduction to Art

.5 credit

This course serves as the gateway for future art electives. A semester course, Introduction to Art is offered to students of all artistic abilities and fulfills half of the Fine Arts graduation requirement. The course stands alone as a general introduction to studio art for the “beginning” artist, and also provides serious art students with a foundation for continued study in art. It includes a range of experiences in drawing, painting, design, cartooning, and calligraphy, in order to give students a broad basis for personal expression. Elements and principles of design common to all the visual arts will be stressed. Strategies for understanding and evaluating historical and contemporary art will also be developed. (Semester course, open to grades 9,10, 11,12)

641 Art 2 CP1

1 credit

This course is planned to reinforce and expand the offerings listed in Introduction to Art as well as to help the student develop a more individualistic approach to solving problems. Greater emphasis will be placed on design fundamentals related to drawing, painting, design, clay sculpture, and printmaking as a means for recording an experience, relating an idea, or expressing a feeling. Exposure to a range of artists and styles will provide the knowledge necessary to complete large murals that will be completed by the group. This exposure will provide additional methods for critical comparison and better comprehension of historical and contemporary art works. This course meets the fine arts requirement. Required: Introduction to Art or Painting 1 (Full year course, open to grades 10,11,12)

644 Art 3 Honors

1 credit

This advanced level course builds on the experiences of Art 1 and Art 2. With a strong foundation in the elements and principles of design, students will be challenged to develop their skills in drawing, painting, printmaking, collage, sculpture, and mixed media. Beginning with the study of major movements in art history, students will expand the range of their own personal expression through projects such as portraiture, figure studies, abstraction, and landscapes. Required: Art 2, portfolio review (Full year course, open to grades 11,12)

654 Art 4 Honors

1 credit

Students in this class will be challenged with more demanding and wide-ranging projects, but will also be able to concentrate on their individual areas of interest and strength. By the end of the year students will have created a strong, broad, and focused body of work. The course benefits those students who wish to apply to an art college or augment college applications with an art portfolio. Required: Art 3, portfolio review (Full year course, open to grade 12 only)

645 AP Studio Art

1 credit

This course is offered for seniors who are very serious about art and wish to prepare a portfolio for Advanced Placement college credit. Taken in addition to Art 4, this course allows independent studio time for building a Drawing, 2-D Design or 3-D Design Portfolio. Students produce at least 24 pieces, 12 of which are a particular, personalized “Concentration”. Students will submit their work to the College Board in early May. Required Art 3, portfolio review (Full year course, open to grade 12 only)

444 Art History CP1

.5 credit

This course focuses on how art reflects the history, culture, customs, religion and values of societies throughout the world. A special emphasis is placed on how art reflects the political, economic, and social organizations of society. No prior knowledge about art is required. This course will include a “hands on” art component and will be team-taught by the History and Fine Arts Departments. This course meets the fine arts requirements. (Semester course, open to grades 10, 11,12)

651 Crafts A

.5 credit

This course provides a general introduction to the elements of design as they relate to the field of crafts. Students will learn basic skills and techniques necessary to work creatively and spontaneously with fiber, paint, clay, stenciling, beading, paste paper and bookbinding. Traditional crafts of various cultures will be investigated. (Semester course, open to grades 9,10,11,12)

630 Ceramics 1

.5 credit

This is a hands-on introductory course in clay. Students will be introduced to basic hand building and wheel throwing techniques, and learn the fundamental processes of texturing, glazing and firing clay. After becoming familiar with the unique properties of clay, students will learn to make mugs, vases, bowls and other functional objects. Sculptural pieces will also be explored. (Semester course, open to grades 9,10,11,12)

631 Ceramics 2

.5 credit

Students in this course are challenged with more complex problems as they build upon skills learned in Ceramics 1. More complex vessels, vases, bowls, and other functional objects will be created as well as more complex sculptural objects. Required: Ceramics 1 (Semester course, open to grades 10,11,12)

634 Multi-Media Imaging

.5 credit

This course introduces the student to the use of multiple materials within the production of individual art works. Students will explore combinations of traditional and experimental image making techniques, including printmaking, photography, collage, and digital image manipulation. Using tools such as an etching press, silk-screens, scanners and digital imaging software, students will incorporate original, borrowed and manipulated images into unique and expressive compositions. Students will have the opportunity to develop a wide variety of portfolio-quality artwork. (Semester course, open to grades 10,11,12)

655 Painting 1

.5 credit

This is an introductory class for students who wish to learn techniques of painting as they learn about color, design, texture and the other elements of art. They will work with tempera, acrylic and watercolor doing a variety of painting projects including still life, landscape and self-portrait. The students will learn to critically evaluate art and will be exposed to the works and styles of painters throughout history. This course meets the fine arts requirement. (Semester course, open to grades 9,10,11,12)

635 Painting 2

.5 credit

Using the knowledge and experience gained in Painting 1 or a similar painting exposure, the students will work to develop their individual style in painting. They will develop projects experimenting with various techniques and media. The students will learn to stretch and prepare a canvas and will work with oil paint and mixed media along with acrylic and watercolor. Projects to be completed will reflect personal exploration of ideas and experimentation with materials along with the incorporation of some of the styles of painters throughout time. This course meets the fine arts requirement. Required: Painting 1 or Introduction to Art (Semester course, open to grades 10,11,12)

636 Painting 3

.5 credit

Using the knowledge and experience gained in Painting 2 or a similar painting exposure, the students will work to expand their individual style in painting. They will explore projects and deepen understanding of techniques and media. Projects to be completed will reflect personal exploration of ideas and experimentation with materials along with the incorporation of some of the styles of painters throughout time. Independent work is required as a member of this course. This course meets the fine arts requirement.

Required: Painting 1 or Introduction to Art

(Semester course, open to grades 10,11,12)

545 Photography 1

.5 credit

This course focuses on both black and white 35mm film photography and digital photography concepts. Camera controls such as f-stops, shutter speeds, and film speeds are explained and the importance of correct exposure is demonstrated. Skills learned include composition, film developing and printing in both the traditional and digital darkrooms. Camera skills are incorporated in this course through a variety of shooting assignments including: shadows and light, alternative camera angles, depth of field, action and motion, portraits and self portraits, and multiple exposures. (Semester course open to all grades)

546 Photography 2

.5 credit

This intermediate course in photography builds on fundamentals learned in Photography 1. Students explore the technical, artistic and commercial aspects of photography through creative assignments including advertising, portraiture, photojournalism, documentary, fine art, and photomontage. This course includes on and off camera flash techniques, studio strobe usage, and advanced camera techniques. Both film and digital photography are explored and digital darkroom techniques with a variety of software are used to enhance student photography and in the production of portfolio and project based work. Students will exhibit their work and produce a portfolio of images. A Day in the Life of FHS photo book will be produced by the class as a group project. (Semester course open to all grades)

547 Photography 3

.5 credit

This course provides the advanced photography student a solid background in the theory and practice of photography. Emphasis is on both technical and artistic expression from initial image capture to finished print. The integration of technical skill and aesthetic expression are emphasized along with advanced studio techniques with digital camera equipment. An individual theme based project will be assigned and students will acquire skills necessary to create their own unique body of work. This course helps students identify and achieve professional goals and objectives by providing an understanding of the professional preparation necessary to get established in a particular career area. Students will exhibit their work and produce a portfolio of images. (Semester course open to juniors and seniors) Prerequisite: Photography 1 and Photography 2



Course Offerings

Music Theory 1 H

Music Theory 2 AP

Instrumental Ensemble

Instrumental Lessons

Concert Choir/9th Grade Chorus

Madrigal Singers

Percussion Techniques
and Ensemble

Piano/Keyboard I

Piano/Keyboard II

Beginning Guitar Techniques

Jazz Workshop I

Jazz Workshop II

MUSIC

The study of music contributes positively to the quality of every student's life. Students have an opportunity to creatively express themselves vocally and instrumentally and can acquire knowledge of notation, composition and performance traditions which will assist them to perform, create and appreciate music independently for the rest of their lives. Our many and varied musical performance organizations are important contributors to the musical life of our school and community.

**Music
Course Sequence**

MUSIC

9th	10th	11th	12th
Madrigal Singers	Madrigal Singers	Madrigal Singers	Madrigal Singers
Concert Choir (9 th grade)	Band	Band	Band
Band	Piano Keyboard I	Piano Keyboard I	Piano Keyboard I
Piano Keyboard I	Piano Keyboard II	Piano Keyboard II	Piano Keyboard II
Piano Keyboard II	Jazz Workshop I	Jazz Workshop I	Jazz Workshop I
Jazz Workshop I	Jazz Workshop II	Jazz Workshop II	Jazz Workshop II
Jazz Workshop II	Beginning Guitar Techniques	Beginning Guitar Techniques	Beginning Guitar Techniques
Beginning Guitar Techniques	Orchestra	Orchestra	Orchestra
Orchestra	Music Theory I	Music Theory I	Music Theory I
Musical Theater I	Musical Theater I	Music Theory II AP	Music Theory II AP
Musical Theater II	Musical Theater II	Musical Theater I	Musical Theater I
		Musical Theater II	Musical Theater II

(All courses are non-weighted except as noted.)

Music

662 Band

1 credit

The Band performs as both a Marching Band through the fall semester (plus a band camp of 4 days in August) and a Concert Band for the remainder of the school year. During the marching season the band prepares an intricate field show that they perform at home football games and State festivals. The band also represents the community in other various performances throughout the year. The concert season consists of 2 formal concerts, the state MICCA festival, and other performance opportunities that may be scheduled. Students have the opportunity to study and perform a wide variety of band literature for both concert and marching ensembles. Students that twirl or dance also have the opportunity to take band for the fall semester in order to participate with the Marching Band (no experience necessarily required). Participation in all scheduled performances is required. This course meets the Fine Arts requirement. (Full year course, open to grades 9,10,11,12)

663 Madrigal Singers

1 credit

This is a course in part singing for all students who desire experience in choral singing. Both standard and popular works are included. Participation in all scheduled performances is required. This course meets the fine arts requirement. (Full year course, open to grades 9,10,11,12)

664 Music Theory 1 Keyboard and Guitar Skills H

1 credit

This is an academic course with hands on experience with keyboard and guitar skills. This course is for all grade levels, focusing on the reading, writing, structure, chords, and harmony involved in music making. Students will demonstrate their knowledge through sight-reading, keyboard/guitar work, and notating music. Guitars and keyboards will be used in defining and listening to chord progressions and developing improvisational techniques. In our keyboard lab, students will be working with music software to create original compositions. This course meets the fine arts requirement (Full year course, open to grades 10,11,12)

665 Music Theory 2 AP

1 credit

This accelerated course is for qualified students who have successfully completed Music Theory 1. Course emphasis is on composing original works, analysis, and structural design of music composition. Students are also prepared for the Advanced Placement examination in Music Theory. This course meets the fine arts. Recommended: Music Theory 1 (Full year course, open to grades 11,12)

678 Concert Choir 9th Grade Chorus

1 credit

This class is for 9th graders interested in becoming better choral and solo singers. Students will learn basic music theory, movement, sight singing, and how to be part of a choral ensemble. Students will be encouraged to learn solos and will learn

about the history of musical theater in the United States. The chorus will sing in the Winter, Pops, and Spring Choral Concerts, will sing with the FHS Madrigal Singers, and will participate in the Musical Theater Review for both semesters. (Full year course, open to the grade 9)

672 Jazz Workshop 1

.5 credit

This is a practical course for students who want to learn to improvise in the jazz idiom. Students will be taught elements of jazz theory including chords, and scales. The course will also explore the history of jazz from ragtime through avant garde. There will be written, playing, and listening assignments. There is one required performance for this class. (Semester course, open to grades 9-12)

673 Jazz Workshop 2

.5 credit

A performance based course using elements from Jazz Workshop 1 and applying it to each student's instrument. Students will learn to play jazz tunes over typical jazz forms. Students will learn to play different styles of jazz. At least one performance will be required for this class. Students will also have the opportunity to perform in one State Jazz Combo Festival. Students need to have completed Jazz Workshop I or permission from the teacher. (Semester course, open to grades 9-12)

674 Beginning Guitar Techniques

.5 credit

The course is open to any student that wishes to learn how to play beginning guitar. Students will learn to play single notes, basic chords, and common strumming techniques. This course will also give the students some background in the history of the guitar and the history of how the guitar was used in the history of music. There will be playing and written assignments. There is a performance that is required for this class. (Semester course, open to grades 9-12)

675 Percussion Ensemble

1 credit

This class will function as a techniques course to assist with playing of various percussion instruments. It will use the techniques learned by playing through ensemble music written for both the drum line and percussion ensembles. Reading, notating music and cadences, and other percussion knowledge will also be discussed. A performance will be required of this ensemble. This class meets the fine arts requirement. (Full year course, open to grades 9,10,11,12)

669 Orchestra

1 credit

The String Orchestra is an ensemble for students who have some experience playing a string orchestra instrument (violin, viola, cello, string bass, etc.). Fundamentals of string technique and music reading are stressed. Orchestral literature from all periods of composition is used to build repertoire for programs throughout the year. There will occasionally be after school commitments for school and community performances. Participation in all performances is required. Students that play wind instruments are also allowed to take the class but must have completed 2 years of band to participate. This course fulfills the Fine Arts requirement. (Full year course, open to grades 9-12)

676 Piano Keyboard I

.5 credit

Utilizing the Music Department's Keyboard Lab, students will learn the basic music theory elements that are involved in playing the piano. Students will work at their own pace and be exposed to various types of piano literature spanning the Renaissance to Classical eras. Research assignments will include differing styles, composers, pianists, pedagogues, musical form, and historical perspective. Students will be expected to practice outside of class, although a piano keyboard is not a requirement to be in the class. Students will be required to participate in performances scheduled outside of class. (Semester course, open to grades 9-12)

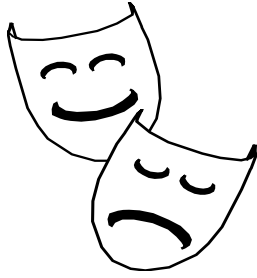
677 Piano Keyboard II

.5 credit

Piano Keyboard II is for the more advanced piano students. Students will work at their own pace utilizing the Music Department's Keyboard Lab. They will learn more advance piano playing techniques, phrasing, and differing styles. Students will be exposed to piano literature of the Classical, Romantic, and Modern eras. Students will be studying ragtime and jazz pieces. Research assignments will include differing styles, composers, pianists, pedagogues, musical form, and historical perspective. Students will be expected to practice outside of class, although a piano keyboard is not a requirement to be in the class. Students who haven't taken Piano Keyboard I need permission from the teacher. Students will be required to participate in performances scheduled outside of class. (Semester course, open to grades 9-12)

Extra Curricular:

Flute Ensemble
Jazz Ensemble
Jazz Combo
Show Choir
Men's A cappella
Women's A cappella



Course Offerings

Acting I

Acting II

Performance Workshop A

Performance Workshop B

Music Theatre I

Music Theatre II

Acting and Play Study I

Acting and Play Study II

Advanced Acting H

Acting for ESL Students

Performance and Production
Independent Study

THEATRE ARTS

The Theatre Arts program presents an opportunity for the student of the theatre, as well as the novice, to learn and appreciate the elements of theatre as both a performer and as a supporter of the art. Students will investigate theater through experiences in performance, evaluation, study and theater exercises. A positive theatre appreciation, self-awareness and self-growth are some of the many building blocks of the program. The Drama Company also produces five main stage productions each year including a fall play, a state festival play, a musical, A Night of Original Plays and a senior cabaret.

**Theater Arts
Course Sequence**

<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
Acting I	Acting I	Acting I	Acting I
Acting II	Acting II	Acting II	Acting II
Performance Workshop A	Performance Workshop A	Acting and Play Study I	Acting and Play Study I
	Performance Workshop B	Acting and Play Study II	Acting and Play Study II
Performance Workshop B	Musical Theater I	Performance Workshop A	Performance Workshop A
Musical Theater I	Musical Theater II	Performance Workshop B	Performance Workshop B
Musical Theater II		Musical Theater I	Musical Theater I
		Musical Theater II	Musical Theater II
		Performance and Production Independent Study	Advanced Acting
			Performance and Production Independent Study

Theater Arts Course Descriptions

680 Acting I

.5 credit

A fast paced workshop format designed to develop and strengthen acting, observation and listening skills, through exercises in creative movement, improvisation, creative dramatics, pantomime and theater exercises. The central focus of this beginning level class is to build an ensemble within the class and begin to reflect on our own inner resources as an actor and build solo performance skills. The structure of the class breaks down into 75% on your feet and 25% in your seat! Text- *Stage and the School*. This course meets the fine arts requirements. (Semester course, open to grades 9,10,11,12)

681 Acting II

.5 credit

Building on the skills developed in the Acting I class, student actors will investigate character work, scene writing and performance, movement exercises, varieties of drama, trust exercises and solo performance skills. Prerequisite: Acting I (Semester course, open to grades 9,10,11,12)

691 Acting and Play Study I

.5 credit

The workshop format continues in this class intended for the serious student of Acting. Using the fundamentals taught in Acting I and II the actor will analyze, research and perform scenes representative of several genres and periods in theater history. Works to be studied and performed cover Greek Theater through Theater of the 19th Century. Genres include Readers' Theater, Shakespearean Acting, French Comedies and 19th Century Realism. Classroom exercises focus on the physical and vocal actor. Out of class activities include performance opportunities and the study and review of a professional play. Pre-requisite two semesters of Acting classes. (Semester class, open to grades 11,12)

692 Acting and Play Study II

.5 credit

Using the techniques mastered in Acting and Play Study I student actors will expand their training to include the teachings of Stanislavski, Sanford Misner and Lee Strasberg. Emphasis will be put on emotional and sensory recall while creating an inner

and outer monologue for each performance. Students will design their personal theater portfolio that will include two contrasting classic monologues, an actor's resume and personal representation. Workshops include effective make-up techniques, beginning design, monologue workshops and effective audition techniques. Prerequisites: Acting and Play Study (Semester class, open to grade 11,12)

695 Advanced Acting H

1 credit

Students will study and prepare scenes and monologues from a different contemporary playwright each month. The course will cover contemporary work from 1910 to the present. Students will use this work to prepare for college auditions, scholarship auditions, festival auditions, and will combine this contemporary work with classic monologue presentations. Students will write a one-act play and a ten minute play, which they will also design, direct and perform. Students will design and plot costumes, lighting and sets for each of these plays. Prerequisites: Open to seniors only who have taken Acting I and II, and Acting and Play Study I and II (Full year course) *Fine Arts and/or Practical Arts credit

877 Acting for the ESL Student

.5 credit

Using theater exercises, games and warm-up exercises to create a safe and fun learning environment, ESL students will focus on developing powerful tools to help the non native speaker improve their English proficiency and deepen their understanding of the American culture, worldwide cultures and their own culture. The performance of a one act play and/or scenes will be included. (Semester course, open to grades 9-12)

696 Performance Workshop A

.5 credit

This course is designed to apply the skills mastered in Acting I and Acting II in a practical manner. Students will begin simple design elements and tour with a Children's Theater production each semester. Performances will be scheduled at local Framingham K-8 Schools. All class members will be involved in all production and performance areas. (Semester course, open to grades 9, 10, 11, 12)

698 Performance Workshop B

.5 credit

This is a course designed to apply the skills mastered in Acting I and Acting II in a practical manner. Students will begin simple design elements and prepare a studio production to tour. Performances will be scheduled at local Framingham venues. All class members will be involved in all production and performance areas. (Semester course, open to grades 9, 10, 11, 12)

686 Performance and Production Independent Study

.5 credit

This semester course is open to juniors and seniors who are interested in project based, intensive study in the areas of theater or musical performance or production. Areas of study include: vocal performance, acting performance, music technology, set, costume, lighting, sound and prop design as well as directing and playwriting. Students in this course may also intern at Framingham Middle and Elementary schools with theater, musical and technical directors. Each student, along with the teacher, will design a project each term in his or her area of interest. An Independent Study Night and/or recital will be required as a final assessment. Students interested in the design area will enter the Massachusetts High School Drama Guild's scholarship and contest event held in December. (Semester course)

684 Music Theater I

.5 credit

This course is designed for the performance level student who wants to work in musical theater. The student deals with some elements of performing, singing and stage movement/dance as required for particular genres of musical theater. MT-I will focus on the various contribution of many composer/lyricists of the Broadway stage, including such notables as Kern, Herbert, Rodgers, Hammerstein, Kander, Ebb, Porter, Sondheim and Rice to name a few. An occasional class session will be devoted to vocal practice, dance and the viewing or studying of musical comedy scripts. The class will strive to produce in class-shortened vignettes and musical selections representative of the onset of this art form up to the present day. Reviews and critiques will be assigned. This course is team taught by the Music and Theater Arts staff. This course meets the fine arts requirement. Students will be required to participate in performances scheduled outside of class. (Semester course, open to grades 9, 10, 11, 12)

685 Musical Theater II

.5 credit

This course is a continuation of Music Theater I with stronger emphasis on performance. Students will prepare two songs and a monologue. Students will be required to participate in performances scheduled outside of class. (Semester course, open to grades 9, 10, 11, 12)

Extra Curricular



Meets Monday afternoons in Studio H100

Produces: A Children's Theater Production, Fall Play, 24 Hour Theater Project, MHSDG

Festival Production, Spring Musical and Senior Cabaret



Course Offerings

Health Education
Sports Education
Lifetime Activities
 Fitness for Life
Elective Program

HEALTH AND PHYSICAL EDUCATION

The Health and Physical Education program at Framingham High School is designed to provide students with a variety of activities that will promote the core concepts of the Massachusetts Comprehensive Health Curriculum Framework. These core concepts are health literacy, healthy self-management skills, and health promotion. Through the coordinated teaching of health education and physical education, these core concepts are achieved. Each discipline has a delineated responsibility of addressing certain standards within the four strands of the health framework: physical health, social and emotional health, safety and prevention, and personal and community health.

Through the health and physical education offerings, students will gain the knowledge and skills necessary to perform a variety of physical activities and will know the implications of and understand the benefits from involvement in lifelong physical activities. Students will learn factual information and develop the necessary skills to make informed choices and apply them to daily situations. Students will engage in promoting a positive learning environment within each class while understanding the benefits of upholding this attitude in their daily lifestyle.

The Health and Physical Education elective program will enrich and complete a student's career at Framingham. Through our elective program students have the opportunity to develop areas of interest and become exposed to healthy competition, personal awareness, and future academic success. Students are encouraged to become involved in these offerings.

**Physical Education
Course Sequence**

Grade 9	Grade 10	Grade 11	Grade 12
Fitness for Life	Fitness for Life	Sports Education	Sports Education
Sports Education	Sports Education	Lifetime Activities	Lifetime Activities
Lifetime Activities	Lifetime Activities	All Electives	All Electives
Electives	Health		
	Electives		

HEALTH AND PHYSICAL EDUCATION

Sue Ames, Department Chair

Health and Physical Education is a four-semester requirement for all students. Although students have four years to complete this requirement, they are encouraged to take one semester of physical education their freshman year and one semester of physical education and one semester of health education their sophomore year. The final semester may be taken during a student's junior year. A passing grade must be achieved from each course in order to receive the appropriate credits for graduation from Framingham High School; .5 credit per semester of physical education totaling 1.5 credits, and .5 for health education for a grand total of 2.0 credits toward graduation.

Each of the following courses is a semester course, which students are required to take to fulfill their four-semester requirement. There will be no repeating of any offering to fulfill the requirement and elective courses do not fulfill the department graduation requirement. The Freshman seminar class includes a Wellness segment taught by the Health and Physical Education staff. Students who pass will receive .5 credit towards graduation but this is not one of the department's required courses.

731 Sports Education

.5 credit

The Sports Education Program will provide students the opportunity to experience a variety of team sports as a participant, coach, spectator and official. As a participant, the students will learn the skills necessary for successful participation through practice drills and team play. Leadership experience will be developed as a coach by planning practice sessions and developing and incorporating strategies during game situations. Students will learn the qualities and respectful behaviors for being a good spectator as they cheer their team along during tournament play. Students will be encouraged to officiate within the classroom activity or in a youth sport program in the community.

732 Lifetime Activities

.5 credit

During the Lifetime Activities segment of the physical education program, students will experience a wide variety of activities focusing on lifelong participation. These activities will include the racquet sports of tennis, badminton, table tennis and racquetball, as well as, archery and golf.

730 Fitness for Life

.5 credit

The Fitness program is a semester course that provides students with team-building activities, cooperative group lessons, current nutritional needs, exposure to fitness technology and use of the Wellness Center. Students will comprehend the difference between health-related and skill-related fitness, will understand the importance of developing their cardiovascular and muscular systems, will utilize such technology as heart rate monitors and pedometers to track their personal fitness level and will generate a personal wellness program, including a nutrition component, for future use. Additionally, by incorporating the Fitnessgram program into our curriculum, students will see their fitness progression from middle school to high school, while understanding the importance and benefit of life-long activity and healthy choices. Upon successful completion of Fitness for Life students will become "certified" members of the Wellness Center. The "certification" allows them to use the facility on their own time after school, when the Wellness Center is open.

735 Health Education - Grade 10

.5 credit

The Health Education Program provides students with the knowledge and skills to make informed responsible decisions and assist them in leading healthy lifestyles. The health classroom instruction will consist of wellness, communication skills, cancers, infectious diseases including sexually transmitted infections and HIV/AIDS, and social and emotional health to include relationships, sex and family life education, violence prevention, sexual harassment and substance free lifestyles.

PHYSICAL EDUCATION ELECTIVE PROGRAM

The Framingham High School Health and Physical Education Department continues to offer an extensive elective program. **Final approval of course offerings will be made by the Health and Physical Education Department Head after careful consideration of student interest, funding, staffing and facility needs.** Successful completion of the required four-

semester health and physical education program will be a prerequisite for participation in the grade 11 and 12 elective classes. All courses will be semester courses and .5 credit.

742 Physical Education Leaders

.5 credit

Students interested in participating in this course **must have the recommendation of one physical education teacher and the department head** that can attest to the student's leadership abilities. Students should have completed all three required physical education courses. This course will provide the knowledge and skills necessary to develop student leaders in physical education and the community. Students will have the opportunity to practice their skills as physical education leaders by assisting the teachers in the required physical education program. Opportunities to coach in the community youth programs and Special Olympics and attend relevant leadership conferences will be explored. Time management, skill instruction, and scheduling practice sessions for a variety of sports will be presented. (Semester course, open to grades 11,12)

737 Advanced Sports Performance

.5 credit

This class is for students to improve upon all aspects of flexibility, speed, agility, power and strength by learning the proper techniques of dynamic movement, acceleration, maximum velocity, multi-directional speed and weightlifting. Students will also be introduced to sports nutrition and its impact on athletic performance. Students will demonstrate advancement through pre- and post-testing in the vertical jump, standing long jump, 3 cone drill, pro-agility, 20 and 40 yard dash. Basic kinesiology, anatomy and physiology, and general skills will be emphasized. Students must have passed Fitness for Life (Semester course, open to grades 10, 11,12)

744 In-Line Skating/Floor Hockey

.5 credit

This course is designed to teach the basic movements of in-line skating such as turning, speed control and braking. This unit offers a work out comparable to running and superior to cycling and stair climbing without the impact and shock on the joints. In-line skating provides an excellent cardiovascular and muscular endurance workout. Keeping track of calories burned is a great way to keep students motivated and monitoring progress. Students may also use the 10K workout provided in class and continue at home.

Once students have developed the necessary skills of in-line skating they can further practice and enhance these skills in roller floor hockey. The basics of team play, stick handling, shooting, receiving, position play and goal keeping will be practiced while on in-line skates. Basic knowledge of the rules, defense and offense will allow students to engage in small game situations. In-line skates, helmets and all protective gear will be provided. If students have their own equipment, they will be encouraged to use it. All students must wear protective eye gear provided by the school.

747 Lacrosse

.5 credit

Students participating in this course will be expected to successfully demonstrate the basics of lacrosse. Passing, catching, shooting, cradling and dodging skills will be emphasized throughout this course. Teams will be established in the class with practice schedules developed to enhance the skills necessary for competition. Individuals will be required to observe female and male lacrosse games by film or by attending a high school game. Non-contact games will be played in class emphasizing skill development and proper techniques. (Semester course, open to grades 10, 11, 12)

748 Competitive Team Sports

.5 credit

Students participating in this course will be expected to successfully demonstrate the basic skills of various, teams sports such as basketball, soccer and volleyball. The course will focus on refining these skills and developing strategies to participate successfully in competition. Students will be expected to attend a basketball game, a soccer game and a volleyball match to observe the skills, communication and teamwork necessary for successful participation in the interscholastic program. Teams will be established in the class with practice schedules developed to enhance the skills for competition. Tournaments and healthy competition will take place throughout the course. (Semester course, open to grades 10, 11,12 upon completion of Sports Education)

749 Personal Training

.5 credit

Students will be exposed to the qualifications needed to become a fitness professional. Students will learn basic exercise physiology of the cardio-respiratory system, muscular-skeletal system and the energy systems in the body. Exercise prescription for normal, healthy populations will also be focused on along with how to develop a personalized cardiovascular and resistant-training program for special populations. Students will gain knowledge of the importance of exercise in helping to prevent illness and disease. Students will be expected to demonstrate their aptitude to develop a personalized workout program along with their ability to teach proper techniques of the workout. (Semester course, open to grades 11,12)

306 Exercise Physiology

.5 credit

This class explores the human body's physiological responses to varied levels of exercise; from mild workouts to vigorous exercise leading to chronic fatigue. Through class lecture, discussion and laboratory experiments, students will gain an understanding of body performance during exercise. Study of the muscular system and physical exertion will be based upon the molecular events during physical stress including strength training, aerobic training and the involvement of physics in body movements. Labs will take place in both science labs and the Wellness Center; including study of the cardiovascular, muscular and respiratory responses during exercise. This course is co-taught with the science department.

738 Sports Psychology**.5 credit**

This course will expose students to the correlation of sport participation and exercise and the affect of persons' psychological health, development and well-being. Students will also learn how psychological factors affect an individual's physical performance. The course is designed to provide the student with the theory basis of human behavior in sport settings with an emphasis on the mental aspects of behavior. Areas to be discussed are: sport personology (including personality, motivation, achievement and attributions), anxiety/arousal, attentional focus and social/cultural manifestations of sport including humanism, youth sport, aggression, cooperation/cohesion and leadership. (Semester course, open to grades 10, 11,12)

754 Sport in Society**.5 credit**

With the notion that young students and athletes need to recognize their role in their high school and their community, this curriculum provides students with a fundamental knowledge of historical events, such as the title IX ruling, that have shaped the opportunities of today's sport. This course increases awareness of sport and its relation to society by exploring programs that identify problems, offer solutions and promote the benefits of sport. Committed to the idea that the sports community can, and should, take a lead role in bringing about social change, this course also covers the topics of diversity awareness, conflict resolution, violence prevention, sportsmanship and ethical behavior within athletic settings. Regular participation in a community service project is required. (Semester course, open to grades 10, 11,12)

758 Resiliency for Life Health**.5 credit**

The Health for Resiliency for Life (RFL) will provides students with the knowledge and skills to make informed responsible decisions and assist them in leading healthy lifestyles. Instruction will consist of wellness, communication skill, nutrition, non-infectious and infectious diseases to include sexually transmitted infections and HIV/AIDS, and social and emotional health to include relationships, sex and family life education, violence prevention, sexual harassment and substance free lifestyles. The RFL Health course parallels the mainstream health curriculum with adaptations relative to the needs of the RFL program.

616 Women's Health Part I**.5 credit**

This first semester course will be team taught by a Family and Consumer Sciences teacher and a Health Education teacher. This first semester course for students in grades 11 and 12 will offer the beginning of in-depth study of women's health issues. The course will focus on the development and practice of skills necessary to become healthy, independent women. The activities will include fitness, self-defense, learning about the health care industry, healthy eating labs, guest speakers from the health and fitness community, field trips, and health promotion activities in the school and community. The history of women's health and the effect that the women's movement has had on the health of women will be studied. Students will contribute to the health of the community through participation in a community service project as part of a unit of building healthy adolescent relationships. Pre-requisite: Successful completion of Grade 10 Health (First semester course, open to grades 11,12)

617 Women's Health Part II**.5 credit**

This course will be offered second semester and will be open to grade 11 and 12 students who have successfully completed grade 10 health. The unit on fitness will explore a variety of lifelong activities, which can improve a woman's health. Units on the history of women and disease, preventative medicine, pregnancy, nutrition through the life cycle, accessing the health care industry, women and the media, and relationship building skills, will be the focus of this Part II course. Students will contribute to the health of the community through participation in a community service learning project that involves sharing health skills with others in the community. (Second semester course, open to grades 11,12)

622 Introduction to Health Care Careers**.5 credit**

Introduction to Health Care Careers is a component of the interdepartmental Health Care careers pathway. The course has been designed by a faculty team of Family and Consumer Sciences, Health, and Science teachers to prepare students to work in important well paying health careers of the 21st century. The goal of this course is to introduce interested students to a variety of careers in health care, the requirements for admission to programs and colleges with these career majors, and the expectations of those working in the careers. Students can then make an informed decision as they begin their college and career searches. Students will visit college facilities, which offer degrees a variety of career choices. Field trips and guest speakers representing community health facilities will also enhance the coursework. Students will also learn and participate in resume writing, career outlook search, college searches, job interviews, and job application writing. (Open to grades 9,10,11,12 recommended as part of the health care career pathway)

Career Pathways Completion of all courses in these career pathways will earn a certificate of completion for students. These certificates can help students enter post-secondary programs with advanced knowledge and preparation for learning in their chosen career field. Each Pathway is interdisciplinary and involves cooperative interdepartmental planning to provide opportunities for students to make informed plans for future education.

Health Care Careers

1. Health Education
2. Biology
3. Introduction To Health Care Careers
4. Anatomy
5. Physiology
6. CPR and First Aid

895 ESL Health Education**.5 credit**

The Health Education Program provides students with the knowledge and skills to make informed, responsible decisions and assist them in living healthy lifestyles. The health instruction will consist of wellness, communication skills, non-infectious and infectious diseases, and social and emotional health. These topics include sexually transmitted diseases, HIV/AIDS, sex and family life education, violence prevention, and substance free lifestyles. The ESL Health Education course parallels the mainstream health curriculum with modifications relative to the students' levels of English language proficiency. (Semester II course, open to ESL students, level 2, in grades 11,12)

759 Yoga/Pilates**.5 credit**

This class is for students wishing to explore yoga and some pilates, as a way to improve upon their overall flexibility, strength, and core strength. With increased flexibility and strength, power, agility and balance will be challenged. Students will understand the importance of developing their breathing techniques and core strength as it relates to other fitness programs, and life long health and balance. Once students understand and master a minimum of number of poses, vinyasas, and breathing techniques, they will be expected to continue to learn and try more difficult skills. A meditative Shavasana (relaxation-mind/body imagery) will be conducted at the end of every session. Students will journal thoughts regarding their yoga practice throughout the semester. (Semester I elective course does not replace a required course grades 10, 11, 12)

PHYSICAL EDUCATION UNITS OF INSTRUCTION

The following units of instruction listed under each section are a sampling of the activities students may participate in during the semester course. Students will be encouraged to participate in some of the activities outside the physical education setting.

Fitness For Life/ Project Adventure	Sports Education	Lifetime Activities
Aerobics Circuit Weight Training Components of Fitness Dance Jump Roping Low Ropes Course New Games Personal Best Fitness Test Speedball Tae Bo Track and Field Ultimate Frisbee Walking/Jogging Yoga/Stress Management	Basketball Field Hockey Flag Football Floor Hockey Lacrosse Rugby Soccer Team Handball	Archery Badminton Bocce Bowling Cricket Croquet Golf Horseshoes Pickle-Ball Racquetball Self Defense Shuffleboard Softball Table Tennis Tennis Volleyball



History and Social Sciences

Course Offerings

Modern World History H
Modern World History CP1

United States History I AP
United States History I H
United States History I CP1

United States History II AP
United States History II H
United States History II CP1

African-American History CP1

American Law CP1

American Pop CP1

Art History CP-1

Current Issues CP1

Economics CP1

European History AP

Facing History CP1

International Relations H

Peer Leadership

Psychology AP

Psychology CP1

Political Theory H

Social Psychology CP1

Sociology CP1

US Government and Politics AP

The curriculum is designed to enable all students to become life-long learners who are skillful and competent in history and social sciences. As students progress through their course of study, they will learn the traditions and ideals of other nations and cultures, understand the foundations of the United States as a representative democracy, and participate intelligently in discussions of local, national, and international concern. Core courses emphasize global comprehension of history, geography, economics, and government. Varied methods of instruction enable students to write effectively, frame relevant questions, shape reasoned arguments, and analyze primary and secondary sources.

Required courses include Modern World History (grade 9), US History I (grade 10), and US History II (grade 11).

Students are strongly encouraged to broaden their learning experiences through enrollment in elective courses. Elective courses vary in level, thus affording students the opportunity to engage in topic specific study.

To provide a continuous setting for learning, history and social science courses integrate the study of several disciplines, allowing students to thoughtfully reflect on and respond to current and past events. Throughout their studies, students are given the opportunity to understand themselves and others.

**History and Social Sciences
Course Sequence**

Graduating Class	Freshman Year	Sophomore Year	Junior Year	Senior Year	Graduation Credits	Mandatory Courses for Graduation
2010	Modern World History	USI	USII	Optional Elective(s)	3	1. Modern World History 2. USI 3. USII
		Optional Elective(s)	Optional Elective(s)			
2011	Modern World History	USI	USII	Optional Elective(s)	3	1. Modern World History 2. USI 3. USII
		Optional Elective(s)	Optional Elective(s)			
2012*	Modern World History	USI	USII	Optional Elective(s)	3	4. Modern World History 5. USI 6. USII
		Optional Elective(s)	Optional Elective(s)			
2013*	Modern World History	USI	USII	Optional Elective(s)	3	1. Modern World History 2. USI 3. USII
		Optional Elective(s)	Optional Elective(s)			

*Starting with the class of 2012, it will be a graduation requirement to pass the History MCAS.

HISTORY AND SOCIAL SCIENCES
Greg Lagan, Department Chair

422 Modern World History H

1 credit

423 Modern World History CP1

Starting c. 1800, students will interpret and analyze the impact of significant world events. The course revisits revolutions in Europe and the Americas and ends with a study of world affairs today. Study will include units on the Enlightenment, Industrialization, Imperialism, Totalitarianism, and the Cold War. The use of primary documents will be emphasized in attempts to understand historical events. (Required full year course, open to grade 9)

402 United States History I H

1 credit

403 United States History I CP1

This course represents a social, political, and economic survey of America beginning before the arrival of Columbus and continuing to 1877. Units of study include sectionalism, westward expansion, urban development, and the formation of our democratic system. The forces shaping American thinking and society will be a focus. Other topics will feature changes in attitudes toward race, ethnicity, women, and family issues in context of the dynamic American landscape. (Required full year course, open to grade 10)

432 United States History II H

1 credit

433 United States History II CP1

This course covers the time period from 1877 to present-day. Changes in social, political, and economic issues and policies are highlighted as the United States moves from an agrarian society in the 1800's to an industrial society and a world leader into the 20th century. In-depth treatment of pivotal events will include, but are not limited to, Reconstruction, Industrialization, Immigration, the New Deal, Cold War, Civil Rights Movement, Détente, and the Gulf War. (Required full year course, open to grade 11)

431 US History I AP

1 credit

The first of two sequential Advanced Placement courses offered to highly motivated students who are committed to two years of study in US History. Major emphasis is placed on historical interpretation by the use of primary and secondary sources, analysis of major schools of historical thought, and training in historical research. Students will also work with Advanced Placement practice tests including document-based questions (DBQ's). Chronologically, this course covers the period from initial contact between the Old and New World through the Civil War and Reconstruction. (Full year course, open to grades 10)

441 US History II AP**1 credit***Prerequisite: Successful completion of US History I AP.*

This is the second of two sequential Advanced Placement courses offered to those students who have completed US History I - AP. Major emphasis will continue to be placed on historical interpretation by the use of primary and secondary sources, analysis of major schools of historical thought, and training in historical research. Chronologically, this course covers the period from Reconstruction to the present. US History I/II AP will prepare students for the Advanced Placement examination course in the spring. (Full year course, open to grade 11)

ELECTIVES

NOTE: *The following courses do NOT fulfill the World Studies and US History requirements. They remain available as elective courses for the grades indicated.*

468 African-American History CP1**.5 credit**

This course seeks to show the role that African-Americans played in the shaping and development of our country. To accomplish this, the course will emphasize: 1) An understanding of the African origins of American blacks; 2) Why Africans were brought to America; 3) The effects of slavery on whites and blacks alike; 4) The progress of African-Americans from 1619 to present; and 5) The goals and objectives of contemporary African-Americans in our society. Outside reading and research is required. (Semester course, open to grades 10, 11, 12)

460 American Law CP1**.5 credit**

This course focuses on the evolution of law in the United States. A major emphasis of this course will be to explain the rights and responsibilities of students and juveniles under our legal system. Other areas to be covered include introduction to law, trial procedure, criminal versus civil law, and the Bill of Rights. (Semester course, open to grades 10, 11, 12)

443 American Pop CP1**.5 credit**

American Pop is meant to help students learn to think critically and historically about the mass-produced culture that surrounds us every day. The course looks at how pop culture both shapes and reflects American society. Songs, novels, films, and television, are analyzed and viewed within historical context. Thinking critically is what takes this course a step away from a superficial discussion about movies, music etc. and moves toward the question of why the issue of popular culture so important. We will investigate what roles past persons or events in popular culture played, and what kind of needs that pop culture filled and continues to fill decade-by-decade from the 1920's to the present. (Semester course, open to grades 10, 11, 12)

444 Art History CP1**.5 credit**

This course focuses on how art reflects the history, culture, customs, religion and values of societies throughout the world. A special emphasis is placed on how art reflects the political, economic, and social organizations of society. No prior knowledge about art is required and students will not be expected to create fine art as part of this course. **This course does not fulfill a fine arts requirement.* (Semester course, open to grades 10, 11, 12)

470 Current Issues CP1**.5 credit**

This course focuses on current political, social, and economic issues largely through the use of primary sources. Topics to be discussed include problems unique to youth in America and controversial issues (media, censorship, basic human rights, etc.) impacting society. Extensive class discussions aim to elevate student awareness of national and global issues and how to act upon them at a local level. (Semester course, open to grades 11, 12)

466 Economics CP1**.5 credit**

This course familiarizes students with certain basic economic principles and laws governing our economic system. Principles of economics are made clear through work with graphs and charts. In addition, ideas of the great economists are discussed as well as specific topics, such as the Federal Reserve System, labor unions, and international trade. (Semester course, open to grades 11, 12)

440 European History AP**1 credit**

This course covers European History from 1450 to modern day. Historical analysis of primary and secondary documents relative to the emergence of the modern world through the post-World War II era will be required. Students will work with Advanced Placement practice tests including document-based questions (DBQ's). This course is designed to prepare students for the Advanced Placement exam in the spring. (Full year course, open to grades 11, 12)

461 Facing History CP1**.5 credit**

Facing History focuses on the ways that individuals interact with history and relate aspects of their own identity to historical concepts. It consists of four major units. First, students will examine how both individual and national identities are formed, as well as how these identities influence behavior and decision-making. The second unit focuses on the issue of membership. Students learn how national identity help people connect but also contribute to misunderstanding, stereotyping and conflict. The third unit revolves around human rights violations throughout history. Finally, the course focuses on the concept of "choosing to participate." Students reflect on the past and will understand that they have the power to change history through their own individual actions. They explore what it means to be a citizen in a democracy, and to exercise one's rights and responsibilities in the service of a more humane and compassionate world. * (Semester course, open to grades 10, 11, 12)

* Excerpts taken from Facing History Scope & Sequence

451 International Relations H**.5 credit**

International Relations presents theories and concepts that will enable students to understand the forces and factors that influence the nations of the world in their relations with one another. Current international situations will be examined to determine why they happened and their effects upon our welfare. Research papers, selected outside readings, and analytical discussions will be required. (Semester course, open to grades 11, 12)

476 Peer Leadership**1 credit**

Prerequisites: Interested sophomore students must sign up in the spring and an interview will be scheduled for those candidates based on excellent attendance, academic achievement, leadership qualities and exemplary character.

This full year highly selective course, sponsored by the Anti-Defamation League and the World of Difference Institute, is open to juniors. During the first semester of the course, students are trained on diversity issues, an established anti-bias curriculum and education methodology. After this semester of training these Peer Leaders are prepared to teach selected activities in 9th grade Health and Physical Education wellness classes. The training semester is spent working in pairs to lead lessons and discussions about cultural sensitivity, racial and ethnic awareness, and stereotypes, as examples. The ultimate goal of this program is to improve awareness of differences that exist in the Framingham High School community of learners. (Full year course, open to grade 11 only)

450 Political Theory H**.5 credit**

This is a discussion-based course in which students examine the works of great political philosophers ranging from Plato (ancient) to Marx (modern). There is a substantial reading requirement in this course. Students are encouraged to discuss contemporary issues that relate to political philosophy. In-class student debates and position papers will be the primary means of assessment. (Semester course, open to grades 11, 12)

464 Psychology CP1**.5 credit**

This is an introductory course in the scientific study of human behavior that includes the aims and methods of psychology, the physiological functions of the brain, and the principles of learning, memory, emotions, motivation, and personality. Emphasis is placed on the role of experimentation, writing assignments, and the application of psychology in the lives of the students. (Semester course, open to grades 11, 12)

472 Psychology AP**1 credit**

Designed for students who wish to study human behavior and mental processes at a level that approximates an introductory college course, AP Psychology stresses a scientific approach to the study of psychology. The course exposes students to a wide range of concepts, research findings and psychological theories while emphasizing application so the students can see how these relate to their own lives. Topics include the historical development of the schools of psychology, research methods, the biological determinants of behavior, altered states of consciousness, sensation and perception, conditioning and learning, cognition and memory, testing individual differences, normal and abnormal personality development, psychotherapy, and social psychology. Students are prepared to take the AP test in May. Students who take CP1 Psychology may not take this course. (Full year course, open to grades 11, 12)

473 Social Psychology CP1**.5 credit**

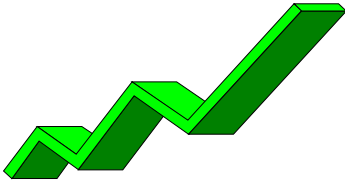
Social Psychology is the scientific study of the individual in social situations. This course will examine the different ways in which people understand themselves and interact with others by combining the individual perspective of psychology and the environmental influences of sociology. Students will be introduced to major theories and principles of both psychology and sociology in order to fully understand the differences and connections between the two disciplines. A variety of instructional methods will be utilized to meet the needs of all students. (Semester course, open to grades 10, 11, 12)

465 Sociology CP1**.5 credit**

This course helps students develop an understanding of group life and the influences of heredity and environment. It emphasizes the forces of social cooperation versus the forces of social conflict. Areas of study include: culture, crowd behavior, mass media, propaganda, marriage, the family, race, class structure, education, and religion. Field trips and guest speakers will be used when appropriate. Requirements include outside readings and a research project. (Semester course, open to grades 10, 11, 12)

459 United States Government and Politics AP**1 credit**

Designed for students that wish to take a course in political science/government at a level that approximates to a college introductory course, this course is an AP level survey of American government and political thought. Some topics include: the Constitution and foundation of American democracy, American political culture and landscape, the structure and function of the federal government, the power of special interests and the media, your rights as a citizen and a student, civil liberties and civil rights, landmark Supreme Court cases, and social, economic, and foreign policy. Students are prepared to take the AP test in May. (Full year course, open to grades 11, 12)



MATHEMATICS

Course Offerings

Algebra 1 CP1
Algebra 1 CP2
Geometry H
Geometry CP1
Geometry CP2
Algebra 2 H
Algebra 2 CP1
Algebra 2 CP2
Advanced Mathematics H
Advanced Mathematics CP1
Advanced Mathematics CP2
SAT Prep Math H
SAT Prep Math CP1
Creative Mathematics H
Discrete and Finite Math CP1
Calculus BC AP
Calculus AB AP
Introductory Calculus CP1
Statistics CP1
Statistics AP
Programming in C++ H
Introduction to JAVA Programming H
Problem Solving H
Problem Solving CP1
Computer Science AB AP
Topics in Calculus AB
Topics in Calculus BC

In today's society, it is imperative that a fundamental knowledge of mathematics becomes a part of everyone's educational background. It is important for students to realize that their achievement in mathematics is not based solely on their ability but also on their persistence and effort. The study of mathematics will help develop logical thinking and reasoning skills that are crucial in our daily lives. All students will achieve mathematical competence through a comprehensive mathematics program that emphasizes the appropriate use of technology, problem solving, communicating, reasoning and proof, making connections and using representations. To this end, students are encouraged to take four years (eight semesters) of mathematics. In order to comply with the requirements outlined in the Massachusetts Curriculum Frameworks, CP1 and CP2 students are encouraged to double up in mathematics during their sophomore year.

The first year of algebra is critical. It is a pivotal course that requires students to work diligently on the fundamental concepts of mathematics. This background will help students achieve success in all subsequent courses. Another course that our department sees as vital to student achievement is our Problem Solving course. It is designed to develop and improve the problem solving strategies that will be utilized in all subsequent courses as well as on such standardized tests as the PSAT, SAT and MCAS. We recommend that this course be taken during a student's freshman or sophomore year.

Students will be expected to communicate their knowledge of mathematics through a variety of assessment tools. Students will be exposed to the many wonderful connections that exist among the varied disciplines of mathematics as well as to the real world. Students will then begin to see and understand the importance, beauty and power of mathematics.

**Mathematics
Course Sequence**

Grade 9	Grade 10	Grade 11	Grade 12
<u>Core Curriculum Options</u>	<u>Core Curriculum Options</u>	<u>Core Curriculum Options</u>	<u>Core Curriculum Options</u>
Geometry Honors	Algebra 2 Honors	Advanced Math Honors	Calculus BC/AB AP
Geometry CP1	Algebra 2 CP1	Advanced Math CP1	Statistics AP
Algebra 1 CP1	Geometry CP1	Algebra 2 CP1	Introduction to Calculus CP1
Algebra 1 CP2	Geometry CP2	Algebra 2 CP2	Advanced Math CP1
			Advanced Math CP2
<u>Electives</u>	<u>Electives</u>	<u>Electives</u>	<u>Electives</u>
C++ Honors	C++ Honors	Statistics AP	Computer Science AB AP
Problem Solving Honors/CP1	JAVA Honors	C++ Honors	C++ Honors
	Creative Math Honors	JAVA Honors	JAVA Honors
	Problem Solving Honors/CP1	Creative Math Honors	Creative Math Honors
		Problem Solving Honors/CP1	Finite & Discrete Math CP1
		SAT Prep Math Honors/CP1	Statistics CP1
			Problem Solving Honors/CP1
			Topics in Calculus AB
			Topics in Calculus BC

MATHEMATICS

Paul Maiorano, Department Chair

203 Algebra 1 CP1

1 credit

This is a rigorous course in algebra, which introduces abstract concepts by the use of symbolism in which quantitative relationships can be stated in general terms. Emphasis is on the relationships of the real number system. Manipulation of symbols according to mathematical laws requires a thorough understanding of fundamentals. Particular areas of emphasis include factoring, graphing, powers, functions, and the solution of linear, simultaneous, and quadratic equations. Related word problems will be stressed. (Full year course, open to grade 9)

204 Algebra 1 CP2

1 credit

The CP-2 Algebra 1 courses emphasize a conceptual understanding of algebra as a means of representation and of algebraic methods as a problem-solving tool. Particular areas include the language of algebra, solution of open sentences, axioms of the real number system, operations with real numbers and with polynomials, order in the set of real numbers, factoring, graphing, relations, functions, irrational numbers, and quadratic equations. (Full year course, open to grades 9,10)

201 Geometry H

1 credit

This course is for students who have successfully completed Algebra 1 in the eighth grade. It emphasizes logical arguments in plane geometry, geometric applications of algebra, solid and coordinate geometry, and an introduction to trigonometry. It is the first course for students wishing to enroll in our challenging course work in mathematics, culminating with calculus in the twelfth grade. Recommended: Pass Algebra 1 in Grade 8 (85% recommended) (Full year course, open to grade 9)

202 Geometry CP1

1 credit

This is the sequential course to Algebra 1 for capable mathematics students preparing for college. It precedes Algebra 2 and Advanced Math. The course develops techniques of logical reasoning through the study of geometric figures. Plane and solid geometric facts are determined through inductive and deductive processes, which stress original and creative thinking. Coordinate geometry and trigonometry are introduced. Recommended: Pass Algebra 1 (80% in CP1 Algebra recommended) (Full year course, open to grades 9,10,11)

In order to comply with the requirements outlined in the Massachusetts Curriculum Frameworks, 10th grade students should also be enrolled in Algebra 2.

213 Geometry CP2

1 credit

This course includes the study of plane and spatial geometric figures. Algebraic applications and coordinate methods are included along with inductive and deductive reasoning. Topics include area, similarity, circles, regular polygons, geometric solids, as well as an introduction to trigonometry. Recommended: Pass Algebra 1 (Full year course is open to grades 10,11,12)

In order to comply with the requirements outlined in the Massachusetts Curriculum Frameworks, 10th grade students should also be enrolled in Algebra 2.

211 Algebra 2 H

1 credit

This course provides in-depth preparation for Advanced Mathematics H. It continues the study of the properties and structure of the real number system. The use of symbolism is emphasized and applied to problem solving. Stress is placed on the ability to derive formulas and prove assertions. Irrational and complex numbers as expansions of our number system, systems of quadratics, graphs of conic sections, introduction to trigonometry, sequences, series, and the binomial theorem are included as topics. Students are required to participate in Mathematics Olympiad competition, which will be scheduled during the academic day. Recommended: Honors Geometry (85% recommended) (Full year course, open to grade 10)

212 Algebra 2 CP1

1 credit

This course continues the study of the properties and the structure of the real number system. The use of symbolism is emphasized and applied to problem solving. Irrational and complex numbers as expansions of our number system, logarithms, variation, analytic geometry of the straight line, systems of quadratics, graphs of the conic sections, introduction to trigonometry, sequences, series, and the binomial theorem are included as topics. Recommended: Algebra 1 and Geometry (80% in CP1 recommended) (Full year course, open to grades 11,12)

223 Algebra 2 CP2

1 credit

The CP-2 Algebra 2 course include topics such as operations with rational and complex numbers, factoring, solutions of equations and inequalities, coordinate geometry, relations and functions, quadratic functions, systems of equations, exponents, logarithms, and conic sections. Concepts of problem solving will be introduced. This course treats the Algebra 2 curriculum in a less rigorous manner than Algebra 2 CP1. Recommended: Pass Algebra 1 and Geometry (Full year course, open to grades 11 and 12)

221 Advanced Mathematics H

1 credit

This is a pre-calculus course for those students in the junior year that have strong motivation in mathematics. It is a rigorous treatment of elementary functions with emphasis on mathematical analysis. Analytical geometry and higher algebra topics such as series and limits will be included. Students are required to participate in New England Math League and Math Olympiad competitions, which will be scheduled during the academic day. Recommended: Algebra 1, Geometry, and Algebra 2 Honors (85% in Honors recommended) (Full year course, open to grade 11)

222 Advanced Mathematics CP1

1 credit

This is a course for students who wish to acquire a deeper and more expanded knowledge of mathematics. It will include mathematical analysis based on the algebraic, trigonometric, and logarithmic functions. Advanced algebra and introductory probability will be considered. Emphasis will be placed on abstract concepts as well as on skill in practical applications. Recommended: Algebra 1, Geometry, and Algebra 2 CP1 (80% or higher recommended in CP1) (Full year course, open to grades 11,12)

220 Advanced Mathematics CP2

1 credit

This is a course for seniors who wish to continue their study of high-level mathematics. It will include an in depth study of the multiple representations of polynomial, rational, exponential, logarithmic, and trigonometric functions. The treatment of these topics is not as rigorous as that in Advanced Math CP1 and will be paced to meet the need of students fulfilling the prerequisites. Recommended: Algebra 1, Geometry, and Algebra 2 CP2 (80% or higher recommended in CP2) (Semester course, open to grade 12)

252 SAT Prep Mathematics H

.5 credit

253 SAT Prep Mathematics CP1

.5 credit

This semester course will focus on preparing students for the College Board's SAT 1 examination in Mathematics. If students are planning on taking the exam in January, April or May, they should enroll in this course during the first semester. If students are planning on taking the exam in October, November, December or June, they should enroll in this course during the second semester. Students will have the opportunity to take several full-length practice SAT tests. Hints, test taking strategies and exercises for improving test scores will be addressed.

This course does not count towards fulfilling the three-credit Mathematics requirement.

244 Creative Math 1 H

.5 credit

This course covers the techniques and strategies of both problem solving and problem posing. Following this process, students will begin open-ended investigations dealing mainly with geometry, elementary number theory, sequences and series, and other topics from high school mathematics. Emphasis will be on originality, creativity, and the discovery of patterns and relations. In addition, there will be discussion on the nature of mathematics, its relationship to the physical and social

sciences, and the role that induction, deduction, and the human imagination play in its growth. Recommended: Honors Geometry and Honors Algebra 2 and the ability to work independently (Semester course, open to grades 10,11,12)

246 Discrete and Finite Math CP1

.5 credit

This course is designed for the student whose freshman college course will not be calculus, but will include topics from finite and discrete mathematics. Students planning to major in business, computers, or liberal arts should take this course. Topics include sets, logic, combinatorics, probability, matrices, determinants, and linear programming. Recommended: Pass Algebra 2 (Semester course, open to grades 11,12)

231 Calculus BC AP

1 credit

This course follows the Advanced Placement BC syllabus of the College Board. This is a college level course, which is offered to qualified students to prepare for the Advanced Placement Examination (Level BC) in calculus. It will give substantial training in differential and integral calculus and related analytic geometry. As a college level course, the teaching and assignments will be of college depth and length. Students are required to participate in the New England Math League and Math Olympiad competitions that will be scheduled during the academic day. Recommended: Honors Advanced Mathematics (85%) (Full year course, open to grade 12)

232 Calculus AB AP

1 credit

This course follows the Advanced Placement (Level AB) syllabus of the College Board. Included in the course are the study of elementary functions, limit theory, and the methods of differential and integral calculus together with applications. Students are required to participate in the New England Math League and Math Olympiad competitions that will be scheduled during the academic day. Recommended: Honors Advanced Mathematics (75%) or Advanced Mathematics CP1 (85%) (Full year course, open to grade 12)

233 Introductory Calculus CP1

1 credit

This course in the accelerated series provides an introduction to calculus. It is intended to prepare students for more rigorous college calculus courses. Course topics also include analytic geometry, elementary functions, limit theory, and methods of differential and integral calculus with applications. Recommended: Advanced Mathematics (Full year course is open to grade 12)

247 Statistics CP1

.5 credit

This is a basic course in statistics, which introduces the student to the art of collecting and analyzing data and making inferences from the data. Most students will take statistics in college, and this is an excellent introduction to statistics. Topics from probability will also be included. Recommended: Algebra 2 or concurrently taking Algebra 2 (Semester course, open to grades 11,12)

238 Statistics AP

1 credit

Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing and drawing conclusions from data. Ideas and computations presented in this course have immediate links and connections with actual events. Calculators will simplify calculations and allow students to focus deeply on the concepts involved in statistics. This course prepares students for the Advanced Placement examination in Statistics. Students are required to participate in the New England Math League and Math Olympiad competitions that will be scheduled during the academic day. Recommended: Algebra 2 Honors (85%) or Advanced Mathematics (Full year course, open to grades 11,12)

243 Programming in C++ H

1 credit

Programming in C++ is for the new computer student. Concepts and theory will start from the very beginning and build to the more complicated structures for which this language is noted. Top-down design (planning the solution of a problem in detailed steps before putting it into computer code) will be stressed. Problems used will be taken from a wide background including math, business, and other areas. During the second semester, topics covered will include such advanced programming topics as classes, inheritance and pointers. Due to the difficulty of some of these topics, only students who are serious about computer programming should consider taking this course. This course meets either the math requirement or the practical arts requirement. (Full year course, open to grades 9,10,11,12)

240 Introduction to JAVA Programming H

1 credit

This course is for those students who have successfully completed at least one semester of C++ programming and who want to learn something about one of the most useful and powerful computer languages. The student is introduced to JAVA programming techniques and shown how they are similar to and yet very different from those used to program in C++. In particular, the student will learn how to use libraries to build larger programs that are very powerful. This is a challenging course, and only those students who are serious about computer programming should consider taking it. Second semester, topics covered will include arrays, searching and sorting. This course meets either the math requirement or the practical arts requirement. Recommended: Computer Programming in C++ (85%) (Full year course, open to grades 10,11,12)

262 Problem Solving H

.5 credit

263 Problem Solving CP1

.5 credit

This course is designed to develop and improve the problem solving strategies that are utilized in educational course work and also in the world of work. Students will learn how to work cooperatively in groups. They will develop communication skills. They will learn problem solving techniques such as diagrams, systematic lists, eliminating possibilities, matrix logic, pattern searches, guess and check, sub-problems, solving an easier related problem, physical representations, working backwards,

Venn diagrams, using algebra, and finite differences. This course does not require any previous mathematics background beyond Algebra 1 and should not be thought of as a “math” course. It is a thinking improvement course. PSAT, SAT and MCAS test scores should improve as a result of this course. Students who fail the math portion of the 8th grade MCAS will be encouraged to take this course during their sophomore year.

Students will be given the opportunity to take this course at Honors or CP1 level. Students will sign a contract at the beginning of the semester to designate the level at which they will be taking the course. Modifications will be made with regard to students' workload on problem sets to distinguish between the two levels. (Semester course, open to grades 9,10,11,12)

266 Computer Science AB AP

1 credit

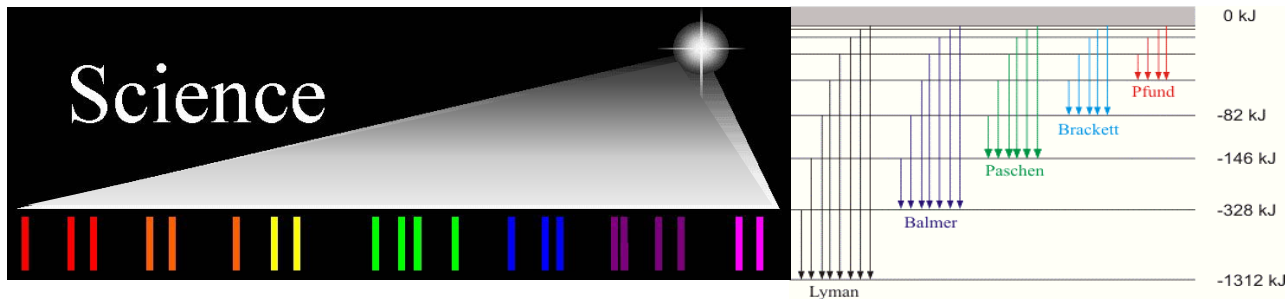
This is a full year course for students who have completed one year of C++. The course covers remaining topics needed for the Advanced Placement AB Examination in Computer Science. These include recursion, linked lists (single, double and circular), binary trees and the AP classes: vector, matrix, string, stack and queue. The AP case study will also be examined. Additional topics as time allows are Boolean Algebra, hashing, prefix, infix and post fix notations, quadratic sorts, big O notation, worst case and average case time, worst case and average case space, approximation methods and Monte Carlo methods. Due to a very demanding curriculum, this is a course only for students who are serious about programming. This course meets either the math requirement or the practical arts requirement. Recommended: C++ (Semester course, open to grades 11,12)

251 Topics in Calculus AB U

.5 credit

259 Topics in Calculus BC U

This course is designed to be taken in conjunction with any of our Calculus courses. Students will be offered an opportunity to review many of the major concepts that are presented in our Calculus curriculum for the purpose of remediation and/or reinforcement. Topics that will be discussed will include: limits and continuity, derivatives, applications for derivatives, integration, applications of definite integrals, transcendental functions, and infinite sequences and series. It is our belief that students gain most in the study of mathematics by being involved with it. Toward this end, students will be given many opportunities to work in a cooperative learning environment to solve and then present their solutions to a variety of open response problems. The course is designed for students who feel that additional practice would be beneficial to their understanding of the Calculus curriculum. (Full year course, open to grade 12. Course will meet twice during a seven-day cycle)



COURSE OFFERINGS

Core Disciplinary Courses

- Earth Science H
- Earth Science CP1
- Earth Science CP2
- Biology H
- Biology CP1
- Biology CP2
- Chemistry H
- Chemistry CP1
- Chemistry CP2
- Physics H
- Physics CP1
- Pre-Engineering Exploration CP1
- Introduction to Science & Engineering CP1

Advanced Placement Courses

- Biology AP
- Chemistry AP
- Environmental Science AP
- Physics AP
- AP Science Recitation

Elective Courses

- Anatomy & Physiology CP1
- Animal Behavior CP1
- Astronomy CP1
- Biotechnology CP1
- Environmental Science CP1
- Exercise Physiology CP1
- Forensic Science CP1
- Oceanography CP1
- Project Physics CP1
- Zoology CP1
- Independent Study

Science Department

Science can inform, enrich, and even save our lives. We believe that science is a life-long endeavor. The science faculty is dedicated to offering a program of science education that will prepare the student for a life of inquiry.

A “core” curriculum of Earth Science, Biology, Chemistry and Physics has a strong laboratory component. Each core course, or discipline, provides a distinct manner of analyzing natural phenomena. Through their studies in science, students build the tools that scientists use to explain the work around us.

Our curriculum is designed to meet the Massachusetts State Frameworks. Beginning with the Class of 2010, students will take one Science MCAS exam as a high school graduation requirement. Our Biology, Introduction to Science & Engineering, and Chemistry courses are all designed to meet this requirement.

The core disciplines are supplemented by Advanced Placement courses and elective courses in which students can pursue more concentrated studies in a particular area of interest. AP courses provide students with their first experience of a rigorous college course in science. The electives enhance and enrich the experience of the study of science.

The students of Framingham High School have a science program that will start them on a path of discovery that will serve them as citizens of the world.

**Science
Course Sequence Options**

Grade 9	Grade 10	Grade 11	Grade 12
Earth H	Earth H	Earth H	Earth H
Earth CP1	Earth CP1		
Earth CP2	Earth CP2		
Biology H	Biology H	Biology H	
Biology CP1	Biology CP1	Biology CP1	Biology CP1
	Biology CP2	Biology CP2	Biology CP2
	Chemistry H	Chemistry H	Chemistry H
	Chemistry CP 1	Chemistry CP 1	Chemistry CP 1
	Chemistry CP2	Chemistry CP2	Chemistry CP2
	Physics H	Physics H	Physics H
	Physics CP1	Physics CP1	Physics CP1
Introduction to Technology & Engineering CP1	Introduction to Technology & Engineering CP1	Pre-Engineering Exploration CP1	Pre-Engineering Exploration CP1
		Biology AP	Biology AP
		Chemistry AP	Chemistry AP
		Physics AP	Physics AP
		Environmental AP	Environmental AP
		Science Elective Courses	Science Elective Courses

SCIENCE

Matthew Corcoran, Department Chair

Core Disciplinary Courses:

311 Earth Systems H

1 credit

Honors Earth Systems Science is a detailed study of the physical earth and earth systems through the use of computer and physical modeling, including the use of Geographic Information Systems (GIS) as an analytical tool. All five branches of Earth Systems science are touched upon in this rigorous survey course: Geology, Environmental Science, Oceanography, Meteorology and Astronomy. Students learn about these individual systems in depth and synthesize a holistic concept of Earth's interrelated systems. Honors Earth Science is intensive and students should have a strong background in the physical sciences, superior math and graphing skills and a thirst for knowledge of the world around them. After this course, you will never look at the Earth in the same way again. (Full year course, open to grades 9,10,11,12)

312 Earth Systems CP1

1 credit

This course explores how energy and matter are cycled through the earth's dynamic environments. Through computer and physical modeling and laboratory experiments, students examine how physical processes and human interactions have sculpted our planet. Students study and apply the major principles Geology, Environmental science Oceanography, Meteorology and Astronomy to model and analyze our ever-changing world. Students in this course build the skills to analyze

complex information in a variety of ways that will serve them across disciplines and throughout their high school career. Students entering CP-1 Earth Systems Science must have well-developed laboratory, graphing and math skills. (Full year course, open to grades 9,10)

313 Earth Systems Science CP2

1 credit

In CP-2 Earth Systems Science students will explore the five branches of Earth Science through the use of computer and physical models. CP-2 Earth Science takes students from earth's solid inner core to the stars above, from auroras at the edge of the sky to the trenches of the deepest ocean. Throughout the curriculum, inquiry is emphasized as analytical skills are developed. The course focuses on development of laboratory skills, graphing, study and note taking skills and serves as an introduction to high school level science courses. Enrollment is by department head approval only. (Full year course, open to grades 9,10)

303 Biology H

1 credit

This course is a comprehensive and challenging introduction to biological science, with a strong molecular emphasis. Topics include basic biochemistry, cell structure and function, DNA structure and function, genetics, evolution, and a survey of life. Comprehensive laboratory investigations teach important biological techniques and reinforce major concepts. Some dissections are included. Strong note taking, study, and writing skills are recommended. Prerequisite: Algebra I is required for enrollment. (Full year course, open to grades 9, 10)

304 Biology CP1

1 credit

This course is a comprehensive introduction to the study of life. Students will learn through both classroom and laboratory interactions that introduce and investigate the major concepts of biology. Specific topics include evolution, cell structure and function, biochemistry, genetics, photosynthesis and cellular respiration, human biology and ecology. The curriculum stresses a molecular-based approach, with the focus on the major concepts. The lab activities include dissections. Prerequisite: Algebra I is required for enrollment. (Full year course, open to grades 9,10,11,12)

305 Biology CP2

1 credit

This course covers the major concepts of biology including cell structure and function, key biological processes, genetics, human biology, evolution and ecology. The course content and detail is less rigorous than the CP1 level; however, all salient topics of biology are covered with a combination of classroom and laboratory interactions and activities. Dissections are included. Enrollment is by department head approval only. (Full year course, open to grades 10,11,12)

323 Chemistry H

1 credit

Welcome to the study of matter. This course is a comprehensive introduction to chemistry, including a rigorous treatment of chemical reactions, stoichiometry, kinetic theory, phases of matter, atomic structure and bonding, thermochemistry, kinetics, equilibrium, and oxidation-reduction reactions. This laboratory-centered program will emphasize the discovery and understanding of ideas and concepts through data analysis. It is recommended that students have superior math skills. Prerequisite: Completion of geometry is required for enrollment. (Full year course, open to grades 10,11,12)

324 Chemistry CP1

1 credit

Chemistry is the study of matter, energy, and its interaction. This course is a comprehensive overview of chemistry, including chemical reactions, stoichiometry, kinetic theory, phases of matter, atomic structure and bonding, thermochemistry, kinetics, and equilibrium. This laboratory-centered program will emphasize the interpretation of data to reinforce concepts and the development of quantitative thinking. Students should have completed two years of high school math to be successful. (Full year course, open to grades 10,11,12)

325 Chemistry CP2

1 credit

Living by Chemistry uses a hands-on approach to make connections between chemical concepts and social issues. This innovative curriculum developed by the University of California, Berkeley covers the state frameworks for chemistry, and places them in context through a variety of topics that include chemical changes, toxins, combustion, weather and smell. Students learn about chemical principles through the integrated laboratory component and analysis of experimental data. Students should have algebra and graphing skills. Enrollment is by department head approval only. (Full year course, open to grades 10,11,12)

333 Physics H

1 credit

This course explores introductory topics in physics by using a problem solving approach. This is a mathematically rigorous program requiring excellent algebra, trigonometry and graphing skills. Topics include mechanics, energy, light, electricity, and some wave motion. Semester 1 is primarily mechanics. Semester 2 is a survey of energy topics. Students should be concurrently enrolled in Advanced Math or higher. (Full year course, open to grades 10,11,12)

334 Physics CP1

1 credit

This course explores introductory topics in physics by using a problem solving approach. Students must have well-developed laboratory, graphing and math skills. Topics include mechanics, energy, light, and electricity. Semester 1 is primarily mechanics. Semester 2 is a survey of energy topics. Students should have successfully completed at least two years of high school math to be successful. (Full year course, open to grades 10,11,12)

385 Introduction to Technology & Engineering CP1**1 credit**

Technology/Engineering is one of the choices you can make to help pass the MCAS requirement for Science and graduation. The course utilizes the engineering design process and investigates prototype development and the science involved within the process. Students will solve problems in structure design, strength of materials, fluid and thermal systems, electrical circuits, communications, and manufacturing. Offered in conjunction with the Technology / Engineering Department, this course can be taken for either Science or Practical Arts credit.

(Full Year course, open to grades 9,10)

562 Pre-Engineering Exploration CP1**.5 credit**

Pre-Engineering Exploration is an intensive look at professional engineering design processes. The course investigates the following areas: Robotics and Computer Programming, Design Processes, Electrical Systems, Fluid Systems, Quality Assurance, Manufacturing Systems, Thermal Systems, Structures, Mechanical Drives, and Materials Technology. Students will have an opportunity to act as a member of an engineering group to develop, design, and problem-solve through modular-based, largely self-directed instruction and project-based activities. Offered in conjunction with the Technology / Engineering Department, this course can be taken for either Science or Practical Arts credit.

(Semester course, open to grades 11,12)

Advanced Placement Courses:

The following courses are designed to offer an introductory college science experience and meet the requirements of the College Board. These courses are offered as the student's second high school exposure to the content, not as a preliminary course in the subject. In order to meet the recommended hours, students will be automatically scheduled into the appropriate AP seminar. The seminar meets two days per cycle for the full year. Thus, students meet all seven days of the school cycle over two periods, allowing them adequate time to complete the recommended labs and lecture material. The College Board has approved the curricula and the college textbooks for these courses.

Enrolled students are expected to take the AP test in the spring. We are very proud of the great success our students have had on the AP test and in their subsequent college classes.

380 Biology AP with seminar**1.5 credit**

Taught as a college introductory course for science majors, this program prepares students for the Advanced Placement Exam. Students will cover the major themes of molecules, cells, heredity, genetics, evolution, diversity of life, and ecology. Labs include all twelve of the College Board required AP Biology labs, plus genetic engineering and a PCR-based lab. Some dissection also included. The course will be automatically scheduled with the appropriate AP seminar. Prerequisite: Completion of introductory Biology and Chemistry classes is required prior to enrollment. (Full year course, open to grades 11,12. Course will meet seven days a cycle.)

381 Chemistry AP with seminar**1.5 credit**

This course is offered for those who wish to take a second more intensive course in chemistry. Topics include atomic structure and periodicity, chemical bonding, stoichiometry, states of matter, kinetics, equilibrium, thermodynamics and electrochemistry. This program will be of particular interest for those interested in any science or engineering career. The course will be automatically scheduled with the appropriate AP seminar. Prerequisite: One full year of high school chemistry. (Full year course, open to grades 11,12. Course will meet seven days a cycle.)

382 Environmental Science AP with seminar**1.5 credit**

APES is a college level introductory course. This course emphasizes a rigorous scientific approach that stresses scientific principles, analysis and a laboratory component rather than sociological or political perspectives. This course combines the realms of biology, chemistry and physics to help students come to understand the interrelationships between man and nature. The course will be automatically scheduled with the appropriate AP seminar. Prerequisite: One full year of high school earth science, biology, or chemistry. (Full year course, open to grades 11,12. Course will meet seven days a cycle.)

383 Physics AP with seminar**1.5 credit**

This is a calculus-based course that serves as a second year of Physics and preparation for the two-part Advanced Placement Physics test (Physics C). Calculus is introduced as another tool for problem solving. The first semester concentrates on Mechanics, while the second semester is dedicated to studying Electricity and Magnetism. This program will be of particular interest for those interested in any physical science or engineering career. The course will be automatically scheduled with the appropriate AP seminar. Prerequisite: One full year of high school physics. (Full year course, open to grades 11,12. Course will meet seven days a cycle.)

384 Advanced Science Recitation U**.5 credit**

This course is taken in conjunction with an AP Science course. The course will meet two days a cycle, on days that the AP seminar does not meet. The course is an opportunity to review many of the major concepts that are presented in our AP curriculum for the purpose of remediation and/or reinforcement. Toward this end, students will be given opportunities to work in a cooperative learning environment to solve and then present their solutions to a variety of problems. The course is designed for students who feel that additional practice would be beneficial to their understanding of their AP curriculum. Prerequisite: Enrollment in an AP Science course; concurrent scheduling with appropriate AP Seminar.

(Full year course, open to grades 11,12. Course will meet three days a cycle.)

Science Elective Course Options:

The science elective courses are designed to supplement the fundamental science curriculum by building on core disciplinary knowledge from the full-year science course offerings. Students taking science elective courses should have already demonstrated competence in at least two disciplines. *The successful completion of two full year lab courses is a minimum prerequisite for all science elective courses. The elective cannot run concurrent to the second core disciplinary course.*

336 Project Physics CP1

.5 credit

An activity-based physics course that explores both practical and theoretical aspects of physics. Compete with other groups to achieve specific goals; build a rocket that flies the farthest, a plane that stays aloft the longest, a mousetrap powered car that goes the farthest or fastest, a solar greenhouse that reaches the highest temperature. (One semester course, open to grades 11,12)

343 Environmental Science CP1

.5 credit

This course focuses attention on the place of humans in ecological cycles and situations. Topics include nutrient cycles, energy flow, and interaction at the community level. The impact of humans on biological systems is probed. Students will be introduced to ecological concepts and major environmental problems that affect the world in which they live. Students will learn about technological developments that have caused environmental problems as well as how technology can help to solve them. Among the topics covered will be solid waste, air and water pollution, nuclear energy, rain forest destruction, water resources and recycling. (One semester course, open to grades 11,12)

345 Animal Behavior CP1

.5 credit

Students will investigate animal behavior and the interaction of animals with their environment. Animals in the wild and in the laboratory will be studied. Animal rights and animal activism will be studied through videotape and the use of the Internet, and debated. A class project will be required on this topic. (One semester course, open to grades 11,12)

346 Oceanography CP1

.5 credit

This is an activity-oriented program with field investigations including a tide pool and beach study. Biological, chemical and physical characteristics of the shores and ocean will be studied. New technologies are discussed and utilized by the students. Study of organisms in the laboratory is included. Students will also perform comprehensive seawater testing. (One semester course, open to grades 11,12)

348 Biotechnology CP1

.5 credit

This course is a detailed and challenging investigation of the science and applications of Biotechnology. Specific topics include DNA structure, DNA replication, protein synthesis, mutations and genetic engineering, including cloning and stem cell research. Students will also discuss and debate some of the many ethical issues surrounding this field. Laboratory activities include DNA electrophoresis, DNA fingerprinting, DNA extractions and recombinant DNA. This course is an excellent choice for students interested in pursuing a career in biomedical research or in medicine. It is strongly recommended that students take Biology and Chemistry before taking Biotechnology. (One semester course, open to grades 11,12)

349 Astronomy CP1

.5 credit

A course based on student interests; students choose the topics of inquiry. Previous units included stellar evolution leading to white dwarfs, neutron stars, or black holes; cosmology, constellations, aurora; and extraterrestrial life. Group project work is encouraged. Star parties with telescope observations are optional. (One semester course, open to grades 11,12)

350 Zoology CP1

.5 credit

Primarily a laboratory dissection course, "Zoo" offers the student an opportunity to investigate the structure of a variety of organisms. Students will observe the sequential development, function and evolutionary relationships existing among animals. Dissections will include the lamprey eel, necturus, frog, pigeon and snake. (One semester course, open to grades 11,12)

351 Anatomy (Musculoskeletal/Nervous) CP1

.5 credit

Anatomy and Physiology (A&P) is an intense lab and case study based exploration of the human body. The two strands of A&P may be taken independently of each other and cover different body systems. This course focuses on the skeletal, muscular, nervous and cardiovascular systems of the human body. Required vocabulary stresses the medical and anatomical terminology used in physical therapy and sports medicine. Hands-on experiences and labs coincide with the structures and terminology of the human body. Dissections form the basis of the lab program. A strong background in first year biology is recommended, and students should have successfully completed chemistry. (One semester course, open to grades 11,12)

362 Physiology (Regulation/Metabolism) CP1

.5 credit

Anatomy and Physiology (A&P) is an intense lab and case study based exploration of the human body. The two strands of A&P may be taken independently of each other and cover different body systems. This course focuses on the respiratory, digestive, excretory, endocrine, and immune systems of the human body. We will relate the function of these systems to the homeostasis of the entire body. Epidemiological case studies, pathology investigations, lab activities, and research projects will be an integral part of the curriculum. Limited dissection is included. A strong background in first year biology is recommended.

306 Exercise Physiology CP1

.5 credit

This class explores the human body's physiological responses to varied levels of exercise; from mild workouts to vigorous exercise leading to chronic fatigue. Through class lecture, discussion and laboratory experiments, students will gain an

understanding of body performance during exercise. Study of the muscular system and physical exertion will be based upon the molecular events during physical stress including strength training, aerobic training and the involvement of physics in body movements. Labs will take place in both science labs and the Wellness Center; including study of the cardiovascular, muscular and respiratory responses during exercise. A strong background in first year Biology is recommended. Since it is offered in conjunction with the Physical Education Department, this course can be taken as an elective for Science Department credit or for Physical Education Department credit. (One semester course, open to grades 11, 12.)

356 Forensic Science CP1

.5 credit

Forensic science is the application of science to matters of law. This course takes you from the crime scene to the courtroom, revealing the techniques that professionals use to identify and collect evidence, analyze it, and apply the results in an investigation. Forensics is a complex mixture of planning, problem solving, practical application, and communication. In this course you will apply your prior scientific background to legal investigations by performing labs and presenting your findings to the class. This is a lab and project based course that is best suited to an independent worker. As you sharpen your analytical skills, you will learn what is really behind Crime Scene Investigations. Prerequisites: Successful completion of both Biology and Chemistry. (One semester course, open to grades 11, 12)

352 Independent Study Science U

.5 credit

Self-motivated students with projects or experiments they would like to pursue will receive guidance in how they might set up and perform their activity. Mentors from industry may be available. Internship opportunities exist. Students will be encouraged to enter their projects in Science Fairs. Student must have approval of both a faculty sponsor and the department head. (One semester course, open to grade 12)

Course Offerings



Applied English I
Applied English II
Applied Math I
Applied Math II
Directed Study Strategies
Study Strategies/Skills
High School to the Future
Structure of the English Language
Phoenix English*
Phoenix Math *
Phoenix Math II*
Phoenix Geometry*
Phoenix Study Strategies*
Phoenix Modern World History*
Phoenix History*
Phoenix HistoryII*
Phoenix Earth Science*
Phoenix Biology*

*Phoenix Program only

SPECIAL EDUCATION

The Special Education Department provides specially designed instruction to meet the unique needs of students with disabilities. Students eligible for Special Education services have Individualized Educational Programs that can include both Special Education and Regular Education classes. The primary goal of the department is to support and encourage maximum student involvement in regular education classes to the extent appropriate.

The Special Education Department and the Framingham High School community are committed to meeting the educational and emotional needs of students with learning challenges in the least restrictive environment. Each Framingham High School student with special needs is placed in accordance with the TEAM evaluation process. This process involves exploring and documenting all regular education alternatives prior to referral to Special Education.

Participation in the following Special Education classes is predicated upon recommendations made via the TEAM process and the receipt of a signed Individualized Educational Program accepting the class(es).

**SPECIAL EDUCATION
Course Sequence**

Grade 9	Grade 10	Grade 11	Grade 12
Applied English I	Applied English II	Applied English II	Applied English II
Applied Math I	Applied Math II	Applied Math II	Study Strategies/Skills
9th Grade Study Strategies	Study Strategies/Skills	Study Strategies/Skills	HS to the Future
Study Skills- Term 2		HS to the Future	

SPECIAL EDUCATION
Corinne Nye, Department Chair

700 Phoenix Math II

1 credit

This full year course is a continuation of Phoenix Math I and provides specialized instruction for students with varied basic math skills. The course includes solving equations, order of operations, basic math, algebra, an introduction to geometry, and statistics. The topics covered in this course focus on MCAS preparation. (Full year course; only available to students in Phoenix Program, grades 10, 11, and 12 TEAM recommendation required)

701 Applied English I

1 credit

This full year course provides specialized instruction in reading for comprehension and vocabulary development, as well as developing reading skills in a variety of literary genres, including the play, poetry, and the short story. Writing assignments will focus on the development of clear, concise sentences, paragraphs, and essays. This course utilizes multimedia resources to supplement diverse learning styles. Applied English mirrors the English I curriculum. (Full year course, open to grade 9 TEAM recommendation required)

702 Applied Math I

1 credit

This full year course is for freshman and/or students entering special education, who require assistance with basic math skills. This class will include solving equations, order of operations, basic math, and an introduction to geometry, statistics, and MCAS preparation. This class covers the majority of the Algebra I course curriculum. (Full year course, open to grades 9; for grades 10, 11, and 12, TEAM recommendation required)

704 Phoenix History

1 credit

This course represents a social, political, and economic survey of America beginning before the arrival of Columbus and continuing to 1877. Units of study include sectionalism, westward expansion, urban development, and the formation of our democratic system. The forces shaping American thinking and society will be a focus. Other topics will feature changes in attitudes toward race, ethnicity, women, and family issues in context of the dynamic American landscape. (Full year course; only available to students in the Phoenix Program grades 10,11,12 TEAM recommendation required)

707 Study Skills

.5 credit

This half-year course is offered to all special education students. Each student will work with his/her teacher to develop and/or improve various study skills and learning strategies. The curriculum will be individualized to meet each students needs, but will focus on the following areas: organizational skills, reading comprehension strategies, outlining and note-taking skills, test taking skills, term papers, long-range assignments, and self advocacy skills. Some sections may incorporate speech and language services for students who require special intervention. (Half-year course, open to grades 9, 10, 11, and 12; TEAM recommendation required)

708 High School to the Future

.25 credit

This 2-part course is offered to junior special education students in the spring and senior special education students in the fall. Each part meets 2 times per cycle for one semester. This course assists students in organization and work completion, while building skills necessary for post-high school options. Resume and college essay writing, interviewing skills, and SAT preparation, may be incorporated depending on the individual need of each student. (Semester course, open to grades 11 and 12; TEAM recommendation required)

709 Phoenix English 9**1 credit**

This full year course provides specialized instruction in reading for comprehension and vocabulary development, as well as developing reading skills in a variety of literary genres. Writing assignments will focus on the development of clear, concise sentences, paragraphs, and essays. This course utilizes multimedia resources to supplement diverse learning styles (Full year course; only available to grade 9 students in the Phoenix Program TEAM recommendation required)

710 Phoenix English**1 credit**

This full year course provides specialized instruction in reading for comprehension and vocabulary development, as well as developing reading skills in a variety of literary genres. Writing assignments will focus on the development of clear, concise sentences, paragraphs, and essays. This course utilizes multimedia resources to supplement diverse learning styles. (Full year course; only available to students in the Phoenix Program, grades 10,11 and 12 TEAM recommendation required)

711 Phoenix Modern World History**1 credit**

This full year course is designed to allow students to analyze and interpret significant historical events and periods in world history. It will focus on certain areas including Ancient Greece, European, and American History. Students will be challenged to utilize their writing, interpreting, and analytical skills to foster complete understanding of the significance of historical events. (Full year course; only available to students in the Phoenix Program, grade 9 TEAM recommendation required)

712 Phoenix History II**1 credit**

This course covers the time period from 1877 to present-day. Changes in social, political, and economic issues and policies are highlighted as the United States moves from an agrarian society in the 1800's to an industrial society and a world leader into the 20th century. In-depth treatment of pivotal events will include, but are not limited to, Reconstruction, Industrialization, Immigration, the New Deal, Cold War, Civil Rights Movement, Détente, and the Gulf War. (Full year course; only available to students in the Phoenix Program grades 10,11,12 TEAM recommendation required)

713 Directed Study Strategies Grade 9

This is a semester long course that freshmen who receive special education services are required to take. Each student will work with his/her teacher to develop and/or improve various study skills and learning strategies. The curriculum will be individualized to meet each students needs, but will focus on the following areas: organizational skills, reading comprehension strategies, outlining and note-taking skills, test taking skills, term papers, long-range assignments, and self advocacy skills. Several sections will incorporate speech and language services for students who require special intervention. (Half year course, mandated for grade 9 TEAM recommendation required)

714 Phoenix Earth Science**1 credit**

Students will explore the five branches of Earth Science through the use of physical models. Earth Science takes students from earth's solid inner core to the stars above, from auroras at the edge of the sky to the trenches of the deepest ocean. Throughout the curriculum, inquiry is emphasized as analytical skills are developed. The course focuses on development of laboratory skills, graphing, study and note taking skills and serves as an introduction to high school level science courses. (Full year course, open to Phoenix students only TEAM recommendation required)

716 Structure of the English Language**.5 credit**

This semester course is for students who are motivated to improve their reading and vocabulary skills through intensive small group instruction. Students will work individually and in small groups on a variety of skills designed to assist them in improving their reading comprehension and written expression. (Semester course, open to grades 9, 10, 11, and 12; TEAM recommendation required)

718 Phoenix Geometry**1 credit**

This course includes the study of plane and spatial geometric figures. Algebraic applications and coordinate methods are included along with inductive and deductive reasoning. Topics include area, similarity, circles, regular polygons, geometric solids, as well as an introduction to trigonometry. (Full year course; only available to students in the Phoenix Program grades 10,11,12 TEAM recommendation required)

720 Applied Math II**1 credit**

This full year course is for upper classmen who have already taken Applied Math I. This course connects algebra, geometry, and trigonometry to real world applications. This course also includes MCAS preparation. Applied Math II picks up on the final topics of Algebra I and begins geometry topics. (Full year course open to grades 10, 11, and 12 TEAM recommendation required)

721 Study Strategies**1 credit**

This full year course is offered to all special education students. Each student will work with his/her teacher to develop and/or improve various study skills and learning strategies. The curriculum will be individualized to meet each students needs, but

will focus on the following areas: organizational skills, reading comprehension strategies, outlining and note-taking skills, test taking skills, term papers, long-range assignments, and self advocacy skills. Two sections will incorporate speech and language services for students who require special intervention. (Full year course, open to grades 10, 11, and 12; TEAM recommendation required)

723 Phoenix Study Strategies

1 credit

This full year course allows students to work on the development and/or improvement of various study skills and learning strategies. The curriculum will be individualized to meet each students needs, but will focus on the following areas: organizational skills, reading comprehension strategies, outlining and note-taking skills, test taking skills, term papers, long-range assignments, and self advocacy skills. (Full year course; only available to students in the Phoenix Program TEAM recommendation required)

724 Phoenix Math

1 credit

This full year course provides specialized instruction for students with varied basic math skills. The course includes solving equations, order of operations, basic math, algebra, an introduction to geometry, and statistics. The topics covered in this course focus on MCAS preparation. (Full year course; only available to students in the Phoenix Program TEAM recommendation required)

726 Applied English II

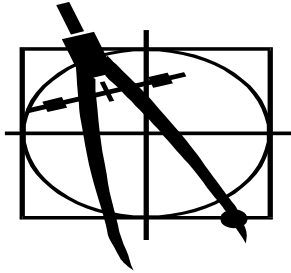
1 credit

This full year course is for upper classmen who have already taken Applied English I. This course encourages students to consider different genres of literature and its relationship to society and themselves. Students will analyze and interpret literature through discussion as well as expository writing. A writing portfolio, including various forms of written expression, will be a culminating project for the course. (Full year course, open to grades 10, 11, and 12 TEAM recommendation required)

727 Phoenix Biology

1 credit

This course covers the major concepts of biology including cell structure and function, key biological processes, genetics, human biology, evolution and ecology. The course content and detail are appropriately paced and all salient topics of biology are covered. (Full year course, open to grades 10,11,12 in the Phoenix Program TEAM recommendation required)



Technology Education/ Engineering Department

Technology Education Course Offerings

Media and Communications

Graphic Communications
Computer Graphics 1
Computer Graphics 2
Desktop Publishing
Yearbook Production
Production Graphics
Digital Photography
Advanced Digital Photography
Television Production 1
Television Production 2
Television Production 3,4 (H)

Computer Systems

Introduction to Gaming CP1
Basic Web Design/HTML
Electronics
Robotics
Advanced Electronics
Computer Science CP1

Engineering/Technology

Architectural Design CP1
Advanced Architectural
Design CP1
Engineering Drawing & Design 1
Engineering Drawing & Design 2
Design Manufacturing
Transportation Technology
Power and Energy Technology

Independent Study in
Technology/Engineering

ESL Technology/Engineering

Science Options

Introduction to Science and
Engineering CP1

Pre-Engineering

The **Technology Education/Engineering Department** at Framingham High School is a comprehensive program including the study of media communications, computer systems, and engineering.

There are 28 courses offered in the program that are all activity based, providing an emphasis on the engineering design process and the practical use of tools and materials in order to better understand our technical world.

Students are encouraged and challenged to apply critical and creative thinking skills in solving problems and developing solutions.

Technology/Engineering has been partnered with the sciences as a core subject and is one of the MCAS options for students to consider meeting the Massachusetts science graduation requirement. The program also provides options to meet the “practical arts” expectation for Framingham graduation.

**Technology Education/Engineering
Course Sequence**

CAREER PLAN	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p>MEDIA AND COMMUNICATIONS</p> <p>*Tech Prep</p> <p>* Tech Prep Courses are articulated with post-secondary schools for possible college credit</p>	<p>*Graphic Com</p> <p>Desktop Publish</p> <p>*Digital Photo</p>	<p>*Graphic Com</p> <p>Desktop Publish</p> <p>*Digital Photo</p> <p>*Comp Graph 1</p> <p>*Comp Graph 2</p> <p>*Adv. Digital Photo</p> <p>*TV Prod 1</p> <p>*TV Prod 2</p>	<p>*Comp Graph1</p> <p>*Comp Graph 2</p> <p>Desktop Publish</p> <p>*Digital Photo</p> <p>*Adv Digital Photo</p> <p>*TV Prod 1</p> <p>*TV Prod 2</p> <p>Yearbook</p>	<p>*Comp Graph1</p> <p>*Comp Graph 2</p> <p>Desktop Publish</p> <p>*Digital Photo</p> <p>*Adv Digital Photo</p> <p>*TV Prod 1</p> <p>*TV Prod 2</p> <p>Yearbook</p> <p>Prod Graphics</p> <p>Ind. Study TV</p>
<p>COMPUTER SYSTEMS</p> <p>*Tech Prep</p>	<p>GamingCP1</p> <p>*Web Design</p> <p>*Electronics</p>	<p>GamingCP1</p> <p>*Web Design</p> <p>*Electronics</p> <p>Robotics</p> <p>Adv. Electronics</p> <p>*Comp Sci CP1</p>	<p>GamingCP1</p> <p>*Web Design</p> <p>*Electronics</p> <p>Robotics</p> <p>Adv. Electronics</p> <p>*Comp Sci CP1</p>	<p>GamingCP1</p> <p>*Web Design</p> <p>*Electronics</p> <p>Robotics</p> <p>Adv. Electronics</p> <p>*Comp Sci CP1</p>

ENGINEERING/ TECHNOLOGY *Tech Prep	*Eng Drawing and Design 1 *Eng Drawing and Design 2 Transport Tech Power and Energy ESL Tech/Eng.	*Eng Drawing and Design 1 *Eng Drawing and Design 2 Transport Tech Power and Energy ESL Tech/Eng. Arch Design Adv. Arch Design Design Manufacturing	*Eng Drawing and Design 1 *Eng Drawing and Design 2 Transport Tech Power and Energy ESL Tech/Eng. Arch Design Adv. Arch Design Design Manufacturing Ind. Study/TA	*Eng Drawing and Design 1 *Eng Drawing and Design 2 Transport Tech Power and Energy ESL Tech/Eng. Arch Design Adv. Arch Design Design Manufacturing Ind. Study/TA
SCIENCE OPTIONS	Introduction to Science and Engineering CP1 (MCAS)	Introduction to Science and Engineering (MCAS)	Pre-Engineering	Pre-Engineering

TECHNOLOGY EDUCATION/ENGINEERING

David Bouvier, Department Chair

The following courses are listed by cluster or pathways This determination represents the career plan policy suggested by Career and Technical Education. Tech Prep courses (TP) are articulated with post-secondary schools for possible college credit.

Media and Communications

540 Graphic Communications (TP)

.5 credit

A basic course devoted to image creation that is found in real world applications. Use of Signmakers and related software, T-Shirt production, as done in a business of that type, and mirror printing including sandblasting are covered. Experience in composition, design, and electronic graphics will be offered. Each student will experience individual, co-operative and group projects. This course meets either the practical arts requirement or the fine arts requirement. (Semester course, open to grades 9-12)

544 Computer Graphics 1 (TP)

.5 credit

Use the computer to draw pictures! Learn to communicate with images using Adobe Illustrator CS3 software to create designs ranging from logos to road signs. Students will explore color and elements of design to strengthen their creations. Our final project will be a full sized poster. This course meets either the practical arts requirement or the fine arts requirement. (Semester course, open to grades 10,11,12)

558 Computer Graphics 2 (TP)

.5 credit

Keep making cool projects with Adobe Illustrator CS3! Students will learn principles of design and advanced graphic design. Students will be introduced to animation and motion graphics in this course. Projects include creating album covers, animated movie title sequences, and t-shirt designs. This course meets either the practical arts requirement or the fine arts requirement. Required: Computer Graphics 1 (Semester course, open to grades 10,11,12)

532 Desktop Publishing

.5 credit

Learn to communicate with words and images! Students in this course will explore desktop publishing with Adobe InDesign software, use principles of design, grid systems, visual hierarchy, and typography to make your projects look good. Make menus, newsletters, CD covers, and Flyers! This course meets either the practical arts requirement or the fine arts requirement. (Semester course, open to grades 9,10,11,12)

539 Digital Photography (TP)**.5 credit**

This course explores the use of technology in the “digital darkroom”. Students will learn how digital cameras, scanners and printers operate and are used to process digital images. Adobe Photoshop CS3 software will be used to edit, manipulate, and create images. Concepts will include computer systems and technology, pixel resolution, file formats, saving and storing images, composition, and tool skills to produce creative digital images. The Internet will be used as a resource in this Macintosh computer environment. This course meets the practical arts requirement and accepted at MassBay Community College. (Semester course, open to grades 9,10,11,12)

577 Advanced Digital Photography (TP)**.5 credit**

This course continues the instruction and involvement with Adobe Photoshop CS3 software that will involve advanced procedures available because of the power of the software. Mastery of additional tools within Photoshop CS3 is the goal with greater expectations for detail and critical observations. Lighting techniques, composition and high quality digital cameras will be used. Photographs will also be applied to glass. This course meets the practical arts requirement. Required: Digital Photography (Semester course, open to grades 10,11,12)

549 Television Production 1 (TP)**.5 credit**

Television Production offers the students an opportunity to work in a television sound studio. Short takes, animations, and commercials are just a few of the many audio-video areas that each student will explore. This course meets either the practical arts requirement or the fine arts requirement. Recommended: Digital Photography, Computer Graphics, or Graphic Communications (Fall semester course, open to grades 10,11,12)

550 Television Production 2 (TP)**.5 credit**

An advanced course in video production intended to develop a student’s skill in producing and directing for television. Production experience is expanded to include video editing, field production, and the direction of studio productions. This course meets either the practical arts requirement or the fine arts requirement. Required: TV Production 1 (Spring semester course, open to grades 10,11,12)

581/582 Yearbook Production**.5 credit**

This course will result in the publication of the Framingham High School yearbook, Genesis. Students will write articles, take photographs and design page layouts. Students will use scanners, digital cameras and Adobe PhotoShop and InDesign software to create the publication. Students may enroll in 581-Semester 1, 582- Semester 2, or both. In addition to meeting during the regularly scheduled class period, students must be available to work before and /or after school on an as needed basis. This course meets the practical arts requirement. (Semester course, open to grades 11,12)

543 Production Graphics**.5 credit**

Students will design and produce print projects that will be seen throughout the school community. Experienced Media and Communications students will offer service and support for production pre-press services to school personnel. Administrative, departmental and instructor requests will be considered through partnership with the print shop located nearby. Past projects have included: Staff Directory, Program of Studies Booklet, Awards Night Program, Student Handbook. This course meets the practical arts requirement.

(Prerequisite: Computer Graphics OR Desktop Publishing OR Yearbook; Semester course, open to grades 10, 11, 12)

Computer Systems**568 Introduction to Gaming CP1 (TP)****.5 credit**

Learn how to design and make your own video game! This course introduces students to the key concepts of game development using Game Maker software and others. Learn to create single player and multiplayer games using a scripting programming language. Students will also learn programming debugging practices.

531 Basic Web Design / HTML (TP)**.5 credit**

Make Web Sites! Students will learn how to create web pages, search for and use on-line information, access files from the Internet, and incorporate design theory. Students will explore the historical development and the role of the World Wide Web in today's society. Students will gain a broad understanding of HTML and CSS computer languages. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

567 Electronics**.5 credit**

This course is an introduction to basic electricity theory and electronics. The student will learn how to identify, use and test common DC, AC and Analog electronic components using hands on experiments. The student will also build and study various common electronic circuits using the above components. Electronic projects will be constructed using breadboards and Printed Circuit boards utilizing soldering equipment. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

534 Advanced Electronics**.5 credit**

Build and program a robot!!!! This course expands on topics learned in Electronics and Robotics. Students will investigate advanced principles of electronics including microprocessors, sensors, and digital circuitry. Students will design and construct an advanced robotic system and learn how to use test equipment for the troubleshooting and repair of the systems. Students will design a robot to meet specific criteria. This course meets the practical arts requirement. Required: Electronics or Robotics (Semester Course, open to grades 10,11,12)

569 Computer Science CP1 (TP)**.5 credit**

Build a computer!!! This course is an analysis of the PC computer environment. Computer hardware, including motherboards, processors, temporary and permanent storage, and types of memory will be explored. Students will learn how to buy and assemble all the components necessary to build a computer. Students will study how operating systems, such as DOS and Windows, are used for file management, manipulation and transfer of data, and hardware communication, including the Internet. This course meets the practical arts requirement. (Semester course, open to grades 10,11,12)

556 Robotics**.5 credit**

This course explores the usage of robotics in automation and manufacturing. Students will learn how to design robotic systems utilizing programming languages and sensors. Students will build robots of their own design using current technology and electronics. Competitions similar to the Junkyard Wars will be encouraged as students' problem-solve devices to meet design criteria. This course meets the practical arts requirement. (Semester course, open to grades 10,11,12)

Engineering Technology**551 Architectural Design CP1****.5 credit**

This course is designed to give the student a basic knowledge of architectural structures. It includes the criteria for site selection, elevations, details, specifications, methods of construction, and pictorial representations. Students should be familiar with basic drafting tools. The course will focus on residential structures, culminating in the design of a "dream" house. This course meets the practical arts requirement. Recommended: Engineering Drawing and Design (Semester course, open to grades 10,11,12)

552 Advanced Architectural Design CP1 (TP)**.5 credit**

This course investigates all levels of architectural design including urban planning, landscape design, structural design, and architectural methodology. Students will become familiar with public and private code requirements, construction methods and advanced rendering techniques. Historical architectural solutions will also be studied. This course meets the practical arts requirement. Required: Architectural Design (Semester course, open to grades 11,12)

560 Engineering Drawing and Design 1 (TP)**.5 credit**

Engineering Drawing is one of the best choices to communicate and present designs in the engineering design process. It is the universal language of technology. Students will learn 2-dimensional and 3-dimensional visualization skills that will assist them with the study of geometry and the planning process in technology education. Basic drafting techniques are taught along with an introduction to Computer-Aided Design (CAD) using PTC ProDesktop 3D modeling software. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

561 Engineering Drawing and Design 2 (TP)**.5 credit**

This computer-based drawing course investigates and utilizes the sophisticated tools found in Computer-Aided Design (CAD). More complex assignments will be emphasized with accepted design standards. Three-dimensional modeling and computer animation will be added for presentations. This course meets the practical arts requirement. Required: Engineering Drawing and Design 1 (Semester course, open to grades 9, 10,11,12)

570 Introduction to Manufacturing Technology**.5 credit**

This introduction to manufacturing is devoted to the design, development, and marketing of a wood product that can be mass-produced involving all the woodworking and engineering techniques in production and management. Emphasis is placed on environmental, social, and economic implications of the manufactured item. Hands-on activities using tools and machines will be a priority. This course meets the practical arts requirement. (Semester course, open to grades 10,11,12)

572 Transportation Technology**.5 credit**

An exploratory course that provides investigation into the guidance, control, structure, and propulsion systems found in transportation vehicles (land, water, air, and space). Modeling activities may include hot-air balloons, boat design, land speed vehicles, and/or simple automotive concerns. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

573 Power and Energy Technology**.5 credit**

This is an introductory course in the study of power and energy as it is used and converted to do work. Units of study will include gas engines, solar collectors, wind power, hydroelectric power, pneumatics and hydraulics. Students will work on team challenges that emphasize the design process and problem solving. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

575 ESL Technology/Engineering .**5 credit**

This course is designed to provide technological experiences to students who still have significant limitations in English. The communications and manufacturing clusters will provide the basic body of knowledge and skill training activities. Modifications are designed to serve this population while developing a technical vocabulary, productive attitudes, and problem solving skills. This course meets the practical arts requirement. (Semester course, open to grades 9,10,11,12)

590 Independent Study in Technology/Engineering**.5 credit**

Students who have completed the regular course offerings, or those in need of individualized scheduling, may participate in this program. The student must secure the approval of a faculty advisor before the start of the semester. This course meets the practical arts requirement. (Semester course, open to grades 11,12)

SCIENCE OPTIONS**385 Introduction to Science & Engineering CP1****1 credit**

Technology/Engineering is one of the choices you can make to help pass the MCAS requirement for Science and graduation. The course utilizes the engineering design process and investigates prototype development and the science involved within the process. Students will solve problems in structure design, strength of materials, fluid and thermal systems, electrical circuits, communications, and manufacturing. Offered in conjunction with the Technology / Engineering Department, this course can be taken for either Science or Practical Arts credit. (Full Year course, open to grades 9,10)

562 Pre-Engineering Exploration**.5 credit**

Pre-Engineering Exploration is an intensive look at professional engineering design processes. The course investigates the following areas: Robotics and Computer Programming, Design Processes, Electrical Systems, Fluid Systems, Quality Assurance, Manufacturing Systems, Thermal Systems, Structures, Mechanical Drives, Plastics Technology and Materials Technology. Students will have an opportunity to act as a member of an engineering group to develop, design, and problem-solve through modular-based instruction and project-based activities. This course is offered in conjunction with the Science Department. The course meets the practical arts requirement and can be taken for science credit. It is suggested as a supplement to a full-year science course. (Semester course, open to grades 10,11,12)



Course Offerings

French 1-2 Basic CP2
French 2-5 CP1
French 2-5 Honors
French 5 AP

Italian 1-2 CP1
Italian 1-2 Honors
Italian 3-4 AP

Latin 1-2 CP1
Latin 1-4 Honors

Spanish 1-2 Basic CP2
Spanish 2-5 CP1
Spanish 2-5 Honors
Spanish 5 AP

World Language Department

The ability to function in more than one language in today's interdependent world is a critical skill for students to acquire. Language study enables students to communicate successfully with members of other cultures.

Students who study a language will:

- Strengthen their critical and analytical thinking skills
- Develop effective learning strategies with lifelong benefits
- Expand their base of knowledge to include ideas, perspectives and solutions that exist in other cultures
- Realize the interdependence of people throughout the world
- Gain direct access to knowledge and information generated by other countries and cultures
- Facilitate their participation in political and personal dealings

WORLD LANGUAGE DEPARTMENT
Sequence of Courses

For those students who had Spanish or French in the middle school and wish to continue:

Grade 9	Grade 10	Grade 11	Grade 12
Spanish 2 CP1* Spanish 2 H**	Spanish 3 CP1 Spanish 3 H	Spanish 4 CP1 Spanish 4 H	Spanish 5 CP1 Spanish 5 H Spanish 5 AP
Spanish 1 BasicCP2	Spanish 2 BasicCP2	XXXXXXXXXX	XXXXXXXXXX
French 2 CP1 French 2 H	French 3 CP1 French 3 H	French 4 CP1 French 4 H	French 5 CP1 French 5 H French 5 AP
French 1 Basic CP2	French 2 Basic CP2	XXXXXXXXXX	XXXXXXXXXX

*CP1 sequence is for students who have completed the Middle School program with a C- average or better.

** H sequence is for students who have completed the Middle School program with a B average or better.

Basic sequence is for students who have had an interrupted Middle School program or have completed the program with a D+ average or lower.

For students who want to add to or begin their study of a World Language:

Year 1	Year 2	Year 3	Year 4
Italian 1 CP1 Italian 1 H	Italian 2 CP1 Italian 2 H	XXXXXXXXXX Italian 3 H	XXXXXXXXXX Italian 4 AP
Latin 1 CP1 Latin 1 H	Latin 2 CP1 Latin 2 H	XXXXXXXXXX Latin 3 H	XXXXXXXXXX Latin 4 H
French 1 Basic CP2 Spanish 1 Basic CP2	French 2 Basic CP2 Spanish 2 Basic CP2	XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXX XXXXXXXXXX

Please note:

1. **The basic program** of study follows the Middle School Language Curriculum and is only a two-year program for students not going beyond the two-year FHS language requirement
2. Minimum requirement for graduation from Framingham High School is two years of study of the same language
3. Recommended course of studies from the Department of Education Frameworks and most colleges and universities range from 3-4 years of study of the same language

WORLD LANGUAGE

Maria Figueroa, Department Chair

FRENCH

French Basic Sequence of Courses

120 French 1 Basic CP2

1 credit

This is a beginning course for students with limited French language experience. Students begin by developing listening and speaking skills which are then reinforced and used to build skills in reading and writing. Teacher-created materials form the basis for the course. The cultural focus of the level one curriculum is France and its cities. The course is enriched with music, art and history. Prerequisite: students who did not complete the 3 year Middle School Language program or students who completed the Grade 6, 7, 8 French curriculum with a D+ or lower (Full year course, open to grades 9, 10,11).

NOTE: Native speakers must have prior approval of the World Language department chair.

127 French 2 Basic CP2

1 credit

This is the second year of a two-year sequence. Students will continue to develop use of vocabulary and major grammatical structures in speaking, listening, reading and writing. Further cultural awareness will be stimulated by oral presentations, written reports and special projects. The cultural focus of the level one curriculum is a continuation of the study of France and its cities. The course is enriched with music, art and history. Prerequisite: French 1 Basic CP2 (Full year course, open to grades 10,11,12).

French CP1 Sequence of Courses

104 French 2 CP1

1 credit

This is the continuing course for students completing the 3-year Middle School French Program. Students will review and recycle basic grammatical structures in different contexts while continuing to expand communication skills in speaking, listening, reading, and writing. Cultural awareness is stimulated through oral presentations, written reports and special projects. The cultural focus of the level two curriculum is France and its cities. The course is enriched with music, art and history. Prerequisite: Completion of Grades 6, 7, 8 French curriculum and recommendation from Grade 8 teacher or French 1 CP1 with a C- average or better. (Full year course, open to grades 9,10,11)

107 French 3 CP1

1 credit

Emphasis is placed on continued development of vocabulary and major grammatical structures including verb tenses from year two and the conditional and future, as well as an introduction to the subjunctive mood. Students are required to demonstrate spoken and written ability in order to function in situations authentic to the cultures of the French speaking world. They will be using French in all oral and written activities in class. The cultural focus of the level three curriculum is France and its regions. The course is enriched with music, art and history. Prerequisite: French 2 CP1 (Full year course, open to grades 10,11,12)

110 French 4 CP1

1 credit

This course is recommended for students wishing to continue the study of French into their senior year. This is the first course to advance beyond the normal 2-year college requirement at the CP1 Level. Students will develop additional skill and proficiency in their use of all grammatical structures. Emphasis is placed on expanding vocabulary through reading selections from French prose and poetry. Students are required to engage in class and group discussions in French. The course is enriched with music, art and history. Various textbooks and supplementary materials and selections from French Literature are used. The cultural focus of the level four curriculum is the Francophone Countries. Prerequisite: French 3 CP1 with a C- average or better. (Full year course, open to grades 11,12)

114 French 5 CP1

1 credit

Students will continue to develop language skills by reading and discussing selected literary works. The course is conducted in French with an emphasis on reports and projects. The course is based on teacher-created materials drawn from a variety of resources. The cultural focus of the level five curriculum is the contributions of the French to world culture. The course is enriched with music, art and history. Prerequisite: French 4 CP1 with a C- average or better. (Full year course, open to grade 12)

French Honors/Advanced Sequence of Courses

103 French 2 H

1 credit

This course is the continuum for students who have successfully completed the 3-year Middle School French program. Students will use major tenses and grammatical structures as they expand their vocabulary and conversational skills. Students will continue to develop their skills in reading, writing, speaking and listening and will be required to use French in class discussion, oral presentations, written reports and special projects. The cultural focus of the level two curriculum is France and its cities. Prerequisite: Completion of Grade 6, 7, 8 French curriculum with a B average or better and Grade 8 teacher recommendation. (Full year course, open to grade 9)

106 French 3 Honors

1 credit

Students will continue to develop conversational skills using additional tenses and structures. Reading and writing will be emphasized through selected texts and writing assignments. Students will produce individual projects and engage in cultural activities. The cultural focus of the level three curriculum is France and its regions. Prerequisite: French 2 Honors with B average or above. (Full year course, open to grades 10,11,12)

109 French 4 Honors

1 credit

In addition to continuing the development of proficiency with the four language skills, emphasis will be placed on continual development of grammatical structures and vocabulary power. Intensive grammar review as well as expanded ability for meaningful personal expression will be stressed. Students will engage in authentic readings, individual and/or group projects and cultural activities. The class will be conducted in French. The cultural focus of the level four curriculum is the Francophone Countries. Prerequisite: French 3 Honors with a B average or above. (Full year course, open to grades 11,12)

113 French 5 Honors

1 credit

While development of linguistic skills will continue, the core of the course will be the study of literature and exclusive use of the target language in classroom discussions and simulations of culturally authentic situations. The cultural focus of the level five curriculum is the contributions of the French to world culture. Prerequisite: French 4 Honors with a B average or above. (Full year course, open to grade 12)

112 French 5 AP

1 credit

An in depth review and reinforcement of grammar, verbs and vocabulary through literature This is the equivalent of a freshman year college course. It will follow the prescribed AP curriculum. Students will be prepared for and expected to take the AP examination in Language. Class will be conducted in French. The cultural focus of the level five curriculum is the contributions of the French to world culture. Prerequisite: French 4 Honors with a B average or above and teacher recommendation. (Full year course, open to grade 12)

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in this course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own registration fees.

ITALIAN

Italian CP1 Sequence of Courses

132 Italian 1 CP1

1 credit

This is a beginning course. Students will develop listening, speaking reading and writing skills. Italian is spoken in the classroom to introduce and practice oral patterns. A basic text is used as well as supplementary materials. Students will produce individual projects and engage in cultural activities. The cultural focus for year one is Italy and its regions. (Full year course, open to grades 9,10,11)

134 Italian 2 CP1

1 credit

Students will continue to develop proficiency in the use of major tenses and structures and will continue to expand basic vocabulary. They will engage in brief conversations and written assignments. They will expand insights into and appreciation of the Italian people, their country, customs, and civilization. The cultural focus for year two is cities, monuments, and the people who created them. Prerequisite: Italian 1 (Full year course, open to grades 10,11,12)

Italian Honors Sequence of Courses

131 Italian 1 H

1 credit

This is a beginning course for high ability students. Students will develop listening, speaking reading and writing skills. Italian is spoken in the classroom to introduce and practice oral patterns. A basic text is used as well as supplementary materials. Students will produce individual projects and engage in cultural activities. The cultural focus for year one is Italy and its regions. (Full year course, open to grades 9,10,11)

133 Italian 2 H

1 credit

Students will continue to develop proficiency in the use of major tenses and structures and will continue to expand basic vocabulary. This course utilizes a communicative approach to encourage the advancement of students' listening, speaking and reading skills in Italian. Through the use of film, short stories and other authentic Italian texts, students will enhance their knowledge of Italian culture and literature. The cultural focus for year two is cities, monuments, and the people who created them. Prerequisite: Italian 1 H (Full year course, open to grades 10,11,12)

135 Italian 3 H

1 credit

Italian is the primary language spoken in the class. Reading, writing, speaking and listening skills will be further developed through short stories and selections that discuss the culture and history of the Italian-speaking people. A review of all major tenses and grammar points will be covered. Students will produce individual projects and engage in cultural activities. The cultural focus for year three is the contributions of Italians to world culture. Prerequisite: Italian 2 (Full year course is open to grades 11,12)

136 Italian 4 H

1 credit

Italian is the primary language spoken in the class. While development of linguistic skills will continue, the course will include literary selections to stimulate discussions in the target language. The study of vocabulary at a more sophisticated level will continue. Students will produce individual projects and engage in cultural activities. The cultural focus for year four is the Italo-Americans and the immigrant experience. Prerequisite: Italian 3 (Full year course, open to grade 12)

137 Italian 4 AP

1 credit

Italian 4 AP is a fast-paced, rigorous curriculum for high ability students. In addition to presenting more advanced grammatical concepts, the course will focus on contemporary 20th century literature. Emphasis will also be on the development of the four linguistic skills to a high degree of proficiency. The cultural focus for year four is Italian history, the Italian Americans and the immigrant experience. The course will be conducted exclusively in Italian. Prerequisite: Italian 3 H with an average of B or above and teacher recommendation (Full year course, open to grades 11,12)

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in this course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own registration fees.

LATIN

Latin CP1 Sequence of Courses

152 Latin 1 CP1

1 credit

This is a beginning language course. Students will use basic grammar, tenses, and vocabulary in reading the stories and myths of our Latin heritage. Students will expand awareness of their own culture and that of the Roman Empire. (Full year course, open to grades 9,10,11)

154 Latin 2 CP1

1 credit

Students will use all major tenses and structures and continue to expand vocabulary. In the second semester students will read prose selections adapted from major authors of ancient Rome. Prerequisite: Latin 1 (Full year course, open to grades 10,11,12)

Latin Honors Sequence of Courses

151 Latin 1 H

1 credit

This is a beginning language course. Students will use basic grammar, tenses, and vocabulary in reading the stories and myths of our Latin heritage. Students will expand awareness of their own culture and that of the Roman Empire. (Full year course, open to grades 9,10,11)

153 Latin 2 H

1 credit

Students will use all major tenses and structures and continue to expand vocabulary. In the second semester students will read prose selections from Caesar and Pliny and poetry from Ovid. Prerequisite: Latin 1 (Full year course, open to grades 10,11,12)

155 Latin 3-4 Prose H

1 credit

Students will continue to develop reading and writing skills while reading selections from Caesar, Cicero, Livy and Sallust. Students will demonstrate knowledge and appreciation of the style and syntax of each author while learning of the fall of the Roman Republic and the rise of the Empire in the "Golden Age of Latin Literature." Though not in itself an A.P. course, the work and study of Cicero is conducted in anticipation of interest in the A.P. exam. For the A.P. exam additional work is required. Prerequisite: Latin 2 (Full year course, open to grades 11,12)

156 Latin 3-4 Poetry H

1 credit

Students will continue to develop reading and writing skills while reading selections from one or more of the following authors - Vergil's *Aeneid*, Ovid's *Metamorphoses* and *Amores*, or some of the poems of Catullus and Horace. All elements of poetic style are studied. Though not in itself an A.P. course, critiques and interpretations are ready to prepare students for the Advanced Placement Examination. For the A.P. exam additional work is required. Prerequisite: Latin 2 (Full year course, open to grades 11,12)

SPANISH

Spanish Basic Sequence of Courses

128 Spanish 1 Basic CP2

1 credit

This is a beginning course for students with limited target language experience. Students begin by developing listening and speaking skills, which are then reinforced and used to build skills in reading and writing. The cultural focus of the level one curriculum is Latinos in the U.S. The course is enriched with music, art and history. Teacher created materials form the basis for the course.

Prerequisite:

- students who did not complete the 3 year Middle School Language program
- students who completed the Grade 6, 7, 8 Spanish curriculum with a D+ or lower

(Full year course, open to grades 9, 10,11).

NOTE: Native speakers must have prior approval of the World Language department chair.

129 Spanish 2 Basic CP2

1 credit

This is the second year of a two-year sequence. Students will continue to develop use of vocabulary and major grammatical structures in speaking, listening, reading and writing. The cultural focus of the level one curriculum is a continuation of the study of Latinos in the U.S. The course is enriched with music, art and history. Further cultural awareness will be stimulated by oral presentations, written reports and special projects. Prerequisite: Spanish 1 Basic CP2 (Full year course, open to grades 10,11,12).

Spanish CP1 Sequence of Courses

174 Spanish 2 CP1

1 credit

This is the continuing course for students completing the 3 -year Middle School Spanish Program. Students will review and recycle basic grammatical structures in different contexts while continuing to expand communication skills in speaking, listening, reading, and writing. The cultural focus of the level two curriculum is the Caribbean region. The course is enriched with music, art and history. Prerequisite: Completion of Grades 6,7,8 Spanish Curriculum with at least a C- average or better. (Full year course, open to grades 9,10,11)

177 Spanish 3 CP1

1 credit

Emphasis is placed on continued development of vocabulary and major grammatical structures including verb tenses in present, past and future. Students are required to demonstrate spoken and written ability in order to function in situations authentic to the cultures of the target language. Students will use Spanish in all oral and written activities in class. The cultural focus of the level three curriculum is the Mexican/Central American region. The course is enriched with music, art and history. Prerequisite: Spanish 2 CP1 (Full year course, open to grades 10,11,12)

180 Spanish 4 CP1

1 credit

This course is recommended for students wishing to continue the study of Spanish into their senior year. This is the first course to advance beyond the normal 2-year college requirement in the CP1 Level. Students will develop additional skill and proficiency in their use of all grammatical structures. Emphasis is placed on expanding vocabulary through reading selections from Spanish prose and poetry. Students are required to engage in class and group discussions in Spanish. Various textbooks and supplementary materials and selections from Spanish Literature are used. The cultural focus of the level four curriculum is the South American region. The course is enriched with music, art and history. Prerequisite: Spanish 3 CP1 with a C- average or better. (Full year course, open to grades 11,12)

184 Spanish 5 CP1**1 credit**

Students will continue to develop language skills by reading and discussing selected literary works. The course is conducted in Spanish with an emphasis on reports and projects. The cultural focus of the level five curriculum is the Spanish region. The course is enriched with music, art and history. The course is based on teacher-created materials drawn from a variety of resources. Prerequisite: Spanish 4 CP1 with a C- average or better. (Full year course, open to grade 12)

Spanish Honors Sequence of Courses**173 Spanish 2 Honors****1 credit**

This course is the continuum for students who have successfully completed the 3-year Middle School Spanish program. Students will use major tenses and grammatical structures as they expand their vocabulary and conversational skills. Students will continue to develop their skills in reading, writing, speaking and listening and will be required to use Spanish in class discussion, oral presentations, written reports and special projects. The cultural focus of the level two curriculum is the Caribbean region. The course is enriched with music, art and history.

Prerequisite: Completion of the Grade 6, 7, 8 Spanish curriculum with a B average or better and Grade 8 teacher recommendation. (Full year course, open to grade 9)

176 Spanish 3 Honors**1 credit**

Students will continue to develop conversational skills using additional tenses and structures. Reading and writing will be emphasized through selected texts and writing assignments. The cultural focus of the level three curriculum is the Mexican/Central American region. The course is enriched with music, art and history. Students will produce individual projects and engage in cultural activities. Prerequisite: Spanish 2 Honors with a B average or better (Full year course, open to grades 10,11,12)

179 Spanish 4 Honors**1 credit**

In addition to continuing the development of proficiency with the four language skills, emphasis will be placed on continual development of grammatical structures and vocabulary power. Intensive grammar review as well as expanded ability for meaningful personal expression will be stressed. Students will engage in authentic readings, individual and/or group projects and cultural activities. The cultural focus of the level four curriculum is the South American region. The course is enriched with music, art and history. The class will be conducted in Spanish. Prerequisite: Spanish 3 Honors with a B average or better. (Full year course, open to grades 11,12)

183 Spanish 5 Honors**1 credit**

While development of linguistic skills will continue, the core of the course will be study of literature and exclusive use of the target language in classroom discussion and simulations of culturally authentic situations. The cultural focus of the level five curriculum is the Spanish region. The course is enriched with music, art and history. Prerequisite: Spanish 4 Honors with a B average or better. (Full year course, open to grade 12)

182 Spanish 5 AP**1 credit**

An in depth review and reinforcement of grammar, verbs and vocabulary through literature, this course is the equivalent of a freshman year college course. It will follow the prescribed AP curriculum. Students will be prepared for and expected to take the AP examination in Language. Class will be conducted Spanish. Prerequisite: Spanish 4 H or with B average or better and teacher recommendation. (Full year course, open to grade 12)

This course prepares students for the Advanced Placement examination given in May by the College Board. All students in this course are expected to register for and take the Advanced Placement examination. Financial aid is available for students who cannot pay their own registration fees.

192 Advanced Placement Spanish Literature**1 credit**

This course is intended for seniors who have a deep interest in literature and are capable of reading, discussing and writing about Spanish literature in the target language at the college level. Students will read and critically analyze a broad selection of works including short stories, poetry and plays beginning with the Middle Ages, continuing into The Golden Age, through 20th century literature. Writing and discussion will be integral parts of this course, as will an exploration of the cultural issues visible in the literature. As this course will be conducted entirely in Spanish, all students will be expected to participate fully in Spanish at all times. Prerequisite: A score of 4 or 5 on the AP Spanish Language Exam or written consent from the World Language Department Chair.

OTHER PROGRAMS

072 Community Service Learning

.5 credit

Students will study hunger, homelessness, poverty, justice, prejudice, abuse and other social issues. Students will read such works as *A Child Called It*, *Amazing Grace*, and *First They Killed My Father* and will study excerpts from *Poverty in Our Own Back Yard*. From what we study, we will devise action by either volunteering at local community organizations or by organizing events. Students will write about what they have done and what they have learned, developing their own expertise from their experiences.

453 Blue and White Scholars Program – Independent Research

1 credit

This program is designed for students who want to pursue a passion. Students will have the opportunity to undertake rigorous, independent, scholarly research and explore an area of strong personal interest. Working cooperatively with a faculty or community advisor, the student will design an action plan, conduct research, keep a log of activities, prepare and submit a final research project, and present the project orally to a faculty panel. Students must be willing to use time beyond the regular school day to fulfill these requirements. Upon successful completion, the student will receive the Blue and White Scholars designation at graduation. Students will be encouraged to submit their work for awards, scholarships or publication. Proposals must be submitted by May of the sophomore or junior year and approved by selected faculty members. All projects must be completed by May of the junior or senior year.

Advanced Student Directed Course

Provides students with the opportunity to extend their learning beyond the curriculum in any academic or occupational discipline. The student will design an independent study and submit a proposal that will include learning objectives, a list of proposed activities, a timeline, a list of resources needed to complete the project, a description of the final product and audience, and a description of how the project will be evaluated. In order to participate, a student must obtain a faculty or community sponsor. Check listings in each department for specific requirements. Additional support is available through the GT Department.

966 Senior Internship

1.5 credits

This second semester course is open to seniors during combined periods E, F, and G who would benefit by experiencing the real world of work in an interest-related career. Students will be expected to complete a career-based interest survey, identify a specific career field of personal interest, create a resume, practice interviewing skills, research potential organizations for placement, and ultimately select and be involved in an internship from early February through April. Participants are expected to develop a tangible product for the host organization, where appropriate, maintain weekly journal entries and time sheets, and produce a culminating paper summarizing the experience. An in-school coordinator will monitor the internship and evaluate the student's progress. As seniors prepare for their post-secondary educational years, this three-period course will help them to build self-confidence, improve social and communication skills, and potentially create a beginning network for future careers.

Independent Study CP1

This program provides students with the opportunity to extend their learning beyond the curriculum in any academic or occupational discipline to include alternate forms of research, college course work, shadowing, etc. Students who decide to participate should consult first with a faculty member who agrees to serve as an advisor with the approval of the department head. There are two types of Independent Study. **IS Project**, which requires a final presentation of a product on a designated January date (Semester 1) and a designated May date (Semester 2) and **IS Curriculum**, which requires a paper documenting the course work. Each student will design an Independent Study program and submit an application detailing learning objectives, methodologies, proposed activities, timelines, evaluation rubric, a reflection essay journalizing progress and a final product to be submitted. Students are required to conference with their advisor four times per semester and must record a journal comment in their IS folder in the Academic Development Center after each conference. An alpha grade will be given and 0.5 credits awarded for successful completion of each semester-long independent study. Please note that an independent study will not be approved until an accepted application with supporting documentation has been submitted to the Independent Study Coordinator within two weeks of the beginning of each semester.

908 Career Development Program

The Career Development Program (formerly Work Study) provides an opportunity for students to continue their education and at the same time gain valuable work experience under school supervision. Students participating in the program carry four (4) academic subjects and are employed in the community during the remainder of the school day. A student can earn up to three (3) credits per year for successful participation in the program. Selection of students is based upon the approval of parent, grade administrator, guidance counselor, and Career Development Coordinator. A student must be sixteen (16) years of age in order to enter the program. Students in the Work Study Program must fulfill the same graduation requirements as all other students. Students are expected to maintain an acceptable academic average in order to remain in the program. Students will not receive credit if they do not fulfill their academic requirements or if they do not perform satisfactorily on the job. Poor school attendance or chronic tardiness will cause a student to lose Career Development credit. For more information, contact the Academic Development Center.

901 Academic Development Center

The Academic Development Center will be available to all Framingham High School students upon request from students, teachers, parents, counselors, or administrators. Tutoring will include assistance with basic concepts in specific subjects, classroom assignments, completion of tests, and general study skills, including: note taking, outlining, following directions, and organization. Tutoring will be provided by peer tutors, teachers, and volunteers in a supportive academic environment.

After-School Internship Program

This program is available to juniors and seniors who wish to explore the real world of work by spending forty to sixty hours in a desired career field. Students will be expected to complete a career-based interest survey, identify a specific career of personal interest, practice interview skills, and complete a resume. Participants are expected to develop a tangible product for the host organization, where appropriate, maintain weekly journal entries and time sheets, and produce a culminating paper summarizing the experience. An in-school coordinator will monitor the internship and evaluate its progress. Once an internship is satisfactorily completed, a notation will be included on the student's transcript indicating the internship and the designated field in which the student worked. This is a fabulous addition to any student's college application.

Summer Internship Program

This program, available to rising sophomores and juniors, is the same as the After-School Internship Program described above. The summer program is preferred by many students, as they are not limited to after-school hours and do not have the conflicting pressures of schoolwork and after-school activities. The internship program is from forty to sixty hours in length, so students are able to have a paying job as well as participate in the internship program.