

**UXBRIDGE HIGH SCHOOL
PROGRAM OF STUDIES
2010 – 2011**

Dear Student and Parent(s)/Guardian(s):

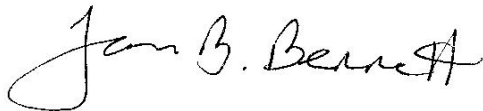
It is my pleasure to provide you with the 2010-2011 Uxbridge High School Program of Studies. The diverse educational programs described in this program provide each student with the opportunity to have his or her individual needs met.

The administration, faculty and community have created and supported programs to meet the needs and varied learning styles of the student body. The rich and varied curriculum is supplemented by an abundance of extra-curricular activities: music, drama, athletics, academic teams, and clubs. Engaged in such activities, students learn to understand that they are part of a larger community that reaches beyond the confines of the building. The goal of our program is not only to equip students with the skills necessary for further work and study but also to encourage them to become responsible human beings capable of contributing to their world.

I encourage each student to select a course load which is both interesting and academically challenging. I also encourage students to consult with parents, current teachers and guidance counselors for advice in program selection. This is your opportunity to make those educational choices that will provide the basis for reaching your future goals and career choices.

If you would like to discuss the Program of Studies or need assistance in making selections, please do not hesitate to contact your child's guidance counselor at 508-278-8633 or myself at 508-278-8634.

Sincerely,

A handwritten signature in cursive script that reads "Tara B. Bennett". The signature is written in black ink and is positioned below the word "Sincerely,".

Tara B. Bennett
Principal

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GUIDANCE DEPARTMENT

1. The main focus of this Department is to assist students and parents in:
 - a. Selecting an appropriate high school program, one designed for their students' and future goals.
 - b. Dealing effectively with a variety of personal issues and helping students in their self-exploration process.
 - c. Offering students the opportunity to explore their future educational goals and career paths and working individually or in small groups to help shape appropriate post grad options.
 - d. Monitoring students' progress and assisting them in developing academic & social skills, which will enhance their high school experience.

2. Students can learn about summer programs, post secondary education options and scholarships through resources in our Guidance Office and on our website.
 - a. Numerous catalogs and bulletins, as well as applications for many accredited colleges and vocational schools are available for student use.
 - b. Representatives from a variety of colleges and the military set up informative displays in the cafeteria, and students are encouraged to seek information that will help formulate post-secondary plans.
 - c. We offer a Financial Aid Night for students and their parents each December.
 - d. A College Planning Night for students and their parents is held in March.

3. Students and parents may make an appointment to meet with counselors. Periodically, counselors or other staff members will meet with students individually or in small groups. Often the topics will be:
 - a. student issues (personal & social)
 - b. school programs
 - c. career (and academic) plans
 - d. student's academic progress

4. Students and parents should periodically review important information (MCAS and SAT/ACT test dates, scholarship information, etc) that is posted in the guidance link on the Uxbridge Public Schools website at: www.uxbridgeschools.com

As a department, we feel each student is valued, and we look forward to the opportunity to work with parents and students to make the UHS experience productive and enjoyable.

Reminder: A student may make an appointment to see his or her counselor through the Guidance Secretary. Should any questions or concerns arise, parents are encouraged to call their child's guidance counselor @ (508) 278 - 8633.

POLICY 581 - PROMOTION/GRADUATION REQUIREMENTS–UHS
EFFECTIVE CLASS OF 2010

1. Students must pass the following courses with a grade of sixty (60) or better and the minimum cumulative credits indicated in order to graduate from Uxbridge High School.

AREA	CREDITS	SEQUENCE REQUIREMENTS
English	16 credits	Students must take Freshman English, Sophomore English, Junior English, and Senior English during their respective years.
Mathematics	16 credits	At a minimum Algebra I and Geometry or Fundamentals of Algebra/Geometry I & II should be taken in Freshman and Sophomore years. Students should take either: Algebra I, Geometry, Algebra II; or Honors Geometry, Honors Algebra II; or Fundamentals of Algebra/Geometry I & II in sequence.
Science/Technology	16 credits	Students must take Introductory Physics/Technology as a Freshman <u>and</u> Biology as a Sophomore. Additionally, students must take a Science Course <u>and</u> either an additional Science or an additional Technology Course to complete requirement.
Social Studies	16 credits	Students must take U.S. History I in Freshman year, U.S. History II in Sophomore year, U.S. History III in Junior year, and U.S. Government as a Senior
Foreign Language	4 credits	All students must complete a minimum of 4 credits in the same Modern Foreign Language.
Physical Education	8 credits	Students must take PE/Wellness in their Freshman year and one PE elective each year thereafter
Health	2 credits	All Sophomores must take Health
Fine Arts	2 credits	All students must take one Fine Arts elective

Massachusetts Law requires that all students awarded a diploma must have earned a competency determination and fulfilled local graduation requirements. Competency determination is achieved by receiving a passing core on MCAS exams identified as requirements to receive a diploma. Students who meet local graduation requirements but do not earn a competency determination will receive a “Certificate of Attainment” instead of a diploma.

2. Credits

- 2.1 A credit equals 33 hours of structured learning time. “Structured learning time” shall mean time during which students are engaged in regularly scheduled instruction, learning activities, or learning assessments within the curriculum for study of the core subjects. In addition to classroom time where both teachers and students are present, structured learning time may include directed study, independent study, technology-assisted learning, presentations by persons other than teachers, school to work programs, and statewide student performance assessments.
- 2.2 Students who do not earn the minimum credits will receive a written notice of this with their semester report card from the Guidance Department and a revised “Four Year Plan” outlining courses needed by senior year in order to graduate.
To be classified as a sophomore, a student must have earned 22 credits;
To be classified as a junior, a student must have earned 48 credits;
To be classified as a senior, a student must have earned 74 credits.
- 2.3 Courses for graduation may be taken at a college/university. Credit will be awarded on the basis of equivalent content as determined by the Principal.
- 2.4 Students will receive credit for the same subject only once, except with approval through IEP process or by The Graduation Review Committee.
- 2.5 **Due to the change from a semester schedule to a trimester schedule, the number of credits needed to graduate will be adjusted through the Class of 2013. Students must earn the following number of credits in order to graduate:**

Class of 2011 – 122 credits

Class of 2013 - 104 credits

Class of 2012 - 113 credits

Class of 2014 - 104 credits

Students are also required to attend classes for four full years in order to graduate.

3. Parents of seniors will be notified by the Principal’s Office near the end of the second trimester, by registered mail, return receipt requested, that the student is in danger of not graduating due to loss of credit. Such notice shall include a request that the parent call for an appointment with the guidance counselor to review the student's record and a statement of the procedures for making up lack of credit.
4. In accordance with IDEA 2004, the Principal or his/her designee shall determine whether a referral or pre-referral should be made for special education programs/services or a referral for evaluation should be made if any of the following conditions exist and shall promptly and in writing notify the parents which condition exists, if a referral is being made, and to their right to make such referral.

This applies to:

- 410.1 (a) Any child who at mid-year presents a substantial risk of non-promotion. For purposes of this paragraph, a substantial risk of non-promotion shall be considered to exist if a child is failing in two or more required subjects.
- 410.1 (b) Any child who may not be promoted at the end of the year.
- 410.1 (c) Any child who has been suspended for more than five (5) days in any quarter or excluded from school.

410.1 (d) Any child who has been absent without medical excuse for more than fifteen (15) days in any semester.

410.1 (e) Any child ages sixteen through twenty-one who is planning to leave school without a high school diploma.

409.0 Pre-referral: Limitation

Prior to referral of a child for an evaluation, the Principal shall ensure that efforts have been made to meet such child's needs within the regular education program. In addition, efforts shall be made to modify the regular education program to meet such needs. Such efforts may include, but are not limited to: modification of the curriculum, teaching strategies, teaching environments, or materials; and use of support services, consultative services, and building base teams to meet the child's needs in the regular education classroom. Such efforts and their results shall be documented and placed in the child's record. Nothing contained in this paragraph shall be construed to limit or condition the right to refer a child for an evaluation.

5. In accordance with IDEA 2004, any student for whom the Uxbridge Public School System is responsible for will be allowed to participate in and/or receive an Uxbridge High diploma upon completion of the requirements in Section 1 (listed above) or the requirements specified in the Individual Education Plan.

6. Students who fail a subject needed for graduation from Uxbridge High School must make up that course. Make ups may be completed as follows:

6.1 Studying the failed subject, at an approved summer school program, during the summer immediately following the year in which the course was failed. The grade earned at an approved summer school will be averaged with the numerical grade of the failed class

6.2 Studying a previously failed required course at a state or private college or university. A three (3) credit course would equal a high school course that is taken over two trimesters or a total of four (4) credits.

6.3 Physical Education/Health make up credits are awarded on a Pass/Fail, if the course is not retaken at Uxbridge High School.

6.4 Taking the course over at Uxbridge High School prior to graduation.

6.5 Foreign Language

Students failing a Foreign Language course and who want to continue in foreign language must either repeat the failed course in order to progress to the next level, or may attend an approved summer school course. Upon successful completion of the approved summer school course the student must pass a departmental exam to continue on to the next level of foreign language study.

6.6 Independent study of a course at Uxbridge High School not previously taken. The course must contain a minimum of 33 hours of structured learning time for each credit.

6.7 In accordance with MIAA rules and regulations, a student cannot count for eligibility any subject taken during the summer vacation unless that subject has been previously pursued and failed. Students must pass four (4) out of five (5) subjects taken. A student cannot count towards eligibility a course previously taken and passed.

7. A Graduation Review Committee (GRC) will consist of the Principal, Assistant Principal, School Nurse, Teacher, and the Student's Counselor. The members will serve a one year term. The committee will review, upon request, the **local graduation requirements**. A student will have the opportunity to substantiate that he/she has made every effort to meet these **local** graduation requirements, including efforts to make up courses and earn back lost credit due to absence. Due his/her unique circumstances, the GRC may develop an alternative program for this student, including waivers of required courses to allow the student to obtain a high school diploma. The Superintendent will be informed when a **waiver is granted**.
8. Credit for a failed subject is contingent upon following the make-up procedures correctly. The Principal has the authority to approve make-up credits in accordance with this policy.
9. Further Requirements:
 1. Each high school student must carry fifteen (15) semester courses in each school year.
 2. When selecting electives at the next highest level in a given subject area (s), students must meet the prerequisites, as outlined in the approved program of studies, for each course.
 3. Physical Education may be omitted with a valid medical excuse from a physician.

MASSACHUSETTS STATE COLLEGE AND UNIVERSITY ADMISSION STANDARDS

Minimum Grade Point Average (G.P.A.):

The GPA must be achieved based on all college preparatory courses completed at the time of application and should be weighted for accelerated (Honors or Advanced Placement) courses. The required minimum weighted high school GPA is 3.0 for the four-year public campuses.

<u>State College G.P.A.</u>	<u>University G.P.A.</u>
3.0	3.0

For students whose G.P.A. falls below 3.0, the combined SAT-I sliding scale range has been altered: 920-1120 for state colleges, 950-1150 for universities.

Other changes that started with the fall of 2000 include the allowance of two ESL (English as a Second Language) college Preparatory courses in lieu of two of the four required English courses, and no science waivers will be allowed (in some cases the third science requirement was waived based on the high school's curriculum and/or other circumstances). Additional language accompanies these requirements as defined by the BHE.

The standards for admission still require the successful completion of the 16 academic college preparatory units including 4 English, 3 Science, 3 Math, 2 Foreign Language, 2 Social Sciences, and 2 electives. The public colleges also have an exemption cap of 10%, which allows admission to a small number of students who do not meet the above standards.

For further information regarding the standards at State Colleges and Universities, please visit the Board of Higher Education website at www.mass.edu.

Weighted Grade Point Average (WGPA)

The following are the “Levels” that are used to determine the weighted grade point average.

LEVEL 1 ADVANCED PLACEMENT COURSES

These courses are most intensive offered at UHS and are designed to prepare students to take the Advanced Placement Examination in a particular subject area. A student who earns a grade of 3 or better on an AP Exam is generally considered qualified to receive credit for the equivalent course at one of the 2,900 colleges and universities that give credit for AP Exams. The estimated cost for each AP Exam is \$80.

LEVEL 2 HONORS COURSES

These courses are more intensive than experienced by the majority of our students. Classroom activities require a great deal of independent learning. Course content demands critical, creative, and analytical thinking. Courses will require demonstration of comprehensive understanding of the structure of the discipline. Classroom activities are organized with some teacher assistance. Course content tends to be abstract and/or conceptual.

LEVEL 3 COLLEGE PREPARATORY AND POST-SECONDARY SCHOOL COURSES

Classroom activities are organized with a moderate amount of teacher assistance. Concepts or skills are acquired through memorization and recall. Course content tends to be concrete and not abstract. Assignments may be short or long-term in duration.

UXBRIDGE HIGH SCHOOL - GPA CLASS RANK WEIGHTED FACTORS

Weighted rank-in-class is computed using the following factors:

LEVEL	WEIGHT
1 (Advanced Placement)	1.10 - 10% above grade point average
2 (Honors)	1.05 - 5% above grade point average
3 (College Prep)	1.00 - grade point average

METHOD OF COMPUTATION

Briefly, rank is calculated by multiplying the actual report card grade by the weight given to the level of the course. This yields the weighted grade. The weighted grades are multiplied by the course credit (2). The sums of these weighted grades are then divided by the total number of credits, which in turn gives a weighted average. Below is an example for one trimester’s computation.

Course	[Level]	Grade	Weight	Credits
Tech Ed.	3	85	x 1.00	= 85.00 x 2 = 170.00
AP English	1	85	x 1.10	= 93.50 x 2 = 187.00
Math	3	85	x 1.00	= 85.00 x 2 = 170.00
Honors Government	2	85	x 1.05	= 89.25 x 2 = 178.50
Biology	3	85	x 1.00	= 85.00 x 2 = 170.00
				10 875.50

875.50 divided by 10 = **87.55 Weighted Average**

A weighted average accurate to two(2) decimal places is computed at the end of the 9th, 10th, and 11th grades, and first and second trimester of grade 12, taking into account the student’s grade for a given course, the weighting factor determined by the level of that course, and the number of credits. Class ranks for each of these years are determined by putting these weighted averages into descending sequence.

SOME NOTES FOR STUDENTS CONTEMPLATING POST HIGH SCHOOL STUDY

1. The UHS requirement of two years of a Foreign Language is the minimum requirement for most four-year colleges. Some colleges require three or four years of one language.

Students are encouraged to refer to specific college requirements when planning their program.

2. Future nurses should plan to take Chemistry, in addition to four years of college preparatory mathematics. It is also recommended that Anatomy and Physiology be taken.
3. It is recommended that students planning on majoring in engineering in college take mathematics through calculus, chemistry, physics, computer assisted drawing (CAD), and computer courses.
4. It is recommended that students entering majors related to medical/health careers consider taking mathematics through advanced mathematics. Calculus is suggested for a pre-medical program. Anatomy and physiology, chemistry, and physics are strongly recommended. Volunteer or paid work in the health field is suggested, especially for students contemplating a major in physical therapy.
5. For students interested in a Bachelor's Degree in business, it is recommended that they take mathematics through calculus. Computer science courses will also be helpful.
6. Students planning a major in art will normally have to prepare a portfolio of their work. Students are encouraged to take appropriate art courses.
7. For students interested in a major in architecture, it is recommended that mathematics through calculus be taken. It is also recommended that chemistry, physics, CAD, architectural drawing, and art (drawing) be taken.
8. Students considering a career in law should consider taking government, law and creative writing courses.

INDEPENDENT STUDY

An Independent Study is designed for the highly motivated student who wishes to pursue an independent learning experience with the assistance of a supervising teacher. The student must have previously shown dependability, self-discipline, and conscientiousness. The student and teacher must submit a learning project proposal to the appropriate Curriculum & Instruction Leader for approval. The project request must contain the purpose of the project, the objectives to be achieved, the anticipated activities and the method of evaluation planned upon completion of the project. The student must then have the contract signed by a parent prior to submitting it to their counselor. The counselor will submit the contract to the Principal for final approval. The teacher meets with the student on a prearranged schedule to monitor his/her progress and assist as needed. It is the responsibility of the student to find a faculty member willing to do an independent study and to secure the permission of the Curriculum & Instruction Leader.

INSTRUCTIONS FOR COURSE SELECTIONS PROCESS FOR 2010-2011 SCHOOL YEAR

1. All students must be enrolled in fifteen (15) courses or 30-credit equivalent, including at least, one English course, one Social Studies course, one Math course, and one Science course **each year** unless the graduation requirement has been completed for that subject. Each student must record their top fifteen (15) courses plus five (5) alternate courses on their worksheet. Every attempt will be made to place students into their first fifteen choices however; some of the alternate courses may need to be utilized.
2. Students are responsible for enrolling in the courses necessary for UHS Graduation Requirements.
3. Students may select more than one (1) course in an academic area. Courses must be taken in sequence and prerequisites must be met. Please refer to the Program of Studies for specific information.
4. During the scheduling process students will receive appointment slips to meet with their counselors in order to go over course selections. It is imperative that students keep these appointments and bring with them their Program of Studies and completed Course Selection Worksheet. After meeting their counselor, students will receive a copy of their course selections. Guidance counselors will select courses for students who do not meet with them, as requested, during the course selection process.
5. If courses have prerequisites a teacher's signature will be required during a Teacher Recommendation Day. A copy of course selections with Teacher Recommendations will be given to the student to be returned with parent/guardian signature.
6. **The Course Selection Process should be something that students take very seriously. Students should utilize their teachers, parents, and guidance counselor as resources when selecting courses. Students must realize that the Master Scheduler attempts to schedule the top 15 courses selected by each student. Once the Master Schedule is finalized, it becomes difficult for students to make changes to their schedules because courses may be full and not available at the time of the requested change.**

ENGLISH

Grade 9

Honors Freshman English
Freshman English
Freshman Fundamentals

Grade 10

Honors Sophomore English
Sophomore English
Literary Aspects of Film
Around the World A
Around the World B
Tolkien (offered SY 2011-2012)
Mystics, Fantasy & Imagination
(offered SY 2011-2012)
Mythology (offered 2012-2013)

Grade 11

AP English: Language and Composition
Honors Junior English
Junior English
SAT Prep
Literary Aspects of Film
Around the World A
Around the World B
Creative Expressions
Tolkien (offered SY 2011-2012)
Mystics, Fantasy & Imagination
(offered SY 2011-2012)
Mythology (offered 2012-2013)

Grade 12

AP English: Literature and Composition
Honors Senior English
Senior English
SAT Prep
Literary Aspects of Film
Around the World A
Around the World B
Creative Expressions
Tolkien (offered SY 2011-2012)
Mystics, Fantasy & Imagination
(offered SY 2011-2012)
Mythology (offered 2012-2013)

ENGLISH DEPARTMENT MISSION STATEMENT

The English Department at Uxbridge High School has various goals designed to create successful, life-long learners. Students will be able to develop effective skills and strategies for various types of communication, such as writing, speaking, listening, viewing, and presenting. They will also develop: independent and critical reading skills for a variety of genres; an appreciation of literature and an understanding of its structure and multi-cultural context; study skills, strategies, work habits, and attitudes necessary for success in school and for life in our ever-changing society; the basic skills of language mechanics and expression; and an ability to examine and evaluate information from various media and technological resources. They will be able to understand the dynamics of languages and dialect. Opportunities to pursue special talents and interests through a variety of media and technology will be available to them as well.

The English Department requires that a student take Freshman English A and B during the freshman year, Sophomore English A and B during the sophomore year, Junior English A and B during the junior year, and Senior English A & B during the senior year. With the exception of the elective courses, students cannot take two grade levels of English during the same year unless they are required to make up credits for courses failed. If this occurs, courses must be taken in the correct 9-12 sequence. Electives are offered in addition to the required core courses, and they cannot substitute for that requirement.

T008/009 **FRESHMAN ENGLISH FUNDAMENTALS A&B**
Credits: 2 each trimester **Grade: 9** **120 Days**
Prerequisite: None

This course focuses on a broad spectrum of skills and concepts: an enlargement of vocabulary; a strong emphasis on grammar; improvement in writing and speaking techniques; a study of various literary genres. Preparation for MCAS/PSAT tests will be ongoing.

T010/T011 **HONORS FRESHMAN ENGLISH A & B**
Credits: 2 each trimester **Grade: 9** **120 Days**

Prerequisite: 80 or above in 8th grade English class; teacher and/or C & I Leader recommendation
This course is designed for the college preparatory student who has exhibited exceptional ability and interest in English. It combines the work in the Freshman English and Sophomore English classes. The course includes more advanced work in vocabulary and language skills, and in MCAS/PSAT/SAT/ AP Preparation. Critical analysis will focus on imagery. There will be challenging reading and writing assignments and an independent research project will be completed. A four-page research paper will be required.

T013/T014 **FRESHMAN ENGLISH A & B**
Credits: 2 each trimester **Grade: 9** **120 Days**

Prerequisite: None
This course focuses on a broad spectrum of skills and concepts: a refinement and enlargement of vocabulary; a strong emphasis on grammar; improvement in writing and speaking techniques; a study of various literary genres; and a study of classical and mythological literary allusions. Research methods and library skills will be studied. Preparation for MCAS and PSAT tests will be ongoing.

T016/T017 **HONORS SOPHOMORE ENGLISH A&B**
Credits: 2 each trimester **Grade: 10** **120 Days**

Prerequisite: 80 or above in Freshmen English; teacher and/or C & I Leader recommendation
This course is designed for the college-preparatory student who has exhibited exceptional ability and interest in English. It will include advanced-level study of challenging readings. Intensive preparation will be given in literary analysis, writing and speaking skills, and vocabulary acquisition. Included will be ongoing preparation for the MCAS, PSAT, SAT and AP English. Critical analysis will concentrate on an understanding of imagery, diction, and structure. Independent projects for groups and individuals will be assigned, and a six-page research paper will be required.

T019/T020 **SOPHOMORE ENGLISH A&B**
Credits: 2 each trimester **Grade: 10** **120 Days**

Prerequisite: Freshman English
This course will continue the work begun in freshman English, including vocabulary growth, expository writing, and literary analysis, with a focus on poetry. The study of great literature of the past and present will continue through the exploration of various genres. The course will also include grammar review and a study of understanding and employing multi-media resources for communication and research. Preparation for MCAS and PSAT/SAT will continue.

T024/T025 **HONORS JUNIOR ENGLISH A&B**
Credits: 2 each trimester **Grade: 11** **120 Days**

Prerequisite: 80 or above in Sophomore English; teacher and/or C & I Leader recommendation
This course is designed for the college preparatory student who has continued to exhibit exceptional ability in freshman & sophomore honors English courses. It will include advance-level study of challenging readings, with a focus on the development of American literature, from colonial times to present. Intensive preparation will be given in writing, vocabulary building, and literary analysis, with a concentration on style. Included will be practice in the verbal sections of the PSAT, SAT, and SAT II in English. Independent projects for groups and individuals will be assigned, and an eight-page research paper will be required.

T027/T028 JUNIOR ENGLISH A&B
Credits: 2 each trimester Grade: 11 120 Days

Prerequisite: Freshman, Sophomore English

This course is designed for continued practice toward mastery of a wide range of language skills. Focus areas will be writing, reading, discussing, and communicating. The course will stress grammar in writing; reading for information, understanding, and pleasure; research skills; and SAT preparation. The literary focus will be on American literature from colonial times to the present. A five-page research paper will be required.

T005/T006/ T007 A. P. ENGLISH: LANGUAGE AND COMPOSITION A, B&C
Credits: 2 each trimester Grade: 11 180 Days

Prerequisite: Teacher and/or C & I Leader recommendation

AP English Language and Composition course is designed to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. The course will help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. The goal is to make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students are required to take the advanced placement test administered by the College Board in May. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class. **Note** the prerequisite, and see your English teacher if you are interested in a really CHALLENGING English course!

T031/T032/T033 A. P. ENGLISH: LITERATURE AND COMPOSITION A,B&C
Credits: 2 each trimester Grade: 12 180 Days

Prerequisite: Teacher and/or C & I leader recommendation

Advanced Placement Literature and Composition will be a very intensive, fast-paced study of literature and language. It will feature in-depth literary analysis and frequent, college-preparatory writing assignments. Students will learn strategies for taking the AP exam, and they will take several practice exams. Students are required to take the advanced placement test administered by the College Board in May. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class. **Note** the prerequisite, and see your English teacher if you are interested in a really CHALLENGING English course!

T034/T035 HONORS SENIOR ENGLISH A&B
Credits: 2 each trimester Grade: 12 120 Days

Prerequisite: 80 or above in Junior English; teacher and/or C & I Leader recommendation

This course will continue highly challenging material for the serious student. It will include in-depth studies of literary genres and literary criticism; intensive work in analytical and expository writing; and an extensive study of masterpieces of British literature, from *Beowulf* to modern writers. Students will receive SAT and SAT II preparation, and they will complete independent reading and writing projects. An eight to ten page research paper will be required.

T037/T038 SENIOR ENGLISH
Credits: 2 each trimester Grade: 12 120 Days

Prerequisite: Freshman, Sophomore, & Junior English.

This course works towards mastery of a wide range of language skills. Emphasis will be on writing with intelligence, clarity, organization, style, and imagination. Literary analysis will focus on a survey of British literature, from *Beowulf* to modern writers. Vocabulary study and SAT practice will continue. A six-page research paper will be required.

T668

INDEPENDENT LIVING

Credits: 2

Grades 11-12

60 days

Prerequisite: None

This course is designed to take the student into the world of work and independence. Students will go through a variety of real life simulated experiences such as job hunting, finding and setting up an apartment. Critical topics of financial literacy will be examined from establishing and maintaining good credit, to developing and following a budget, and buying a vehicle. The objective of all these activities is to make the student aware of and better able to cope with life after Uxbridge High School.

T670

INTERIOR DESIGN

Credits: 2

Grades 10-12

60 days

Prerequisite: None

This course will give the students the opportunity to link their creative ability to well documented strategies and theories concerning planning and decorating a living or working space. Students will be exposed to the relationship between history, texture, color and design. These concepts will be the driving force in preparing each student to use his or her creative talents in preparing a simulated room design project. Actual hands-on-experiences will be interspersed throughout the course wherever possible. This course fills the Fine Arts elective requirement.

T672

THE COLLEGE APPLICATION CHALLENGE

Credits: 2

Grade 12

60 days

Prerequisite: None

Only serious college bound students should choose this elective. This course is designed to help the student navigate and understand the complicated college application process. The student will be given tools to see beyond the glossy brochures to find the college that is right for them. From filling out the application, writing the important admission essay, to meeting the deadlines the student will be supported and guided through the critical elements of the college admission process.

FINE ARTS – PERFORMING ARTS

Concert Band	Grades 9-12
Concert Choir	Grades 9-12
Fundamentals of Guitar	Grades 9-12
Music Theory I	Grades 9-12
Music Theory II	Grades 9-12
Music Appreciation	Grades 9-12
Theater	Grades 9-12

AFTER SCHOOL MUSIC:

Concert Band/Part-time	Grades 9-12
Concert Choir/Part-time	Grades 9-12
UHS Jazz Band	Grades 9-12
UHS Rock/Blues Band	Grades 9-12

PERFORMING ARTS DEPARTMENT MISSION STATEMENT

The Music Program utilizes performance and non-performance based electives, and co-curricular performance ensemble opportunities, to establish the foundation for lifelong learning in the arts. Students learn critical thinking and problem solving skills in order to develop their abilities in the areas of artistic and creative expression. The Performing Arts department will encourage students to utilize a variety of learning strategies in the analysis, performance and interpretation of musical compositions; encourage students to be active music makers and listeners; introduce students to a variety of musical sounds, styles, genres and techniques; improve students' ability to synthesize and apply information in musical environments; promote excellence in the areas of problem solving, creativity and musicianship; encourage students to develop in the areas of artistic and creative expression and encourage students to bridge subject areas and to make interdisciplinary connections.

All students are required to complete 2 credits in the area of Fine Arts.

The following Performing Arts elective courses are offered

<u>GRADE 9:</u> Concert Band Concert Choir Fundamentals of Guitar Music Appreciation Music Theory I Theater	<u>GRADES 10, 11, & 12</u> Same as GRADE 9 and Music Theory II	****Students may enroll in Concert Band and Concert Choir for multiple trimesters/years****
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T800/T801/T802 CONCERT BAND A, B, & C

Credits: 2 each trimester

Grades: 9-12

60 days

Prerequisite: The ability to read music or permission of instructor. The ability to perform on a brass, woodwind, or percussion instrument

This course is intended to introduce and reinforce concepts integral to instrumental music performance. The focus of the class is primarily performance-based: members of the class will develop technical facility on their instrument and study the many aspects of ensemble performance. The band will rehearse and perform standard concert band repertoire. Students are required to attend and participate in evening performances. **Students may enroll in this course for 1, 2, or 3 trimesters per year.**

Course T058 THEATER**Credits: 2****Grade: 9-12****60 Days***Prerequisite: None*

Theater is a one trimester course open to all students. Students will learn the basics of performance arts and the role of in culture and history. This course works on the fundamentals of acting, the necessary components of theatrical production, and a brief history of theater. Students cast in a short play to be performed publicly. This course is participatory and grading is relative to student's daily involvement.

T820/T821/T822 UHS CONCERT BAND (After School) A, B, & C**Credits: .5 each trimester****Grades: 9-12****Full year/ afternoons or evenings**

Prerequisite: Teacher Recommendation or permission of C & I Leader; The ability to read music and the ability to perform on a brass, woodwind or percussion instrument. (Guitarists, bassists and keyboardists may participate with instructor's permission)

An extracurricular instrumental music performance ensemble opened to brass, woodwinds and percussionists. Standard wind band literature and other appropriate repertoire will be rehearsed and performed. Credit will be awarded based upon band members' regular attendance, both at rehearsals and performances. Public performances may include (but are not limited to) in-school assemblies, evening concerts, athletic events, community events and music festivals.

T824/T825/T826 UHS CONCERT CHOIR (After School) A, B, & C**Credits: .5 each trimester****Grades: 9-12****Full year/afternoons or evenings**

Prerequisite: Teacher Recommendation or permission of C & I Leader

An extracurricular choral music performance ensemble. Choral literature of all kinds will be rehearsed and performed. Credit will be awarded based upon chorus members' regular attendance, both at rehearsals and performances. Public performances may include (but are not limited to) in-school assemblies, evening concerts, community events and music festivals.

T828/T829/T830 UHS JAZZ BAND (After School) A, B, & C**Credits: .5 each trimester****Grades: 9-12****Full year/afternoons or evenings**

Prerequisite: Teacher Recommendation or permission of C & I Leader; The ability to read music and the ability to perform on a brass or woodwind instrument, piano, bass, guitar or drums. Participation in Concert Band is mandatory.

An extracurricular jazz music performance ensemble. Musical repertoire covering the range of jazz styles and genres will be explored, rehearsed and performed. Credit will be awarded based upon jazz band members' regular attendance, both at rehearsals and performances. Public performances may include but are not limited to in-school assemblies, evening concerts, community events and music festivals.

T832/T834/T836 UHS ROCK/BLUES BAND (After School) A, B, & C**Credits: .5 each trimester****Grades: 9-12****Full year/afternoon or evenings**

Prerequisite: Teacher Recommendation or permission of C & I Leader; The ability to read music is very helpful; the ability to perform on guitar, keyboards, bass, drums or the ability to sing in the pop/rock/blues style. Participation in Concert Band or Concert Choir is mandatory.

An extracurricular rock, blues and pop music performance ensemble open to interested students. Repertoire covering the range of rock, blues and pop music styles will be explored, with an emphasis on group performance in an informal atmosphere. Credit will be awarded based upon rock/blues band members' regular attendance, both at rehearsals and performances.

FINE ARTS - VISUAL ARTS

Art I A	Grades 9-12
Art I B	Grades 9-12
Art II A	Grades 9-12
Art II B	Grades 9-12
Art III A	Grades 10-12
Art III B	Grades 10-12
Ceramics I A	Grades 10-12
Ceramics I B	Grades 10-12
Self Expression	Grades 9-12
Portfolio	Grades 11-12
Explore and Discover	Grades 10-12

VISUAL ARTS DEPARTMENT MISSION STATEMENT

Our art program uses a multi-disciplinary approach and a traditional studio-based curriculum to establish the foundation for lifelong learning in the arts. Students will learn perceptual, critical thinking and problem solving skills to develop their abilities to think creatively. The art program is a sequential course of studies that includes the use of tools and techniques, understanding elements and principles of design, developing craftsmanship, gaining an awareness of art history, and the effective use of technology. The variety of class projects allows students the opportunity to create artworks, to write effectively about the arts, and to synthesize and apply new information. Artistic and creative expression will be fostered in a safe environment where students develop respect for themselves and others. Assessment strategies are designed to demonstrate what students know and can do; these include tests, quizzes, exhibits, critiques, oral presentations and portfolios, as well as graded projects.

T700

ART I A

Credits: 2

Grades: 9-12

60 days

Prerequisite: None

This foundation course teaches you how to draw realistically through a variety of methods. *ArtTalk* and *Drawing on the Right Side of the Brain* are our textbooks. In this class students will be introduced to basic drawing techniques and an exploration of various art media. Units of study will include the elements and principles of design. Class projects will enable the student to develop perceptual skills. In addition to the production of artwork, students will also learn about aesthetics, criticism and the history of art. *Scholastic Art* magazines and the textbook *Discovering Art History* will also be used to enhance class discussions. Quizzes and tests will be required, as well as written assessments of studio projects.

T702

ART I B

Credits: 2

Grades: 9-12

60 days

Prerequisite: Grade of 70 or higher in Art IA and/or teacher approval. Art IA binder required.

This course is a continuation of Art IA. *ArtTalk*, *Drawing on the Right Side of the Brain* and *Discovering Art History* are the textbooks that will be utilized in this class. Students will continue to learn basic drawing techniques and will participate in an exploration of various art media. Units of study will include the elements and principles of design. In addition to the production of artwork, students will also learn about aesthetics, criticism and the history of art. *Scholastic Art* magazines will be used to enhance class discussions. Quizzes and tests will be required, as well as written assessments of studio projects.

T704**ART II A****Credits: 2****Grades: 9-12****60 days**

Prerequisite: Grade of 70 or higher in Art IB and/or teacher approval. Art I A/B binder required.

This course begins with an intensive drawing review in order to reawaken the processes of visual judgment. The Art II curriculum builds on skills acquired in the Art I classes and students will complete projects focusing on design elements and principles. A variety of media will be explored, and units of study will include drawing, painting and sculpture. Assignments are often related to the work of specific artists. *ArtTalk*, *Drawing on the Right Side of the Brain* and *Discovering Art History* are the textbooks that will be utilized in this class. *Scholastic Art* magazines will also be used to enhance class discussions. Quizzes/tests will be required, as well as written assessments of studio projects and an Art History research project.

T706**ART II B****Credits: 2****Grades: 9-12****60 days**

Prerequisite: Grade of 70 or higher in Art IIA and/or teacher approval. Art IIA binder required.

The Art IIB curriculum builds on skills acquired in Art IIA. Students will continue to complete projects focusing on design elements and principles. Assignments are often related to the work of specific artists. Units of study will include figure drawing and portraiture, as well as painting, printmaking, sculpture and ceramics. *ArtTalk*, *Drawing on the Right Side of the Brain* and *Discovering Art History* are the textbooks that will be utilized in this class. *Scholastic Art* magazines will also be used to enhance class discussions. Quizzes/tests will be required, as well as written assessments of studio projects and an Art History research project.

T708**ART III A****Credits: 2****Grades: 10-12****60 days**

Prerequisite: Grade of 70 or higher in Art IIB and/or teacher approval. Art/IIB binder required.

Art III is comprised of a combination of class problems and independent work aimed at in-depth development of personal imagery and style, along with advanced skill mastery in a given medium. Contracts for individual studies are prepared by the student and must be approved in advance by the instructor. The semester will begin with an intensive drawing review. Class projects may include contour and gesture drawing, portraiture, color composition, watercolor series, oil and acrylic painting, ceramics, printmaking and advanced three-dimensional work. Quizzes/tests will be required, as well as written assessments of studio projects and an Art History research project. Students will be responsible for setting realistic goals and deadlines with regard to their art production. We will also discuss various career opportunities in the arts.

T710**ART III B****Credits: 2****Grades: 10-12****60 days**

Prerequisite: Grade of 70 or higher in Art IIIA and/or teacher approval. Art IIIA binder required.

The Art IIIB curriculum builds on skills acquired in Art IIIA. Students will continue to work toward the development of personal artistic style. Contracts for individual studies are prepared by the student and must be approved in advance by the instructor. In addition to working on class projects assigned by the instructor, students will focus on developing mastery in a medium of their choice. Quizzes/tests will be required, as well as written assessments of studio projects and an Art History research project. Students will be responsible for setting realistic goals and deadlines with regard to their art production. We will also discuss various career opportunities in the arts.

T712 CERAMICS I A**Credits: 2****Grades: 10-12****60 days***Prerequisite: None*

This course is designed to provide the student with a basic working knowledge of the physical and chemical properties of clay. Students will focus on the production, history, criticism and aesthetics of ceramics. They will have the option to produce both hand-built and wheel-thrown items, and will explore a variety of decorative techniques. Class discussions will include the glazing and firing process, how to load and fire an electric kiln, and the costs involved in maintaining a ceramic studio. This is a “hands-on” course requiring daily participation. Therefore, regular attendance is necessary, as well as class participation in readings and discussions; these are crucial factors for success in this course.

T714 CERAMICS I B**Credits: 2****Grades: 10-12****60 days***Prerequisite: Grade of 70 or higher in Ceramics IA and/or teacher approval. Ceramics IA binder required.*

The Ceramics IB curriculum builds on skills acquired in Ceramics IA. Students will continue to develop their knowledge and skills of the ceramic process. They will have the option to produce both hand-built and wheel-thrown items, and will explore a variety of decorative techniques. Assignments are often related to the work of specific artists or cultures. This is a “hands-on” course requiring daily participation. Therefore, regular attendance is necessary, as well as class participation in readings and discussions; these are crucial factors for success in this course.

T716 SELF EXPRESSION**Credits: 2****Grades: 9-12****60 days***Prerequisite: None*

The primary focus of this course is to examine art forms through students' personal experiences. Art will serve as a means of communicating ideas and expressing emotions. Following an introductory unit on drawing techniques, students are required to keep journals with writing and sketching as an ongoing process. Projects often emerge through self-examination using a variety of approaches and may include autobiographical writing, self portraiture, collages, identity box, mask making, researching a family tree, and illustrating a favorite quote. A variety of art media will be explored.

T718 PORTFOLIO**Credits: 2****Grades: 11-12****60days***Prerequisite: Grade of 80 or higher in Art IIIB and/or teacher approval.*

This course is designed for students who are seriously working on a portfolio to prepare them for advanced art programs. Each student must produce a specific number of artworks to be included in the portfolio. Students must prepare a written proposal for each independent project. Students learn how to photograph art work and cut mats. Each student is responsible for submitting a copy of his/her portfolio to the instructor by the end of the semester. An exhibition of the student's artworks may also be arranged.

FOREIGN LANGUAGE

Grade 9

Spanish I A/B
Honors Spanish I A/B
Spanish II A
Honors Spanish II A

Grade 10

Spanish I A/B or Honors Spanish I A/B
Spanish II A or Honors Spanish II A
Spanish II B or Honors Spanish II B
Spanish III A or Honors Spanish III A
Spanish III B or Honors Spanish III B
Spanish in the World of Sports

Grade 11

Spanish I A/B or Honors Spanish I A/B
Spanish II A or Honors Spanish II A
Spanish II B or Honors Spanish II B
Spanish III A or Honors Spanish III A
Spanish III B or Honors Spanish III B
Spanish IV A or Honors Spanish IV A
Spanish IV B or Honors Spanish IV B
Spanish in the World of Sports
Honors French IV A
Honors French IV B

Grade 12

Spanish I A/B or Honors Spanish I A/B
Spanish II A or Honors Spanish II A
Spanish II B or Honors Spanish II B
Spanish IIIA or Honors Spanish IIIA
Spanish III B or Honors Spanish III B
Spanish IV A or Honors Spanish IV A
Spanish IV B or Honors Spanish IV B
Spanish V A
Spanish V B
AP Spanish Language
AP French Language
Spanish in the World of Sports

NOTE: College bound students are recommended to take 4 or more years of the same foreign language and to take all language courses sequentially, avoiding a break between courses so that they may achieve a level of fluency.

FOREIGN LANGUAGE DEPARTMENT MISSION STATEMENT

The Uxbridge High School Foreign Language Department provides students the opportunities to learn to communicate with people of other cultures, develop a better understanding of others and themselves, and broaden their knowledge of the world through a greater awareness and understanding of the diverse cultures of the countries whose language they are learning. It is the goal of the Foreign Language Department to help students develop and implement strategies that allow them to speak, read, write, and understand Spanish at the level appropriate to their grade and developmental stage as outlined in the Massachusetts Foreign Language Framework. The opportunity for written and oral practice encourages creativity and self-expression. The use of computer/multimedia technology connects students to a broader cultural learning experience. Content from other academic disciplines is integrated into Spanish courses in order to assist students in gaining and furthering their knowledge of the target language. Students are encouraged to connect their classroom knowledge to real-life experiences so that they may enjoy the social and personal benefits of speaking Spanish.

T400 HONORS SPANISH I A**Credits: 2****Grades: 9-12****60 days**

Prerequisite: 80 or above in 8th grade Spanish and English; teacher and/or C & I Leader recommendation

This course is for the student who has demonstrated strengths in language arts and/or has a strong desire to learn a foreign language at an advanced pace. In this course, in addition to the required material, the approach to learning grammar and vocabulary may be more natural, more student-directed. Therefore, an introduction to past tense and object pronouns is often included in this course. In addition, writing and speaking skills are expanded and readings in Spanish supplement the text. More emphasis is put on homework, at home grammar preparation, and outside projects. In this class students are expected to be able to work independently as well as cooperatively as the coursework requires. Use of Spanish is emphasized. Therefore as students gain skill, they are required to speak Spanish in front of the class, with other students, and with the teacher. The principal objective is for students to develop the foundation necessary for communication in the upper-level study of Spanish.

T401 HONORS SPANISH I B**Credits: 2****Grades: 9-12****60 days**

Prerequisite: 80 or above Honors Spanish I A; teacher and/or C & I Leader recommendation

In this course, students will continue working on the goals set forth in Honors Spanish I A. Please see the description for Spanish I A for the details.

T403 SPANISH I A**Credits: 2****Grades: 9-12****60 days**

Prerequisite: None

Spanish IA is an introductory course about the language and culture of the Spanish-speaking world that focuses on vocabulary acquisition and the communication skills of reading, writing, speaking and listening. The curriculum includes the use of textbooks, audiovisual materials and technology. Students will begin to demonstrate a basic proficiency of the language through real world situations such as introductions, self-description, likes and dislikes, description of school and classes, food and health. They will ask and answer questions in Spanish, dialogue with other students and the teacher, read adapted texts and write short descriptions in Spanish. On a regular basis, students work in the language laboratory. The language lab offers the students the opportunity to listen to and watch native speakers of Spanish in adapted and authentic contexts so they can learn about culture and begin to work on pronunciation and developing a proper accent. Students must pass this course to continue on to Spanish I B, otherwise they will not have a sufficient foundation to continue to the next level.

T404 SPANISH I B**Credits: 2****Grades: 9-12****60 days**

Prerequisite: A 70 or higher in Spanish I A and/or a teacher recommendation

In Spanish I B students will continue to study the language and culture of the Spanish-speaking world that they began in Spanish I A (please see the description above). Focus is on vocabulary acquisition so that students can learn to speak and write in Spanish. The curriculum includes the use of textbooks, audiovisual materials and technology. Students who pass both Spanish I A and Spanish I B successfully complete the graduation requirement for Foreign Language.

T406 HONORS SPANISH II A**Credits: 2****Grades: 9-12****60 days***Prerequisite: 80 or above Honors Spanish IB; teacher and/or C & I Leader recommendation*

This course is intended for students with demonstrated strength in Spanish and especially for those who intend to complete a three- or four-year sequence in Spanish. In this course, there is more focus on presentational skills. Students are required to do more formal speaking and writing projects. Outside projects are assigned. Vocabulary acquisition remains an important goal and grammar becomes more complex as students learn to use preterit and imperfect tenses and are introduced to the concept of mood. Students do a lot of grammar study at home so that class time can be devoted to communicative practice.

Students are required to use Spanish in class with the teacher and with other students. Video, audio, and readings about culture will supplement the text and students continue to work on a regular basis in the language laboratory. Topics include: school and classes, daily routines, shopping, means of transportation giving/getting directions, and childhood memories.

T407 HONORS SPANISH II B**Credits: 2****Grades: 10-12****60 days***Prerequisite: 80 or above Honors Spanish II A; teacher and/or C & I Leader recommendation*

This course builds on the skills practiced in Honors Spanish II A and it continues to prepare students for the upper-level study of Spanish. Grammar study continues to center on the use of the past tenses and introduction to mood. Outside projects are assigned and more emphasis is put on homework as a means to prepare for the grammar and vocabulary to be used in class the next day. Students are required to speak Spanish in the classroom to the teacher and classmates. Video, audio, and readings about culture will supplement the text and students continue to work on a regular basis in the language laboratory. Topics include: holiday celebrations, crisis situations and natural disasters, television and movies, and food.

T409 SPANISH II A**Credits: 2****Grades: 9-12****60 days***Prerequisite: 70 or higher in both Spanish I A and B and a teacher and/or C & I Leader recommendation*

This course continues to develop the skills introduced in Spanish 1A/B with further development of vocabulary and grammar structures. Students begin to use the past tenses and the language tasks increase in degree of difficulty as the course progresses. Students are required to do projects, write brief compositions in Spanish and give short oral presentations in Spanish. On a regular basis, students will work in the language lab to practice listening and speaking. The class is primarily conducted in Spanish. Topics in this course include: school and classes, daily routines, and shopping. Spanish and Latin American cultural perspectives on these topics will be explored.

T410 SPANISH II B**Credits: 2****Grades: 10-12****60 days***Prerequisite: 70 or higher in Spanish II A and/or a teacher and/or C & I Leader recommendation*

This course builds on the skills in Spanish II A. The topics in this course include: chores and doing errands around town, means of transportation, giving directions, and childhood memories. Spanish and Latin American cultural perspectives on the topics will be explored. Students continue to learn to express themselves in the past tenses, write brief compositions, give brief oral presentations and go to the language lab to practice. Topics include: giving/getting directions and childhood memories.

T412 HONORS SPANISH III A**Credits: 2****Grades: 10-12****60 days***Prerequisite: 80 or above Honors Spanish II B; teacher and/or C & I Leader recommendation*

This course is designed for students who continue to exhibit exceptional ability in the study of Spanish. Grammar study advances to include the active use of both indicative tenses and subjunctive mood and students are introduced to Spanish/Latin American literature. The content of this course requires that students speak Spanish and become involved in discussions and readings in the language. Students are required to write essays in Spanish and to give presentations in Spanish in front of the class. Outside projects and/or readings are assigned. In addition, students do most of the grammar preparation at home so that class time is spent practicing speaking. The language lab is used on a regular basis giving the students the opportunity to listen to and watch native speakers of Spanish, read authentic materials online, and record themselves for practice and assessment. This class is conducted in Spanish and students are required to speak Spanish with their teacher and classmates. Topics may include: travel, professions, and ecology.

T413 HONORS SPANISH III B**Credits: 2****Grades: 10-12****60 days***Prerequisite: 80 or above Honors Spanish III A; teacher and/or C & I Leader recommendation*

This course resumes the work begun in Honors Spanish III A. Students work to perfect their usage of upper-level grammar and increase vocabulary acquisition. The majority of class time continues to be spent practicing speaking and writing and students do most of the grammar preparation at home. Spanish/Latin American short stories remain an important part of the curriculum and students are expected to participate in discussions and write essays about the readings. Outside projects and/or readings are assigned. The language lab is used on a regular basis giving the students the opportunity to listen to and watch native speakers of Spanish, read authentic materials online, and record themselves for practice and assessment. This class is conducted in Spanish and students are required to speak Spanish with their teacher and classmates.

T415 SPANISH III A**Credits: 2****Grades: 10-12****60 days***Prerequisite: 70 or higher in Spanish II B and a teacher and/or C & I Leader recommendation*

Spanish III continues the grammatical structures and the vocabulary necessary to allow students to expand their communicative proficiency and further their appreciation of the culture. In this course the grammar focus is on the use of both the preterit and imperfect tenses. Students are expected to write full-page compositions and make presentations in Spanish. In addition, students will read and discuss short stories by Spanish and Latin American authors. The language lab is used on a regular basis giving the students the opportunity to listen to native speakers of Spanish in adapted and authentic contexts, and to record their work for practice and/or assessment. This course is primarily conducted in Spanish. Topics in this course include: holiday celebrations, crisis situations and natural disasters.

T416 SPANISH III B**Credits: 2****Grades: 10-12****60 days***Prerequisite: 70 or higher in Spanish III A and a teacher and/or C & I Leader recommendation*

This course advances the goals students began working on in Spanish IIIA. Students continue to write and speak in the present and past tenses. Students are expected to write full-page compositions and make presentations in Spanish. In addition, students will read and discuss short stories by Spanish and Latin American authors. The language lab is used on a regular basis giving the students the opportunity to listen to native speakers of Spanish in adapted and authentic contexts, and to record their work for practice and assessment. This course is primarily conducted in Spanish. Topics in this course include: television and movies, food and cooking, and traveling.

T418 HONORS SPANISH IV A**Credits: 2****Grades: 11-12****60 days***Prerequisite: 80 or above Honors Spanish III B; teacher and/or C & I Leader recommendation*

As the preparatory course for AP Spanish Language, this course is intended for the serious language student who is committed to working at an accelerated pace. This course stresses language production. Students will read, summarize, analyze and discuss adapted and authentic reading/audio/video selections, mimic native pronunciation, discuss current events and other cultural topics. The class is conducted primarily in Spanish and it is intended to expand the knowledge of the Spanish language and culture and to practice the skills and strategies necessary to perform successfully on the AP Spanish Language Exam.

T419 HONORS SPANISH IV B**Credits: 2****Grades: 11-12****60 days***Prerequisite: 80 or above Honors Spanish IV A; teacher and/or C & I Leader recommendation*

This course continues to address the strategies and skills necessary to successfully speak and write in Spanish and to prepare for the AP Spanish Language exam. Language production remains the principle objective of the course and students continue to work with primarily authentic materials. The class is conducted primarily in Spanish.

T421 SPANISH IV A**Credits: 2****Grades: 11-12****60 days***Prerequisite: 70 or higher in Spanish III B and/or teacher and/or C & I Leader recommendation.*

Through the use of films and supplemental readings, music, and class activities students learn about the lives and work of several Hispanic historical figures. The course focuses on individuals who are admired in their culture for their struggle to overcome social, economic, cultural, and personal obstacles. Each of their fascinating life stories includes discussion about political and personal conflicts. The subjects of the course may include Selena Quintanilla Pérez, Evita Perón, and Che Guevara. This course is conducted primarily in Spanish and direct grammar instruction is based on student need. The emphasis of the course is acquiring vocabulary and using it to speak in a seminar-style environment. **NOTE:** This course curriculum will switch bi-yearly with that of the Spanish V A and B courses.

T422 SPANISH IV B**Credits: 2****Grades: 11-12****60 days***Prerequisite: 70 or higher in Spanish IV A and/or teacher and/or C & I Leader recommendation.*

Through the use of films and supplemental readings, music, and class activities students learn about the lives and work of several Hispanic historical figures. The course focuses on individuals who are admired in their culture for their struggle to overcome social, economic, cultural, and personal obstacles. Each of their fascinating life stories includes discussion about political and personal conflicts. The subjects of the course may include Frida Kahlo, Emiliano Zapata, Cristina Sánchez, Garcia Lorca, César Chavez, Antonio Gaudi and Goya. This course is conducted primarily in Spanish and direct grammar instruction is based on student need. The emphasis of the course is acquiring vocabulary and using it to speak in a seminar-style environment. **NOTE:** This course curriculum will switch bi-yearly with that of the Spanish V A and B courses.

T427 SPANISH V A**Credits: 2****Grades: 11-12****60 days**

Prerequisite: 70 or higher in Spanish III B or Spanish IV B and/or a teacher and/or C & I Leader recommendation.

Through the use of films, readings, music, and class activities students learn about significant historical events and their impact on the culture of Spanish-speakers. From the Spanish Civil War to socialist Chile under President Allende this course focuses on social and political conflicts that have shaped the Spanish-speaking world. This course is conducted primarily in Spanish and direct grammar instruction is based on student need. The emphasis of the course is acquiring vocabulary and using it to speak in a seminar-style environment. **NOTE:** Since the curriculum of this course flip-flops with that of Spanish V A and B, students may enroll in this course before taking Spanish IV.

T428 SPANISH V B**Credits: 2****Grades: 11-12****60 days**

Prerequisite: 70 or higher in Spanish III B or Spanish IV B and/or a teacher and/or C & I Leader recommendation.

Through the use of films, readings, music, and class activities students learn about significant historical events and their impact on the culture of Spanish-speakers. From Argentina's "Desaparecidos" to Castro's Cuba, this course focuses on social and political conflicts that have shaped the Spanish-speaking world. This course is conducted primarily in Spanish and direct grammar instruction is based on student need. The emphasis of the course is acquiring vocabulary and using it to speak in a seminar-style environment. **NOTE:** Since the curriculum of this course flip-flops with that of Spanish V A and B, students may enroll in this course before taking Spanish IV.

T434/T435/T436 AP SPANISH LANGUAGE A, B, & C**Credits: 2 each trimester****Grade: 12****180 days**

Prerequisite: Honors Spanish IVB; Teacher and/or C & I Leader recommendation

This course is intended for students who will be taking the AP Spanish Language exam. The equivalent of a third-semester college-level course, AP Spanish Language focuses on sharpening and integrating the skills of listening, reading, speaking and writing in Spanish. Many of the class activities are designed to mimic those found on the AP exam. The emphasis of the course is acquisition of vocabulary and the curriculum centers on common themes that come up in everyday social interactions. Topics include the home, school, entertainment, technology, and politics. Students learn about cultural figures and events through the use of authentic audio and reading material. This class is conducted in Spanish. Students are expected to work independently from the teacher, complete work over the summer, and as the testing date draws near, meet with the teacher outside of class time in a group setting to work on areas that need improvement. In order to complete work at home, students will need a headset with a microphone for use at the computer and be able to download Audacity, a free software program for recording audio. Students enrolled in this course are required to take the AP exam. Cost is approximately \$80.00. A *non-refundable \$25.00 deposit must be given by the fourth week of class.*

T437 SPANISH IN THE WORLD OF SPORTS**Credits: 2****Grades: 10-12****60 days**

Prerequisite: 70 or higher in Spanish II B and/or a teacher and/or C & I Leader recommendation.

This course aims to improve reading, writing, speaking, and listening proficiency by using sports as the content focus. Students will explore popular Latino pastimes such as soccer, baseball and basketball, as well as learn about important Hispanic athletes in the history of sports. The course also serves as an investigation into the importance of athletics in the Spanish-speaking culture and the impact of the Hispanic athlete on the international world of sports.

T438

HONORS FRENCH IV A

Credits: 2

Grade 11

60 days

Prerequisite: Teacher and/or C & I Leader recommendation

This is an online course and is only available to students who are currently enrolled in the online French III program. In this course, the student will learn listening, speaking, reading and writing skills through online activities. Throughout the 5 units of material, students learn to express themselves using an ever increasing vocabulary, present, past, future, and conditional tense verbs, articles, adjectives and complex grammatical structures. Culture is sprinkled throughout the course in an attempt to help the learner focus on the French-speaking world and their culture, people, geographical locations and histories.

T439

HONORS FRENCH IV B

Credits: 2

Grade 11

60 days

Prerequisite: Teacher and/or C & I Leader recommendation

This course is a continuation of the Honors French IV A course. This is an online course and is only available to students who are currently enrolled in the online French III program. In this course, the student will learn listening, speaking, reading and writing skills through online activities. Throughout the 5 units of material, students learn to express themselves using an ever increasing vocabulary, present, past, future, and conditional tense verbs, articles, adjectives and complex grammatical structures. Culture is sprinkled throughout the course in an attempt to help the learner focus on the French-speaking world and their culture, people, geographical locations and histories.

T473/T474/T475 AP FRENCH LANGUAGE A, B, & C

Credits: 2 each trimester

Grade: 12

180 days

Prerequisite: Honors French IV B; Teacher and/or C & I Leader recommendation

This is an online course and is only available to students who are currently enrolled in the online French IV program. The AP French Language students apply their French grammar and vocabulary knowledge as well as their listening, reading, speaking, and writing skills to a wide variety of real-world contexts. Students learn to speak fluently and accurately, write sophisticated compositions, and comprehend native speakers. The equivalent of a college-level course, AP French Language prepares students for the AP exam. Students enrolled in this course are required to take the AP exam. Cost is approximately \$80.00. *A non-refundable \$25.00 deposit must be given by the fourth week of class.*

MATHEMATICS

Grade 9

Algebra I
Honors Algebra II
Algebra II (year long)
Fundamentals of Algebra/Geometry I
Honors Geometry
Geometry (can be taken w/year long Alg. II)

Grade 11

Algebra II
Honors Pre-Calculus
Pre-Calculus
AP Calculus
Honors Calculus
Calculus
AP Statistics
Honors Statistics
Statistics
Intro to College Math
Applied Math
SAT Prep

Grade 10

Honors Algebra II
Algebra II
Fundamentals of Algebra/Geometry II
Honors Geometry
Geometry
Honors Pre-Calculus
Pre-Calculus

Grade 12

Honors Pre- Calculus
Pre-Calculus
AP Calculus
Honors Calculus
Calculus
Honors Calculus II
Honors Discrete Math
AP Statistics
Honors Statistics
Statistics
Intro to College Math
Applied Math
SAT Prep

MATHEMATICS DEPARTMENT MISSION STATEMENT

The ultimate goal of the mathematics department is to develop the mathematical skills necessary for each student to extend his/her experiences in mathematics to applications in other areas of life. In order to reach this goal, we strive to make each student mathematically literate and to develop the ability to think logically. Opportunities for discovery and creativity will be provided at each student's level of ability, thus increasing favorable attitudes toward mathematics. Career information using mathematical knowledge as well as the understanding of the importance of mathematics in their futures will be made available to the students.

NOTES:

1. It is recommended for testing purposes (MCAS, PSAT, etc.) that students complete Algebra I, Geometry, and Algebra II by the end of sophomore year.
2. It is recommended for testing purposes (MCAS, PSAT, etc.) that students complete Fundamentals of Algebra/Geometry I, and II by the end of sophomore year.
3. Pre-Calculus must be completed by the end of the junior year if the student plans to take any Calculus or Statistics offering.

Grade 9	Grade 10	Grade 11	Grade 12
Fundamentals I	Fundamentals II	Algebra I Algebra II Geometry Intro to College Math	Algebra I Algebra II Applied Mathematics Geometry Intro to College Math
Algebra I	Algebra II & Geometry <i>must take both</i>	Intro to College Math Pre-calculus SAT prep	Calculus Pre-calculus SAT Prep Statistics
Algebra II (yearlong) Geometry <i>can take both</i>	Geometry Pre-calculus Honors Pre-calculus Intro to College Math	Calculus Honors Calculus Pre-calculus SAT prep Statistics Honors Stats/AP Stats	Calculus Honors Calculus Pre-calculus SAT prep Statistics Honors Stats/AP Stats
Honors Algebra II* Honors Geometry*	Honors Pre-calculus	AP Calculus Statistics Honors Statistics/AP Stats	Honors Calculus II AP Calculus Statistics Honors Statistics/AP Stats

* *must take both*

T201/T202/T203 ALGEBRA I A, B, & C

Credits: 2 each trimester

Grade: 9

180 days

Prerequisite: Current math teacher recommendation

This course presents solving equations and inequalities in one and two variables with applications in word problems. Students will also study polynomials, functions, graphs, factoring, introduction to probability and statistics, and right triangle Trigonometry. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T205/T206 HONORS ALGEBRA II A & B

Credits: 2 each trimester

Grades: 9-10

120 days

Prerequisite: 9th: 80 or above in 8th grade math; teacher and/or C & I Leader recommendation

10th: 80 or above in Algebra I; teacher and/or C & I Leader recommendation

This course will study all of the traditional topics of Algebra II at a faster pace and will also include a continuation of topics from probability. In each unit the most difficult problems in the exercises will be completed. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T208/T209/T210 ALGEBRA II A, B, & C

Credits: 2 each trimester

Grade: 9

180 days

Prerequisite: Grade of 80 or higher in 8th grade math and current math teacher recommendation.

This course offers a review and extension of Algebra I. The real number system is extended to the complex number system and topics such as quadratic functions, polynomial functions, and probability are studied. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T212/T213 ALGEBRA II A & B**Credits: 2 each trimester****Grades: 10-11****120 days***Prerequisite: Successful completion of Algebra I.*

This course offers a review and extension of Algebra I. The real number system is extended to the complex number system and topics such as quadratic functions, polynomial functions, and probability are studied. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T216/T217/T218 FUNDAMENTALS OF ALGEBRA/GEOMETRY I A, B, & C**Credits: 2 each trimester****Grade: 9****180 days***Prerequisite: Current math teacher recommendation*

This course begins with an in depth review of basic skills such as fractions, decimals, percents, LCM, GCF, order of operations, and estimation. Topics include introductory statistics, perimeter and area, the use of variables in simple algebraic expressions, the solving the graphing of linear equations, and solving and graphing of inequalities in one and two variables. *Students must supply their own scientific calculator.*

T220/T221/T222 FUNDAMENTALS OF ALGEBRA/GEOMETRY II A, B, & C**Credits: 2 each trimester****Grade: 10****180 days***Prerequisite: Successful completion of Fundamentals of Algebra/Geometry I*

The basic skills covered from Fundamentals of Algebra/Geometry I are reviewed. Topics include, but are not limited to the following: linear equations, linear inequalities, complex expressions, solving systems of linear equations, the application to real-life situations, topics in geometry and introductory probability. *Students must supply their own scientific calculator.*

T223/T224 HONORS GEOMETRY A & B**Credits: 2 each trimester****Grades: 9-10****120 days***Prerequisite: 9th: 80 or above in 8th grade math and teacher and/or C & I Leader recommendation**10th: 80 or above in Algebra I; teacher and/or C & I Leader recommendation**10th: 80 or higher in yearlong Algebra II; teacher and/or C + I recommendation*

This course presents all of the concepts of Euclidean Geometry as well as the use of the coordinate system in studying geometric concepts and real world applications. The *Geometer's Sketchpad* will be used. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T226/T227 GEOMETRY A & B**Credits: 2 each trimester****Grades: 9-10****120 days***Prerequisite: Successful completion of Algebra I (can be taken with Algebra II)*

This course presents Euclidean Geometry using deductive reasoning. Topics include congruence, similarity, right-triangle trigonometry Pythagorean Theorem, circles, areas, and volumes. The *Geometer's Sketchpad* will be used. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T229/T230/T231 HONORS PRE-CALCULUS A, B, & C**Credits: 2 each trimester****Grades: 10-12****180 days***Prerequisite: 80 or above in BOTH Honors Algebra II and Honors Geometry and teacher and/or C & I Leader recommendation*

This course expands upon linear, quadratic, and general polynomial functions, circular and triangle trigonometry with related topics, conic sections, sequences, series, exponential and logarithmic functions. As the preparatory course for AP Calculus introductory topics such as limits, matrix algebra, vector analysis will be included as well as an in-depth study of probability and statistics. *Students must supply their own TI-83 plus or TI-84 plus graphing calculator.*

T233/T234/T236 PRE-CALCULUS A, B, & C**Credits: 2 each trimester** **Grades: 10-12** **180 days**

Prerequisite: Either grade of 75 or higher in BOTH Algebra II and Geometry with teacher recommendation; or grade of 80 or higher in Intro to College Math with teacher recommendation; or permission of C & I Leader

This course will expand upon linear, quadratic, and general polynomial functions, circular and triangle trigonometry, sequences, series, exponential and logarithmic functions, conic sections, probability, and statistics. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T238/T239/T240 ADVANCED PLACEMENT CALCULUS A, B, & C**Credits: 2 each trimester** **Grades: 11-12** **180 days**

Prerequisite: Teacher and/or C & I Leader recommendation

This course offers a detailed investigation of limits; methods of differentiation and integration. Functions such as polynomial, circular, logarithmic, and exponential, area under curves; and related rate problems are studied. A good deal of time is spent on applications. Extensive preparation is given for the College Board Calculus AB exam which is administered in May. Students are required to take the A.P. exam. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T241/T242 HONORS CALCULUS A & B**Credits: 2 each trimester** **Grades: 11-12** **120 days**

Prerequisite: 80 or higher in Honors Pre Calculus; teacher and/or C & I Leader recommendation

This course is offered to students who have demonstrated exceptional ability in mathematics. It offers an extensive investigation of the derivatives and integrals elementary functions, including polynomial, circular, logarithmic, and exponential functions. A good deal of time is spent on applications of these concepts. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T244/T245 CALCULUS A & B**Credits: 2 each trimester** **Grades: 11- 12** **120 days**

Prerequisite: Either grade of 75 or higher in Pre-Calculus and current math teacher recommendation; or permission of C & I Leader.

This course is intended for the student who does not meet the prerequisites for the Advanced Placement Calculus course but who wants an introduction to Calculus. Topics include the derivative and integral of elementary functions such as polynomial, circular, logarithmic, and exponential; limits; area under curves. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T247 HONORS CALCULUS II**Credits: 2** **Grade: 12** **60 days**

Prerequisite: 80 or higher in Advanced Placement Calculus or Honors Calculus; teacher and/or C & I Leader recommendation

Topics include a brief review of derivatives and antiderivatives; integration by parts and partial fractions; improper integrals; polynomial approximations; and series. *Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.*

T249 HONORS DISCRETE MATHEMATICS**Credits: 2****Grade: 12****60 days**

Prerequisite: 80 or higher in Advanced Placement Calculus or Honors Calculus; teacher and/or C & I Leader recommendation

Topics include logic and proof; truth tables; methods of proof-direct, contradiction, contra positive, and counter-example; mathematical induction; combinatorics and probability; set theory; modular arithmetic; functions; and recurrence relations. Problem solving will be integral part of the course.

T251/T252 HONORS STATISTICS A & B**Credits: 2 each trimester****Grades: 11-12****120 days**

Prerequisite: Either successful completion of Honors Pre-Calculus; teacher and/or C & I Leader recommendation

This course will begin with an overview of introductory probability topics. Topics include average and variation, the organization of data, normal distribution, estimation, regression and hypothesis testing as well as other advanced topics. ***Students must supply their own TI-83 plus or TI-84 plus graphing calculator.***

T254/T255 STATISTICS A & B**Credits: 2 each trimester****Grades: 11-12****120 days**

Prerequisite: Either successful completion of Pre-Calculus and current math teacher recommendation; or permission of C & I Leader

This course begins with an overview of introductory probability topics. Topics include average, the organization of data, normal distribution, estimation, regression and hypothesis testing. ***Students must supply their own TI-83 plus or TI-84 plus graphing calculator.***

T257/T258 INTRODUCTION TO COLLEGE MATH A & B**Credits: 2 each trimester****Grades: 11&12****120 days**

Prerequisite: Either successful completion of Algebra II and Geometry with current math teacher recommendation; or permission of C & I Leader.

This course is designed for the junior or senior who does not meet the prerequisite for Pre-Calculus. Topics include a review of algebra and geometry concepts, circular and right triangle trigonometry, sequences and series, introductory probability, and set theory. ***Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.***

T260 APPLIED MATHEMATICS**Credits: 2****Grades: 11-12****60 days**

Prerequisite: Either successful completion of Fundamentals of Algebra/Geometry II and current math teacher recommendation; or permission of C & I Leader.

The student will use previous math topics to solve real life applications. Topics include applications in income, credit and loans, taxes, housing, automobiles, insurance, investments, banking, shopping, and statistics. Students will become familiar with how math is used in different careers. ***Students must supply their own calculator.***

T262 SAT PREPARATION MATHEMATICS**Credits: 2****Grades: 11-12****60 days**

Prerequisite: Either successful completion of Algebra II and Geometry and current math teacher recommendation; or Fundamentals of Algebra & Geometry II and teacher recommendation; or permission of C & I Leader

This course is designed for the junior or senior who plans to take the College Board Scholastic Aptitude Test. This course covers both mathematics and English topics. Topic review and test taking strategies will complete the trimester course. ***Students must supply their own TI-83 Plus graphing calculator.***

T263/T264/T265 ADVANCED PLACEMENT STATISTICS A, B, & C

Credits: 2 each trimester

Grades: 11-12

180 days

Prerequisite: Teacher and/or C & I Leader recommendation

This course offers a detailed investigation of concepts and tools for collecting, analyzing, and drawing conclusions from data. Four themes will be covered: exploring data, sampling and experimentation, anticipating patterns and statistical inference. A good deal of time is spent on applications. Extensive preparation is given for the College Board Statistics exam which is administered in May. Students are required to take the A.P. exam. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class. ***Students must supply their own TI-83 Plus or TI-84 Plus graphing calculator.***

SCIENCE

Grade 9

Honors Intro Physics/Technology
Intro Physics/Technology

Grade 10

AP Biology
Honors Biology
Biology
Honors Chemistry
Chemistry

Grade 11

AP Biology
AP Chemistry
AP Environmental Science
Honors Chemistry
Chemistry
Honors Physics
Physics
Honors Anatomy & Physiology
Forensic Science I
Forensic Science II
Horticulture
Landscape Design
Environmental Science
Aquatic Ecology

Grade 12

AP Biology
AP Chemistry
AP Environmental Science
Honors Chemistry
Chemistry
Honors Physics
Physics
Honors Anatomy & Physiology
Honors Anatomy & Physiology II
Forensic Science I
Forensic Science II
Horticulture
Landscape Design
Environmental Science
Aquatic Ecology

SCIENCE DEPARTMENT MISSION STATEMENT

All students who graduate from the Uxbridge High School need to be scientifically literate in order to make informed decisions. It is our goal to present students with a solid foundation of the major scientific principles that have impacted the development of all medical and technological advances to date. We strive to teach our students to use the scientific methods of data collection, interpretation and analysis of data which are all essential for scientific literacy. With a solid background of scientific concepts and with the ability to use technology to seek answers, our students will be prepared for the challenges of the future.

T301/T302/T303 HONORS INTRODUCTORY PHYSICS/TECHNOLOGY A, B, & C

Credits: 2 each trimester

Grade: 9

180 days

Prerequisite: 80 or above in 8th grade science and math; teacher and/or C & I Leader recommendation

This course presents concepts contained in the Massachusetts Science Frameworks for Introductory Physics and Technology. The course seeks to prepare students for the MCAS test and is intended to develop problem solving, critical thinking, and knowledge of technology systems and the nature of scientific inquiry. Project-based activities will provide students with relevant hands-on reinforcement of technology/engineering and science concepts. Homework may consist of readings from the two texts, worksheets, research assignments and an electronic journal. The Honors program lends itself to a deeper emphasis on problem solving, more rigorous mathematical computations, as well as, more in depth writing.

T323/T324/T325 AP CHEMISTRY A, B, & C**Credits: 2 each trimester****Grades: 11-12****180 days***Prerequisite: Honors Biology, Algebra I and II or Teacher and/or C & I Leader recommendation*

The AP Chemistry course is designed for the college bound student who is considering a major in science, chemistry or pre-medicine. The course is the equivalent of the general chemistry course usually taken during the first year of college. For some students, this course will enable them to take second-year work in chemistry at their college or to register for courses in fields where general college chemistry is a prerequisite. Topics such as the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, acid/base reactions, redox reactions and the basic concepts of thermodynamics will be presented in significant depth. A calculator is necessary for the mathematical basis of the course. Students are required to take the A.P. exam. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class.

T326/T327 HONORS CHEMISTRY A & B**Credits: 2 each trimester****Grades: 10-12****120 days***Prerequisite: 80 or better in Honors Biology, Algebra I and II; teacher and/or C & I Leader recommendation*

This course is designed for college bound science majors and honors students who have demonstrated exceptional ability in the sciences. Emphasis is placed on theoretical and mathematical aspects of Chemistry in the areas of: atomic structure, nomenclature, periodicity, bonding, types of reactions, stoichiometry, and gas laws. Students are expected to demonstrate ability to perform basic lab tasks and write properly formatted lab reports. A calculator is necessary for the mathematical basis of the course.

T329/T330 CHEMISTRY A & B**Credits: 2 each trimester****Grades: 10-12****120 days***Prerequisite: Grade of 75 or better in Algebra I and II or Instructor/ Curriculum & Instruction Leader permission.*

The course is designed to provide college bound students with a solid foundation in the fundamentals of chemistry. The course emphasizes the use of the laboratory and classroom activities to see many important concepts of chemistry. Practical application to connect chemistry into everyday life is also emphasized. Although the mathematical applications of these principles are limited, a calculator is required.

T335/T336 HONORS PHYSICS A & B**Credits: 2 each trimester****Grades: 11-12****120 days***Prerequisite: 80 or above in Algebra II, Geometry, Functions & Trigonometry or Pre-Calculus; teacher and/or C & I Leader recommendation*

This course is designed to provide the student with an understanding of physics as a description of the laws which govern the physical world. The topics include kinematics, the study of motion; dynamics, the study of forces; energy, power, momentum, heat, light, sound, and electricity and magnetism. A heavy emphasis is placed on using applied trigonometry, geometry and algebra in problem solving and laboratory experiments. A final project is required.

T338/T339 PHYSICS A & B**Credits: 2 each trimester****Grades: 11-12****120 days***Prerequisite: Grade of 75 or better in Biology, Chemistry and Functions & Trigonometry or Pre-Calculus or Instructor/ Curriculum & Instruction Leader permission.*

This course is designed to provide the student with an understanding of physics as a description of the laws which govern the physical world. The topics include: kinematics, the study of motion; dynamics, the study of forces; energy, power, momentum, heat, light, sound, and electricity and magnetism. This course has a lighter mathematics emphasis than in the honors physics course.

T341/T342 HONORS ANATOMY AND PHYSIOLOGY A & B**Credits: 2 each trimester****Grades: 11-12****120 days***Prerequisite: 80 or above in Biology; teacher and/or C & I Leader recommendation*

This course will review biological/chemical concepts as they relate to human anatomy. It will move from this review to developing the major systems in the human body including biochemistry, anatomical orientation, cells, tissue types, integument, skeletal system and muscular system. A scientific paper based on a laboratory investigation is required. Lab activities explore physiological processes and anatomy of several organ systems. This class is designed for students considering a college life science major or one of the health fields.

T344/T345 HONORS ANATOMY AND PHYSIOLOGY II A & B**Credits: 2 each trimester****Grade: 12****120 days***Prerequisite: 80 or above in Biology; teacher and/or C & I Leader recommendation*

This course is a continuation of Anatomy and Physiology I. It is intended for students seriously pursuing a career in medicine, physical therapy or a health related field. The course will continue the study of human systems including: nervous system, circulatory system, digestive system, reproductive system, respiratory system, and urinary system. A PowerPoint Presentation on a topic in physiology is required. Lab activities explore physiological processes and anatomy of several organ systems.

T347 FORENSICS I**Credits: 2****Grades: 11-12****60 days***Prerequisite: Passing grade in Biology and Instructor/ Curriculum & Instruction Leader permission.*

Forensic I is a multidisciplinary course: it is an applied science that encompasses the sciences, technology, mathematics, social studies, and language arts. In recent years, it has become so popular that the public and criminal justice system have been transformed. This course will cover concepts in forensic science, and engage students in thought-provoking cases and scenarios that require them to apply what they have learned and will experience first hand, how forensic science works through collection of data, and critical thinking. The topics covered in the Intro class will include: history, crime scene investigation collection and preservation of evidence. Analysis of: hair, blood, paint and fiber. Fingerprint and tool marks.

T349 FORENSICS II**Credits: 2****Grades: 11-12****60 days***Prerequisite: 75 or better in Forensics I or Instructor/ Curriculum & Instruction Leader permission.*

Students who have taken Intro to Forensic have the opportunity to further their inquiries in this field while discussing the topics on Entomology, Anthropology, Tire impressions, Forensic Psychology, Odontology, Serology, Documentation, Glass & more.

T351 HORTICULTURE**Credits: 2****Grades: 11-12****60 days***Prerequisite: Passing grade in Biology.*

This course is designed for students looking for an alternative to Physics and Chemistry. The course will apply the principles of biology into a practical course for those interested in working in landscaping, greenhouse management or other related horticultural fields. This course is also helpful for those who would like to learn about gardening and home landscaping. The course will cover such topics as plant propagation, plant care management, soil science, entomology, and diseases of trees, shrubs and turf. The course will include hands-on work growing annuals and perennials, pruning trees and shrubs, soil conditioning, and plant propagation. Students are required to participate in outdoor activities and dress appropriately for the weather. This course will provide opportunity for community service.

T353 LANDSCAPE DESIGN**Credits: 2****Grades: 11-12****60 days***Prerequisite: Passing grade in Biology.*

Do you want to be the envy of everyone on the block? This course will teach you about the principles of art design and how they are applied to landscape design. Students will learn about deciduous and evergreen trees and shrubs, perennials, annuals and bulbs, and how they are used in the landscape for both practical purposes and for beauty. Students will learn how to do scaled drawings and will plan their own landscape design.

T355 ENVIRONMENTAL SCIENCE**Credits: 2****Grades: 11-12****60 days***Prerequisite: Passing grade in Biology*

This course deals with the interaction between living organisms and each other, as well as with their physical environment. We also explore the practical application of these concepts: conservation and management of natural resources, endangered species conservation, human impact on the environment and land use planning. Students are expected to demonstrate a grasp the following major concepts: biomes, habitats, communities, population growth and regulation, ecosystem attributes (production, food webs, succession), and biogeochemical cycles. Laboratory and field investigations develop skills in applying the scientific method, and include community service projects to measure the water chemistry of the Blackstone and Mumford Rivers and forest bird populations of the Blackstone River floodplain.

T360/T361/T362 ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**Credits: 2 each trimester****Grades: 11-12****180 days***Prerequisite: Teacher and/or C & I Leader recommendation*

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet, there are several major unifying themes that cut across the many topics included in the study of environmental science. These include the facts that Science is a process, Science is a method of learning more about the world, energy conversions underlie all ecological processes, the Earth itself is one interconnected system, humans alter natural systems, and human survival depends on developing practices that will achieve sustainable systems. Students are required to take the A.P. exam. Cost is approximately \$80.00. A **non-refundable** \$25.00 deposit must be given by the fourth week of class.

T357 AQUATIC ECOLOGY**Credits: 2****Grades: 11-12****60 days***Prerequisite: Passing grade in Biology or Instructor/Curriculum & Instruction Leader permission.*

This course will investigate in detail freshwater aquatic ecosystems. This is a hands-on course that allows you to learn in depth about ecology of rivers and lakes. The course will include the study of watersheds, water chemistry, factors affecting temperature and flow. We will survey the diversity of organisms in freshwater ecosystems, such as the Mumford and Blackstone Rivers. We will study how energy and materials flow through the ecosystem. It includes the biology of freshwater organisms and their adaptations. Activities include: microscopy, water testing, collection of benthic organisms, population studies, dissection of crayfish and fish. We also discuss topics such as pollution and development and the affect it has on aquatic systems. This course will provide opportunity for community service.

SOCIAL STUDIES

	Grade 9	Grade 10	Grade 11	Grade 12
A.P.			AP U.S. History (Full Year)	AP U.S. History (Full Year) AP U.S. Government and Politics (Full Year)
Honors	Honors U.S. History I	Honors U.S. History II Honors World History II	Honors U.S. History III Honors Psychology Honors World History II	Honors U.S. Government Honors Psychology Honors World History II
College Prep.	U.S. History I World Geography	U.S. History II World Geography World War II A World War II B Current Events A Little Bit of Rock and Roll	U.S. History III Psychology Law World Geography World War II A World War II B Current Events A Little Bit of Rock and Roll	U.S. Government Law Psychology World Geography World War II A World War II B

*** Students who are taking AP U.S. History must take Honors World History II in Grade 10.**

SOCIAL STUDIES DEPARTMENT MISSION STATEMENT

“Social Studies educators teach students the content knowledge, intellectual skills and civic values necessary for fulfilling the duties of citizenship in a participatory democracy.”

National Council for the Social Studies

The UHS Social Studies Department is committed to providing students with the knowledge and skills needed to achieve academic and civic competence. At the high school level students learn to analyze the past, relate it to the present, and recognize implications for the future. The Social Studies Department stresses the importance of critical thinking by providing students with a variety of learning opportunities that involve writing, research, debate, and technology.

T131/T132 HONORS U.S. HISTORY I A&B

Credits: 2 each trimester

Grade: 9

120 days

Prerequisite: 80 or above in grade 8 World History I; *teacher and/or C & I Leader recommendation*

Exploration through Reconstruction. The content of this course is similar to U.S. History I however more reading and writing assignments are required.

T134/T135 **U.S. HISTORY I A&B**
Credits: 2 each trimester **Grade: 9** **120 days**

Prerequisite: None

Exploration through Reconstruction. Students examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students study the basic framework of American democracy and the basic concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War, and Reconstruction.

T137/T138 **HONORS U.S. HISTORY II A&B**
Credits: 2 each trimester **Grade: 10** **120 days**

Prerequisite: 80 or above in U.S. History I A&B; *teacher and/or C & I Leader recommendation*

Big Industry through WWII. This course covers the same content as U.S. History II but in greater depth. More reading and writing assignments are required.

T140/T141 **U.S. HISTORY II A&B**
Credits: 2 each trimester **Grade: 10** **120 days**

Prerequisite: None

Big Industry through WWII. Students analyze the causes and consequences of the Industrial Revolution and America's growing role in international relations. Students study the goals and accomplishments of the progressive movement and the New Deal. Students also learn about the various factors that led to America's entry into World War I and World War II, as well as the consequences of World War II for American life.

T143/T144 **HONORS WORLD HISTORY II A&B**
Credits: 2 each trimester **Grade 10** **120 days**

Prerequisite: 80 or above in Honors U.S. History I A&B; *teacher and/or C & I Leader recommendation*

Students study the rise of the nation state in Europe, the French Revolution, and the economic and political roots of the modern world. They study the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe, and Imperialism in Africa, Asia, and South America. They will explain the causes and consequences of the great military and economics events, including World War I, the Great Depression, World War II, the Cold War, and the Russian and Chinese Revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic, and religious conflict in many parts of the world. **Required for sophomores who plan to take AP U.S. History.**

T147/T148/T149 **AP U. S. HISTORY A B & C**
Credits: 2 each trimester **Grade: 11-12** **180 Days**

Prerequisite: *Teacher and/or C & I Leader recommendation*

The A.P. United States History course seeks to provide the student with a learning experience equivalent to that obtained in most college introductory U.S. History courses. The course begins with European exploration and settlement of the New World and ends with the United States since 1974. Students will learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. A good deal of emphasis is placed on research and writing skills and preparation for the Advanced Placement Exam, which is administered in May. Students are required to take the A.P. exam. Cost is approximately \$80.00. A non-refundable \$25.00 deposit must be given by the fourth week of class.

T150/T151 **HONORS U.S. HISTORY III A&B**
Credits: 2 each trimester **Grade: 11** **120 days**

Prerequisite: 80 or above in U.S. History II A&B; *teacher and/or C & I Leader recommendation*

Cold War to the Present. This course covers the same content as U.S. History III (137) but in greater depth and places greater requirements upon the student. The process of "doing" history will be emphasized.

T153/T154 U.S. HISTORY III A&B

Credits: 2 each trimester

Grade: 11

120 days

Prerequisite: None

Cold War to the Present. Students analyze the causes and consequences of the Cold War and the impact of the Korean and Vietnam conflicts on American society. They examine the politics and economics of the end of the Twentieth Century as well as social and cultural changes. Students are exposed to the role of the United States in the post-Cold War world.

T158 LAW

Credits: 2

Grade: 11-12

60 days

Prerequisite: None

This course covers the basic principles of Law and how they apply to each of use in our everyday life. The following areas will be addressed as time allows: courts and courtroom procedure, juvenile rights and responsibilities, employer and employee rights, contracts, credit cards, checking accounts, criminal law and motor vehicle law. There will be strong emphasis on the case-study method. Field trips and guest speakers will be scheduled.

T162 PSYCHOLOGY

Credits: 2

Grade: 11-12

60 days

Prerequisite: None

Psychology on the high school level is offered as an introductory course to a subject often studied in college. Some of the topics stressed are personality, learning, memory, mental health and mental illness. Students are introduced to the methods and terminology used by psychologists. Students will gain an understanding of the various psychological schools of thoughts and the controversies which surround them. The vitality of psychology as an ever developing study is stressed. Class involvement and classroom demonstrations are major components of this course. Students will gain a perspective of the development of psychology and knowledge of the great contributions of renowned psychologists and landmark experiments in psychology.

T163 HONORS PSYCHOLOGY

Credits: 2

Grade: 11-12

60 days

Prerequisite: 80 or higher in grade 10 or 11 Social Studies courses; teacher and/or C & I Leader recommendation

Honors Psychology is a course with content similar to the college level psychology course. The major difference between the two courses is in the amount of work required in and outside the classroom. Honors Psychology students will be responsible for research papers, primary source readings and oral presentations. Students enrolled in Honors Psychology must be able to work more independently in their pursuit of information. Topics to be covered include Personality Theory, Learning, Abnormal Psychology, Memory and Thought, and Developmental Psychology. Honors Psychology is suggested for motivated students interested in the area of study.

T165/T166/T167 AP U.S. GOVERNMENT & POLITICS A B & C
Credits: 2 each trimester Grade: 12 180 Days

Prerequisite: Teacher and/or C & I Leader recommendation

United States course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. While there is no single approach that an AP Government & Politics: United States course must follow, certain topics are generally covered in college courses: Constitutional underpinnings of United States Government, political beliefs and behaviors, political parties, interest groups, and mass media, institutions of National Government: The Congress, the Presidency, the Bureaucracy, and the Federal Courts, public policy, Civil Rights and Civil Liberties. Students are required to take the A.P. exam. Cost is approximately \$80.00. A non-refundable \$25.00 deposit must be given by the fourth week of class.

T168/T169 HONORS U.S. GOVERNMENT A&B
Credits: 2 each trimester Grade: 12 120 days

Prerequisite: 80 or above in U.S. History II A&B; teacher and/or C & I Leader recommendation

Honors Government is a one-semester course, which examines the political processes and institutions of the United States. Emphasis is placed upon understanding the basic values of American politics. The major themes of the course are Introduction to Government, The Constitution, Federalism, Civil Liberties, Civil Rights, Interest Groups and Public Policy and Comparative Government. The course is designed to give students a critical perspective on government and politics. Much emphasis is placed on analysis and interpretation of subject matter through writing. Honors Government is suggested for motivated students interested in this area of study.

T171/T172 U.S. GOVERNMENT A&B
Credits: 2 each trimester Grade: 12 120 days

Prerequisite: None

This course is a study of American government designed to develop in the student an understanding of the importance of the Declaration of Independence and the United States Constitution, by stressing individual freedoms, civil liberties, and the constitutional rights of all citizens. This course also endeavors to examine the philosophic foundations of government.

T180 WORLD GEOGRAPHY
Credits: 2 Grade: 10-12 60 days

Prerequisite: None

This course is a study of people, places and environment from a physical and cultural perspective. Through a variety of classroom activities, students will gain an appreciation and understanding of the interdependent world in which they live. Students will analyze and evaluate the connection between their local and global communities. The course will emphasize the practical and responsible application of geography to life situations.

T184 CURRENT EVENTS
Credits: 2 Grade: 10 -11 60 days

Prerequisite: None

The Current Events course is designed to acquaint students with a wide range of current worldwide and national issues. Important current events in the news will be traced to their historical roots. This course is designed to assist students in becoming more informed citizens and to give them the historical background of events necessary to better understand current situations. Students become familiar with important people, places and events in the news and are able to hold opinions based on facts and deeper understandings.

T185

WORLD WAR II A

Credits: 2

Grade: 10-12

60 days

Prerequisite: None

This course starts with the end of World War I and the signing of the Versailles Treaty and concludes with the Japanese attack on Pearl Harbor. Some of the topics include Peace and Rearmament after WWI, the European democracies, the Revisionist states, blitzkrieg in Poland, the fall of France, the American home-front and finally, Pearl Harbor. Students are strongly encouraged to take both A and B.

T186

WORLD WAR II B

Credits: 2

Grade: 10-12

60 days

Prerequisite: None

This course starts where Part A concluded. Here students will learn of the U.S. decision to go to war and will end with the consequences and aftermath of World War II. Some of the topics include the U.S. and its allies, the occupation of Europe, Japanese offensives, battles for North Africa, European resistance movements, the invasion of Normandy and the Holocaust. Students are strongly encouraged to take A before B.

T187

A LITTLE BIT OF ROCK AND ROLL

Credits: 2

Grade: 10-11

60 days

Prerequisite: None

Hop aboard and boogie on down, the “Magic Bus” is ready to take you away on a Magical Mystery Tour of A Little Bit of Rock and Roll. Hearing certain music can transport us back to a particular place and time. It is one identifier by which we see the blueprint of our lives. At the same time, music is a social guide. It is shaped by and helps to shape a society which produced it. This is especially true with Rock and Roll which is more attitude than genre. This course uses Rock and Roll to examine the political, social, economic, and cultural history of post-World War II America. In other words, any history of the last half of our century must devote significant consideration to Rock and roll, being one of the primary forces in our society as a whole. In this way, it is hoped that you will gain a fuller understanding of the society that has helped shape you and the music that you are drawn to.

TECHNOLOGY EDUCATION

Honors Introductory Physics/Technology	Grade 9
Introductory Physics/Technology	Grade 9
Introduction to Construction	Grades 9-12
Advanced Construction	Grades 9-12
Introduction to Wood Manufacturing Technology	Grades 9-12
Advanced Wood Manufacturing Technologies	Grades 10-12
Introduction to AutoCAD Inventor	Grades 9-12
Advanced AutoCAD Inventor	Grades 9-12
Introduction to Revit Architecture	Grades 9-12
Advanced Revit Architecture	Grades 9-12
Photography and Video Communications	Grades 9-12
Video and Studio Production	Grades 10-12
Robotics	Grades 10-12
Electrical Energy/Electronics	Grades 10-12
Pre-Engineering	Grades 9-12
Computer Applications	Grades 9-12

TECHNOLOGY EDUCATION DEPARTMENT MISSION STATEMENT

The Technology Education program allows students to study the technological aspects of our society in addition to providing opportunities for students to express themselves with respect to their abilities, interests, and talents. This allows the students to experience many technological skills and expand on their knowledge required for job entry. This program also provides for the study of Computer Technologies which will focus on software applications. The goals include developing an awareness of technology and being responsible in making assessments, understanding of technology, and its effect on individuals, society, the environment, and its relationship with many different disciplines. Students are required to use the Engineering Design Process, demonstrate an understanding of technological systems, as well as production and services. As students obtain technological literacy we encourage them to become responsible citizens and life long learners.

T301/T302/T303 HONORS INTRODUCTORY PHYSICS/TECHNOLOGY A, B, & C

Credits: 2 each trimester

Grade: 9

180 days

Prerequisite: 80 in eighth grade science and math; teacher and/or C & I Leader recommendation

This course presents concepts contained in the Massachusetts Science Frameworks for Introductory Physics and Technology. The course seeks to prepare students for the MCAS test and is intended to develop problem solving, critical thinking, and knowledge of technology systems and the nature of scientific inquiry. Project-based activities will provide students with relevant hands-on reinforcement of technology/engineering and science concepts. Homework may consist of readings from the two texts, worksheets, research assignments and an electronic journal. The Honors program lends itself to a deeper emphasis on problem solving, more rigorous mathematical computations, as well as, more in depth writing.

T618 VIDEO AND STUDIO PRODUCTION**Credits: 2****Grades: 10-12****60 days***Prerequisite: Passing grade in Communications Technology and Instructors permission*

Video Production is an extension of Communications Technology with a concentration in video broadcasting. Students' participation is required in providing video programs of school events and community affairs. These events will become the featured stories in the student produced news show. This show will be broadcast on the educational channel of Local Access Television. Topics that will be covered include: video camera skills, scripting and story boarding, non linear video editing, lighting, audio, electronic news gathering and studio broadcasting.

*** **Articulation agreement with Mt. Wachusett Community College is in progress.**

T620 ROBOTICS**Credits: 2****Grades: 10-12****60 days***Prerequisite: None*

The course is designed to be a hands-on course for a variety of students that have interests in Technology Engineering, and the application of physics, but may not have any experience with robotics. The course will be designed to meet diverse standards in both Physics and Technology, but will focus on engaging students in challenging and thoughtful hands-on activities related to robotics. Students will learn to build and program robots to perform a task or to face a challenge. The curriculum includes learning about parts, simple electronic systems, fluid systems, and transmission systems, systems and programming of robots; uses of robots in industry and effects on society; the science and machines; and mathematical concepts of machines. The course is designed for juniors and seniors, as an extension to Introductory Physics and Technology. The activities will promote design engineering and problem solving.

T622 ELECTRICAL ENERGY/ELECTRONICS**Credits: 2****Grades: 10-12****60 days***Prerequisite: 75 or better in Algebra I*

Electrical Energy is designed to teach students, with no prior electronics knowledge, the necessary electrical principles to understand electronics, both DC and AC, and the application of these principles in electronic circuits. The concepts are reinforced with numerous hands-on experiments. Topics covered include current, voltage, resistance, Ohm's Law, magnetism, electrical measurements, DC circuits, inductance and capacitance, use of multi-meter, AC theory, AC measurements, and use of oscilloscope. Electronics is a continuation of the Electrical Energy course with a more in-depth study of DC theory and applications of typical AC/DC circuits.

T624 PRE-ENGINEERING**Credits: 2****Grades: 9-12****60 days***Prerequisite: 70 or better in Algebra 1 or C&I Leader approval.*

This course is designed to introduce students to the Engineering and Design program with using the SolidWorks parametric modeling program. Students will learn to navigate become accustomed to the basic program commands of the basic operations. The students will also learn the process and steps involved with the engineering and design model. Along the way the students will be required to design and fabricate a given problem. Students will use the SolidWorks program to draw any parts and assemblies that will be needed in the fabrication process along the way. This program will prepare students for entrance to an engineering or design college program. They will also be allowed to begin to develop a college entrance design portfolio or add to an existing portfolio.

T626

COMPUTER APPLICATIONS

Credits: 2

Grades: 9-12

60 days

Prerequisite: None

Computer Applications I is an introductory course designed to provide the students with a basic understanding of computer hardware, software, file management, virus protection internet, network, and internet technology. In addition students will learn how to gather and present data in different formats through the use of word processing, spreadsheet, presentation and database software. Based on individual students keyboarding skills will determine whether the student will focus on proper keyboarding techniques or focus on increasing speed and accuracy.