

2014-2015

Course

Catalogue

LEXINGTON  
HIGH SCHOOL

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Lexington, Massachusetts

## Accreditation Statement

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

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

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



Lexington High School  
Course Catalogue  
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## Principal's Message

In February you will be able to discuss recommended courses with your teachers, and in early March you will choose your elective courses online using Aspen. The scheduling process extends through the spring and summer, and you will have online access to your tentative course schedule in August. During this time you will plan the courses you will take that move you toward fulfilling the Lexington High School graduation requirements. More importantly, though, you will have the opportunity to explore new interests, challenge yourself in possibly unexpected ways, and prepare yourself for a lifetime of learning. As you explore the wide range of course offerings described in the *LHS Course Catalogue*, we hope you will make selections that satisfy your curiosity, encourage your critical thinking, and open your mind to new ways of thinking about the world around you.

It is important to seek the advice of your teachers, your parents and your guidance counselors as you make these choices. Be mindful of your own interests and create a program for yourself that balances rigor and challenge with self-reflection and participation in the many opportunities we offer outside the classroom.

Lexington High School has an impressive history of providing a broad and deep educational program. Our course offerings, schoolwide expectations, educational goals and objectives, graduation requirements, as well as the policies and procedures that guide our daily campus life, are grounded in our Mission and Expectations Statement. Taking



the time to read this statement in the *Student/Parent Handbook* will provide a context for the choices you will be making.

This *LHS Course Catalogue* is the product of collaborative work by the faculty, the department heads and curriculum coordinators, and the extraordinary Jean Cole, who formats and edits virtually all of the publications produced by Lexington High School. My sincere thanks to you all.

*Laura J. Lasa*

Laura J. Lasa, *Principal*

January 22, 2014



This *LHS Course Catalogue* is being published under the assumption that the school will receive adequate funding from the town in order to support the program described herein. Changes, including reductions or additions, may result in response to a revenue shortfall, to newly identified needs, or to modifications that may be part of the annual planning process. We will do the best we can to publicize such changes in a timely manner.



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# Course Levels at Lexington High School

The following description is intended as a general guideline for students, parents, and college admissions officers. The individual course descriptions under each department heading can provide more explicit information regarding the nature of the courses and the types of programs available at Lexington High School.

**Grade Point Averages:** Lexington High School does not rank students. The grade point average is based on a four-point scale and includes all subjects in which a student has received a letter grade.

**All courses offered at Lexington High School are designed as college preparatory.**

Although our courses do have ability levels, the courses are not “tracked.” There is a misconception that it is impossible to move levels year-to-year. This is untrue as students do participate in a variety of levels during their high school education. The prerequisite course listed with each course description is the strongly recommended background necessary for student success at that level; however, teacher recommendations take priority over the prerequisite.

**Advanced Placement** courses are taught at the college level and follow an approved College Board curriculum. Teacher recommendations and/or departmental approval are required prior to enrollment.

**Honors** courses are taught at advanced levels and require well-developed scholarship and study skills for success. Teacher recommendations and/or departmental approval may be required prior to enrollment.

**College Preparatory – No Level** courses employ differentiated instruction to meet the needs of a heterogeneous group of students.

**College Preparatory – Level 1** courses are taught at a rigorous level and require sound scholarship and study skills for success.

**College Preparatory – Level 2** courses are designed to emphasize the development of the study skills necessary for both advanced academic work and continued progress in the discipline.



# English

## Academic Expectations

The English Department assumes “primary responsibility” for assisting students in achieving proficiency in Academic Expectations 1 (Writing), 2 (Reading) and 4 (Listening), and 9 (Aesthetic Principles). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations. The goals and objectives of the course offerings listed below reflect the overall goals of Lexington High School’s English program 9-12.

Summer reading: The summer reading list will be available in the Main Office and online <<http://lps.lexingtonma.org/domain/395>> after June 1.



All English courses include instruction in the parts of the sentence and paragraph, vocabulary, grammar and usage. Teachers use those terms to comment on students’ oral and written expression. Courses open to juniors and seniors emphasize instruction and practice in these skills and prepare students for the verbal SAT as well as the Advanced Placement Examination in English. All English courses have common final examinations. Most courses require summer reading and/or related projects.



## Grade 9 – Requirement

### 1100 – Literature and Composition I

**4 credits**

**Level: No Level**

The purpose of this course is to help students become more effective readers and writers. To this end, students study literature from a variety of genres. Major works include *Oedipus Rex*, *The Odyssey*, *Romeo and Juliet*, *In the Time of the Butterflies*, and a variety of short stories, essays and poems. While students have the opportunity to write for a variety of purposes, they focus their attention on the expository essay. Students learn to craft better arguments by generating their own thesis statements, gathering and organizing evidence, and revising earlier drafts of their work. To further the development of their reading and writing skills, students study grammar and vocabulary throughout the year. In addition, they complete a Reading Project during the winter in which they select their own series of outside readings and related activities.

Developed and taught in conjunction with the freshman world history course, this course also focuses on the development of study skills. Students learn strategies in both courses for organizing their notebooks, budgeting their time, and planning long-term projects. Students need to use all of these strategies, along with their reading and writing skills, in order to complete major writing tasks in the spring.





## Courses Open to Sophomores

### 1208 – Literature and Composition II

**4 credits**

**Level: Honors**

This accelerated course continues the skill development begun in Literature and Composition I for students who have excelled in expository writing, reading comprehension, grammar study and vocabulary acquisition. Challenging works from the four major genres provide springboards for frequent and varied writing assignments, primarily independent inquiry and exposition, vocabulary study and grammar instruction. Students may read from the following texts:

*Frankenstein, Things Fall Apart, Fahrenheit 451, Macbeth, Great Expectations, Persepolis, Slaughterhouse-Five*, and others. Students will also read essays and an extensive selection of poetry. Their writing will reflect an ability to select appropriate style and to analyze and express complex viewpoints. Students who elect this course assume the responsibility for making the study of English a priority in their academic commitments.

### 1206 – Literature and Composition II

**4 credits**

**Level: CP1**

This college preparatory course continues the skill development begun in Literature and Composition I. Works from the four major genres generate frequent and varied writing assignments, vocabulary study and grammar instruction. Students may read from a few of the following texts: *Frankenstein, Things Fall Apart, Fahrenheit 451, Macbeth, Great Expectations, Persepolis, Slaughterhouse-Five*, and others.

Students will also read essays and an extensive selection of poetry. Writing instruction focuses on developing unified, coherent and text-supported paragraphs in essays that respond to teacher-guided thesis statements. Creative writing assignments and essays are assigned to develop each individual writer's voice



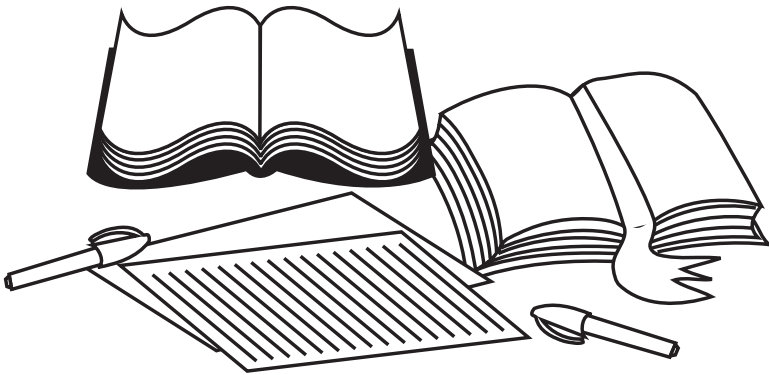
## 1204 – Literature and Composition II

(paired with Social Studies 2204)

**4 credits**

**Level: CP2**

Building on the foundation established in the Freshman Literature and Composition I course, this course takes a more skills-based perspective, helping students to galvanize their understanding of the structure of language in sentences, paragraphs and essays. The development of skills focuses on grammar instruction and MCAS preparation. While skill development plays a prominent role, analysis of literature, orally and in writing, are also important in the class. While students express themselves through formal essays, they also have the opportunity to write poetry, journal entries, and other creative pieces.





## Courses Open to Juniors

### 1308 – American Literature

**4 credits**

**Level: Honors**

In class discussions and compositions, students examine the breadth, diversity, and evolution of American literature within the unique context of the American experience and American values/traditions. This rigorous approach to the literature requires closely reading and re-reading texts to identify patterns, contradictions, and the relationship between motifs and larger themes/ideas. Students will also learn different methods of critically interpreting the texts and produce argumentative, explanatory/informative, and narrative pieces independently. Students will apply critical terminology such as tone, mood, theme, and irony and articulate the distinguishing features of each genre. Students are expected to be active, engaged, and regular participants in class discussion.

The honors year culminates in an extensive, independent final project.

Readings will feature some of the following authors: Nathaniel Hawthorne, Mark Twain, Edith Wharton, Zora Neale Hurston, Ernest Hemingway, F. Scott Fitzgerald, Arthur Miller, and Henry David Thoreau.

### 1306 – American Literature

**4 credits**

**Level: CP1**

Through close reading, students examine a rich array of American poems, novels, essays, short stories, and plays by a wide variety of writers. In both class discussions and compositions, students will critically analyze these works within the unique context of the American experience and American values/traditions. Students should expect significant nightly reading assignments and will produce argumentative, explanatory/informative, and narrative pieces. These assignments vary in length. Assessments will derive from students' reading, writing, and class discussion.



## 1304 – American Literature

4 credits

### Level: CP2

American Literature has a three-fold focus. Students will work together with the teacher to create a learning community that identifies, then reviews and reinforces skills that they have not yet mastered. Secondly, students will identify personal areas of strength and weakness and will work to achieve mastery in the identified areas. Extensive writing and conferencing will be a part of this process. Finally, students will be able to recognize and articulate the common themes and motifs present in American literature.

Works read will include many of these titles: Fitzgerald's *Great Gatsby*, Miller's *Death of a Salesman*, essays by Thoreau and Emerson, selected work from the Harlem Renaissance. Students will also read short stories and essays by contemporary writers.

### Note to Students interested in Advanced Placement Tests

Students may opt to take the Advanced Placement English test at different points in their high school careers. Traditionally, many students have taken the test at the end of their junior year. Students may also take the test in May of their senior year, after taking any of the senior electives.



## Courses Open to Seniors

These are year-long electives. In each course, you will be expected to read and write. Teachers and texts vary year to year. Be sure to pick the course that most entices you.

### 1420 – British Literature

**4 credits**

**Level: No Level**

For many students of English, the phrase “British Literature” conjures up images of dusty leather-bound volumes. This course will complicate that view of British literature by tracing its development from *Beowulf* to the present through close readings of poems, novels, short stories, plays, and essays by a variety of writers such as Chaucer, Swift, Dickens, Woolf, McEwan and Zadie Smith. Don’t let the accent fool you: British literature is not necessarily highbrow stuff.

### 1430 – The Short Story

**4 credits**

**Level: No Level**

This college preparatory course focuses on reading and interpreting over forty international short stories by a variety of well-known authors from around the world. In conjunction with writing on the regional, historical, and cultural backgrounds as well as influences of the countries, students will delve into creative and analytical assignments that are inspired by our “virtual tour.”

### 1450 – Memoir and Other Writing

**4 credits**

**Level: No Level**

In this course, students will draw inspiration from their own experiences as well as from writing prompts and mentor texts to create works in a variety of genres. Students will share their writing with class members on a regular basis, following a writing workshop model. Readings will include short pieces and excerpts by mostly contemporary writers.



## 1460 – Film and Literature

**4 credits**

**Level: No Level**

Film directors make conscious shooting and editing choices. Students learn about shooting and editing early in the course so they can use this knowledge of film technique as a means of analyzing what they see and hear. From Elia Kazan and Alfred Hitchcock films of the 1950s and 1960s to more contemporary films and film clips, students watch, discuss, and analyze how filmmakers convey meaning to viewers.

Note: This class is not NCAA approved. Student-athletes considering NCAA eligibility should not take this class for English credit. If a student would like to take this class for Art Credit, he/she may do so at the approval of both the Fine Arts department head and the English department head.

## 1470 – Shakespeare

**4 credits**

**Level: No Level**

This course will explore Shakespeare as a major voice of Renaissance England. Students will read six of his plays, exploring one or more examples of each genre—history, tragedy, and comedy. Film and audio will help students develop interpretative skills and build perspective. The emphasis will be on Shakespeare's legacy as it has shaped the universal themes, languages, archetypes, and critical perspectives of the western literary tradition.

## 1480 – Dystopias

**4 credits**

**Level: No Level**

What is an ideal world and how might its version of perfection be more troubling than the imperfect world that already exists? This course will look at works that examine the possibility of the future in order to comment on the present. Among works studied may be: *Vis for Vendetta*, *Brave New World*, *Storming the Reality Studio*, *Clockwork Orange*, stories of Kurt Vonnegut, and other works.



## 1490 – Literature of Our Time

**4 credits**

**Level: No Level**

This course will look at very recent fiction and poetry from around the world in the past the past 20 years from such writers as Jhumpa Lahiri, Michael Cunningham, Cormac McCarthy and others. Students will read both short and longer fiction and consider contemporary forces such as the changing natural world, cultural and social difference, and gender roles.

## 1510 – Philosophy, Religion and Literature

**4 credits**

**Level: No Level**

In this course students will explore several major aspects of human experience by examining them through the lens of philosophical, religious and literary texts. We will look at one topic per quarter. Topics addressed may be drawn from among the following: friendship, love, time, nature, identity, evil, memory, war, faith. Students will produce creative, personal and analytical writing in order to deepen and illustrate their understanding of the chosen topics. In this class we will read many shorter works, as opposed to a few longer ones, and the reading will range widely across times and cultures.

## 1520 – American Literature II

**4 credits**

**Level: No Level**

“If you want to make a human being into a monster, deny them, at the cultural level, any reflection of themselves. And growing up, I felt like a monster in some ways. I didn’t see myself reflected at all.” – *Junot Diaz*

We will see our lives and experiences reflected back in the literature we read and in turn affirm our common humanity across racial, gender, linguistic, and class differences. Authors studied may include but are not limited to Junot Diaz, Toni Morrison, Gish Jen, Chang-Rae Lee, Jhumpa Lahiri, Thi Diem Thuy Le, Edwidge Danticat, John Okada, and David Wong Louie.



## 2780 — Journalism

See Interdisciplinary Studies – page 43

Seniors only may take this class for English credit  
with direct permission of the Department Head.





# Fine & Performing Arts

## Academic Expectations

The Fine and Performing Arts Department assumes “primary responsibility” for assisting students in achieving proficiency in Academic Expectations 4 (Listening), 6 (Reason Logically) and 9 (Aesthetic Principles). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations. The goals and objectives of the course offerings listed below reflect the overall goals of Lexington High School’s Fine and Performing Arts program 9-12. In the case where a specific course might concentrate on an additional academic expectation, the number of the expectation addressed is listed below the course title.



## Fine Arts

**T**he visual arts curriculum at Lexington High School is a body of knowledge which is reflective of the National Standards for the Arts and The Massachusetts Curriculum Frameworks. Students are challenged to develop their skills in critical and creative thinking as well as in problem solving, authentic assessment and using the computer as a learning tool. Course offerings provide students with a sequential pattern of innovative and authentic learning experiences. Outcomes for each course will be based on the concepts of :

1. Production and Performance
2. Imaginative, Critical and Reflective Thinking
3. Understanding of Cultural and Historical Contexts
4. Authentic Assessment

Basic department expectations include consistent attendance at all classes, homework and completion of all assignments according to guidelines available from each instructor.



## 6100 – Foundations of Art

**2 credits – semester**

**Level: No Level**

An introductory course which is a prerequisite for all other visual arts courses. Students will be introduced to the elements, principles and vocabulary of design. Students will be introduced to a range of media and will explore image-making and personal interpretation through both observation and imagination. Students will develop appropriate studio habits and will be responsible for sketchbook assignments which complement classroom projects.

## 6410 – Computer Animation

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

**Open to students in grades 10, 11 and 12.** This course will introduce students to the creative world of digital animation using the computer as a tool. Through the use of cutting edge, industry standard software and other hands-on experiences, students will learn how to produce their own unique multimedia animation productions. Students will incorporate music and/or sound effects in their animations, and may include photographs, scanned images, video clips and text, as well as other sources of imagery. The fundamentals of animation, such as storyboarding, timing, exaggeration and staging will be emphasized. Students will publish movies to CD ROM as well as the Internet.

## 6111 – Drawing I

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

Through a series of projects that involve both observation and imagination, students will learn a variety of drawing techniques that involve essential coordination of the hand, eye and mind. Students will



become familiar with different drawing media, including pencil, conte crayon, oil pastels and pen and ink. Sketchbook assignments will complement studio projects.

## 6112 – Drawing II

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Drawing I*

An in-depth continuation of Drawing 1, this course will consist of more advanced projects that require personal interpretation and exploration. Students will experiment with a variety of familiar drawing media and their application to a deeper investigation of drawing principles, including contour, value, proportion, composition, focus, balance and intent. Students will be required to keep a sketchbook/visual journal.

## 6130 – Illustration

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art and/or Drawing I*

Illustration can be found in children's books, book covers, websites, magazines, album covers, clothing, skateboards, and comic books. Illustration is everywhere! In this class we will be learning many skills that are useful to create great illustrations. Graphic Design concepts and creative problem solving abilities will be presented in this class. We will explore different art materials and learn about accomplished historic and contemporary illustrators. Students will be shown how to create thumbnail sketches, pitch an idea, and make necessary adjustments in order to bring ideas into form. Drawing and story telling skills will be strengthened in this class.



## 6120 – Advanced Drawing

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Drawing II*

Students will draw from observation and imagination to further their artistic ability. Drawing challenges will include working from landscape, interiors, portraiture, still life, and solving various compositional conundrums. Class discussions will include historical and contemporary art ideas. A variety of techniques and materials will be explored and students will be asked to keep a sketchbook outside of class in order to explore personal drawing interests.

## 6141 – Painting I

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art and Drawing I*

An understanding of basic color theory will extend to an exploration of the emotional and persuasive application of color. Students will learn essential acrylic and watercolor painting techniques, including opacity, translucence, texture and surface manipulation, and will apply those principles in projects that involve both observation and imagination. Emphasis will be on composition, balance, focus, depth and form. Sketchbook assignments will complement studio work.

## 6142 – Painting II

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Painting I*

This course will build on the knowledge and skills developed in Painting I. Projects in figurative and abstract painting will lead the student to a deeper understanding of color, its application and effect. Through the exploration of traditional and contemporary viewpoints, each student will be encouraged to develop a personal vision. Sketchbook assignments will support class work.



## 6211 – Ceramics

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

Students will explore the potential of clay by being introduced to the basic techniques of handbuilding and glazing. Assignments are centered around a theme with choices to reflect the various interests of each student. A basic introduction to the pottery wheel will be included.

## 6212 – Advanced Ceramics

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Ceramics*

Students will continue their personal exploration of clay by learning more experienced techniques of handbuilding, wheelworking and glazing. Sculpture and vessel-making will focus on form, surface design and color relationships. Students will discuss and view contemporary and historical ceramic artwork. Students may repeat this course for credit with permission of the instructor.

## 6251 – Photography

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

**Open to students in grades 11 or 12 or permission of the instructor.** Students will be introduced to the basic techniques of the camera and image printing in the darkroom. The course is focused on black and white traditional photography. Students will need a 35mm manual film camera as basic equipment for the course. Students need to also plan on purchasing film and photographic paper as needed throughout the semester (approximately \$65 total).



## 6252 – Advanced Photography

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Photography I*

**Open to students in grades 11 or 12.** A more advanced course in the study of black and white photography. Students will be introduced to exciting techniques such as infrared, hand coloring, toning and night photography. Students may repeat this course for credit with permission of the instructor.

## 6260 – Documentary Photography

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Photography I*

**Open to students in grades 11 and 12.** This course is a continuation of black and white photography techniques in which the students will construct a portfolio of work through direct observation of life. Students will pursue the social relevance of families; events; cultural similarities and differences; and observations of our community. Students will study the work of pioneer photographers and discover how to create their own decisive moments.

## 6270 – Digital Imaging

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

This course introduces students to the basic principles and applications of digital photography as a medium, a skill-set, and an integral part of today's digital literacy needs. Topics covered include capturing images using digital cameras, importing pictures and manipulating them in Photoshop for maximum artistic effect. Composition, camera functions and integration of typography with pictures will also be covered.



Students are required to participate in class discussions, work collaboratively and spend time working on out-of-school projects. Students must meet the criteria given for each assignment and participate in the critique of their own work, as well as the work of others. Projects may include: a magazine cover, a print ad, documentary photography, photographic collage, etc.

Point and shoot digital cameras are required. Digital SLR cameras are recommended but not required.

### **6280 – Introduction to Portfolio (*Spring semester*)**

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art , Drawing 1 and one other art class*

Open to Juniors interested in majoring or minoring in Art (in college), as well as those who want to submit a portfolio as a supplement to liberal arts college application(s). Students will learn what different schools require in portfolio submissions, review their “portfolio worthy” work to date, and engage in class projects designed to supplement their portfolios. Presentations by visiting colleges will highlight the offerings and admission requirements of their programs. The instructor will also offer recommendations for pre-college summer art programs for those interested in applying to Art Colleges.

### **6290 – Senior Portfolio for Art Majors (*Fall semester*)**

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art, Drawing 1, Portfolio Intro or a pre-college summer program, two (2) letters of Recommendation from LHS Art Faculty.*

Open to first semester Seniors who are applying to Art Colleges. Most Art Schools require portfolios of 15-20 samples of your best work; some also have specific “entry assignments.” In this class the instructor will work closely with each student (and other department



faculty) to ensure that s/he compiles a portfolio of strong work with emphasis on their particular field of interest. Presentations by visiting colleges will highlight the offerings and admission requirements of their programs. Students in Senior Portfolio will be required to exhibit a selection of their work in the LHS Senior Art Show.

## 6181 – The Art of Book Design

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

**Open to students in grades 10, 11 or 12.** In this course, students will explore a variety of materials, tools and construction and binding techniques, including basic codes, Japanese stab bindings, star binding, fold books and combination books. In this studio workshop, students will be encouraged to incorporate found materials, acquired techniques and especially their imagination in the design of personal journals and other book forms in the creative expression and communication of both verbal and visual ideas.

## 6182 – Advanced Book Design

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*The Art of Book Design*

This course is for serious book design students who want an opportunity to explore nontraditional and combined book structures as well as the ways that books can be used as a means of personal expression. Projects will include altered books; print making and paper design for books; the definition of a page and how it can speak to other pages; and the discussion and exploration of how books can be visual vehicles for the messages they carry. Students will be encouraged to incorporate found and nontraditional materials in their book construction and to create original book forms in which form complements content.





## 6230 – Sculpture

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

Sculpture is an introductory course dealing with form and space. Conceptually, it will build on the Foundations of Art course, concentrating on 3-D design principles. Students will be introduced to a variety of materials. Students self-expression will be encouraged through exploration of traditional and non-traditional approaches to sculpture.

Students will explore the conceptual and technical fundamentals of form study: scale, volume, mass, and space. This hands-on studio course focuses on sculptural object making, using a variety of media to plan, prototype, and produce projects. In addition to this practical knowledge, students gain an understanding of conceptual and expressive practices.

## 6430 – Web Design

See Interdisciplinary Studies – page 43

## 6311 – Digital Video Production I

**2 credits – semester**

**Level: No Level**

**Open to students in grades 10, 11 and 12.** This is a hands-on course where students learn to use digital video equipment and create video segments or mini-documentaries edited on computers. Throughout the course, student will examine the impact of news and entertainment television as well as online videos and podcasting.

A critical analysis of television will be used to discuss bias and point of view used in production techniques. Students will learn how to create storyboards, write scripts, edit on iMovie, use camera techniques effectively and will understand the steps involved television production. Homework for this course should take an average of two-three hours per week. It will include video viewing and related readings. There will be two written tests on terminology.



## 6312 – Digital Video Production II

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Successful completion of An Introduction to Television Production and/or permission of the instructor*

Students will continue to develop and sharpen skills from Digital Video Production I. Students will learn and apply the basic structure of small studio lighting, write scripts, conduct interviews, research topics, use a camera effectively, refine their editing skills, produce and direct a show for television. Students will create two types of programming: Studio Production and video segments. In the Studio Production portion of the class, students will create a Magazine show to highlight the video segments. The magazine show will be televised on LEXMedia, Lexington's public access station.

## 6490 – Independent Study

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Permission of the instructor and Department Head*

Independent Study is interpreted as a course of study whereby a student can give evidence of completed original work and/or completion of the appropriate course in that particular arts discipline. The student should have specific ideas about what he/she wants to accomplish and be willing to establish specific critique time with the specific instructor. Independent study is not to be interpreted as "private lessons," i.e., applying for an independent study with little or no background or experience in that art form. Students are required to complete an independent study request sheet (provided by the sponsoring teacher) that requires teacher, guidance counselor and department head approval.



# Performing Arts: Drama



## 6510 – Art of the Theater

**2 credits – semester**

**Level: No Level**

This course is an introduction to drama and theater. All students will learn to work in imaginative situations truthfully. A variety of approaches to drama and theater are illuminated to students throughout the course. Exploratory improvisation, movement, text and scene work are used to examine the human condition in real and imagined scenarios. Some examples of work include subtext and character, theme, metaphor, form and content, the dynamics of status. This class may **not** be repeated for credit.

## 6520 – Improvisational Theater

**2 credits – semester**

**Level: No Level**

This course is an introduction to improvisation in its many forms. Students will begin with simple improvisation exercises that develop imaginary object use, free association and spontaneity skills, free form improvisation, movement improvisation and structured improvisation. Ensemble work will be stressed as students are expected to invest in each other's success. Thematic work around performance genres, stereotyping character, metaphor and abstraction will be ongoing. This class may **not** be repeated for credit.



## 6530 – Public Speaking

**2 credits – semester**

**Level: No Level**

This is a course designed to give students practice in organizing and delivering informative, persuasive and demonstrative speeches. Students will work on skills such as: eye contact, posture, rate of speaking, and enunciation. Speeches will be delivered every two weeks and there will be several activities to enhance the lessons. In-class critiques offered by students supplement teacher evaluation. This class may not be repeated for credit.

## 6540 – Drama of Social Issues Performance Workshop

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*6510 or 6520. Students must receive permission from one of the drama instructors to enroll in 6540.*

This course will provide a format for students to explore the various social issues that affect our lives and the community/world we live in. Using exploratory and structured improvisation, students will create and perform two theater pieces each semester for the school community. Each performance will explore a different issue in episodic or linear form. Students will be asked to look at these issues from various points of view and interpret them for the stage.



## 6570 – Playwriting

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*One drama class (not Public Speaking) at LHS. Students should plan to take both semesters of this class (Playwriting and Directing) within the same academic year, but exceptions may be made on a case-by-case basis. Please be sure to include both course numbers (6570 and 6580) when registering for this class.*

**&**

## 6580 – Directing

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*One drama class (not Public Speaking) at LHS. Students should plan to take both semesters of this class (Playwriting and Directing) within the same academic year, but exceptions may be made on a case-by-case basis. Please be sure to include both course numbers (6570 and 6580) when registering for this class.*

May **not** be repeated for credit.

### **First Semester: 6570 Playwriting**

Students will engage in a variety of writing exercises to find their voices as writers and to develop their skills in playwriting. Examples of units to be covered include character development, language, dramatic action, plot structure and analysis of dramatic conventions used to create a successful script. We will read, discuss and view examples of playwrights' work. Playwrights to be studied may include Shakespeare, Sam Shephard, Beckett, August Wilson, David Auburn, and more. Students will be given plenty of class time to work on writing exercises. Class time will also be dedicated to critiques of the playwriting exercises. Students will be expected to write a ten-minute play by the end of the semester.

### **Second Semester: 6580 Directing**

In this course, students will examine the role of the director in modern day theater, from concept to production. Specific units may include the relationship of the director, the actors and the designers to the text,



and techniques for directing actors, designing groundplans, developing blocking and script analysis. Students may be introduced to Aristotle's dramatic values as well as the ideas of Stanislavski, Anne Bogart, Harold Clurman, Robert Wilson and more. Course activities include in-class exercises and performances, group presentations, a final project, and a production book. Some of the plays we may examine include Shakespeare's *The Tempest* and Lawrence Yep's *Dragonwings*.

## 6560 – Advanced Drama Workshop

**2 credits – semester**

**Level: No Level**

*Prerequisites:*

*6510 AND 6520 (The prerequisites may be waived for seniors with the permission of the instructor.)*

This course will explore advanced dramatic structures, characterizations, themes and styles. The work will be student generated through research, rehearsal and group cooperation. Students will be held to a high standard within these areas, including presentation and performance, and may have to work outside of the classroom. Projects may include Docudrama-type narratives such as Anna Deveare Smith's, "Twilight Los Angeles," and other exploratory dramas. Student work may be showcased to invited audiences.

This class may *not* be repeated for credit.

**Please Note:**

**Both Art of the Theater and Improvisational Theater are prerequisites for Advanced Drama Workshop. You may not take either of them concurrently with ADW. Seniors who may not have completed the prerequisites may take this class with permission of the instructor.**

## 6590 – Independent Study in Drama

**1 credit – semester**

**Level: No Level**

*Prerequisite:*

*Students must have completed their Fine and Performing Arts graduation requirements before enrolling in an Independent Study.*



# Performing Arts: Music

**M**usic courses at Lexington High School may be selected from among three categories:

1. Theory, composition and history courses
2. Choral performance courses
3. Instrumental performance courses

All music courses offered at the high school level are elective. In the few cases where selectivity is involved, it will be noted under the course description. All course offerings require various levels of student commitment and involvement both in and outside the classroom setting. Regular homework assignments are associated with all music courses. Periodic assessments, term projects and regular class participation will be among the criteria used to determine the final grade a student earns for any course.

In performance (ensemble) classes, in addition to regular class attendance, students will be expected to participate in all dress rehearsals and scheduled performances. Class time is used to evaluate the individual student's ability to learn music for performance as well as to learn how to function effectively as a member of an ensemble. Periodic seating auditions are required in the instrumental groups and for solo work in the vocal ensembles.

Students are expected to practice daily and are encouraged to engage in private study to enhance their proficiency level. It is the Department's intent to offer a balanced music curriculum with adequate opportunities for all students to enhance their musical development.



## Theory, Composition and History

Theory, Composition and History courses include offerings that focus on the historical and theoretical elements of music essential for the discriminating active listener or performer.

### 6610 – Music Theory

**4 credits – year**

**Level: No Level**

This course is designed to develop individual student musicianship in four distinct, but related, areas: *terminology/notation, performance/aural skills, analysis* and *composition*. Sight-reading, rhythmic/melodic/harmonic dictation, and composition are included. The construction and use of scales, keys, intervals, and elementary harmony is emphasized. Students will regularly use the digital music MIDI lab to aid in aural skills development and to complete class composition projects.

Students' abilities and previous musical experience will be assessed at the start of the course and **STUDENTS WILL BE PLACED IN AN APPROPRIATE TRACK OF STUDY**. Basic musical literacy is expected for students enrolling in music theory and students who do not read music will be expected to address this deficiency at the start of the quarter, before the end of the add/drop period. If this is not addressed, students may need to withdraw from the course.

This course may be a prerequisite for the Jazz Improvisation course.

This course may be repeated for credit.

### 6631 – Jazz in Society – Civil War to Great Depression

See Interdisciplinary Studies – page 43

### 6632 – Jazz in Society – Great Depression to the present

See Interdisciplinary Studies – page 43





## 6680 – Mixed Tape Anatomy

– (Not offered in 2014-2015)

**2 credits - semester**

**Level: No Level**

Don't just consume music; get inside of it! This is a new type of music appreciation, one that explores the relationships between songs across genres and time. Each semester, a playlist of songs -the mixed tape- will be presented. The class will musically dissect and critique each of the songs, developing active listening skills. The cultural context for each will be explored, as well as the history of the genre that the song represents. Students will be asked to analyze and present their own selections aligned with the musical elements discussed. They will also create their own versions of genre-defining elements using music technology. Doo wop, dubstep, post-punk, and beyond; challenge yourself and expand your musical palate!



## Choral Performance

Choral performance opportunities are offered to all students. Courses which are selective or which require a co-requisite are so designated in the course description.

### 6710 – LHS Chorale

**4 credits – year**

**Level: No Level**

*Prerequisite:*

*Student must demonstrate the ability to match pitch.*

LHS Chorale is open to all Lexington High School students who are interested in performing as a member of a vocal ensemble. Students will prepare and perform a wide range of challenging choral music representing many styles, languages and time periods, including at least one major work each year. Repertoire may include selections including but



not limited to the great Western art music (sacred and secular), folk and multicultural music, vocal jazz, pop and musical theater. Emphasis in rehearsal is placed on the importance of individual contribution. Students will strengthen their individual vocal technique and enhance their music listening and reading skills throughout the year. Attendance at all special rehearsals and performances is mandatory

**Note:** Concurrent membership in a Lexington High School music ensemble is required for students who wish to participate in student-directed ensembles.

## Select Vocal Ensembles

### 6728 – Women’s Chorus

**4 credits – year**

**Level: Honors**

*Prerequisite:*

#### *Audition*

This course is open to all female Lexington High School students by audition. Students will prepare and perform a wide range of challenging choral music representing many styles, languages and time periods, including at least one major work each year. Repertoire may include selections including but not limited to the great Western art music (sacred and secular), folk and multicultural music, vocal jazz, pop and musical theater, with special emphasis on great works written for women’s voices. Emphasis in rehearsal is placed on the importance of individual contribution. Students will strengthen their individual vocal technique and enhance their music listening and reading skills throughout the year. Attendance at all dress rehearsals and performances is mandatory.

**Note:** Concurrent membership in a Lexington High School music ensemble is required for students who wish to participate in student-directed ensembles.



## 6738 – Concert Choir

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*Audition*

Auditions for this advanced vocal ensemble will be held in the spring. Students will prepare and perform a wide range of challenging choral music representing many styles, languages and time periods, including at least one major work each year. Repertoire may include selections including but not limited to the great Western art music (sacred and secular), folk and multicultural music, vocal jazz, pop and musical theater. Emphasis in rehearsal is placed on the importance of individual contribution. Students will strengthen their individual vocal technique and enhance their music listening and reading skills throughout the year. Attendance at all dress rehearsals and performances is mandatory. This group performs annually at the MICCA Choral Festival.

**Note:** Concurrent membership in a Lexington High School music ensemble is required for students who wish to participate in student-directed ensembles.

## 6778 – Madrigal Singers

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*Audition*

Auditions for this advanced vocal ensemble will be held in the spring. This honors ensemble will prepare and perform a wide range of challenging choral music representing many styles, languages and time periods, including at least one major work each year, with special emphasis placed on works written for small chamber ensemble. Repertoire may include selections including but not limited to the great Western art music (sacred and secular), folk and multicultural music, vocal jazz, pop and musical theater. Students should be able to read and memorize music quickly and carry their own part in a small ensemble. Madrigal Singers perform approximately 30 programs a year in school, community, and regional concerts and competitions. Emphasis in rehearsal is placed on the importance of individual contribution. Students will strengthen



their individual vocal technique and enhance their music listening and reading skills throughout the year. Attendance at all dress rehearsals and performances is mandatory. This group performs annually at the MICCA Choral Festival.

**Note:** Concurrent membership in a Lexington High School music ensemble is required for students who wish to participate in student-directed ensembles

## 6770 – Student-Directed A Cappella Ensembles credits variable – year

**Level: No Level**

*Prerequisite:*

*Concurrent enrollment in an LHS musical ensemble (or other musical elective with special permission) and audition*

Students are selected for the ensembles by competitive auditions in late spring or early fall. Rehearsals are for two hours one evening per week. Students may elect to audition for Pitchpipes or Rock, Paper, Scissors (all male groups); Euphoria, Guacamole or Onomatopoeia (all female groups); or Mixed Nuts or Peanut Butter and Jelly (mixed group). All ensembles, which are limited to 12-16 singers each, perform throughout the school year on a regular basis.





## Instrumental Music

Instrumental music performance opportunities are available to all students. Courses which are selective or which require a co-requisite are so designated in the course description.

### 6900 – Symphonic Band

**4 credits – year**

**Level: No Level**

The goal of the Symphonic Band is to provide each student with the opportunity to actively participate in the creation of art via the medium of music. The vehicle for creating musical art is the ensemble itself; hence, central to attaining the course's artistic goal is the achievement of ensemble performance excellence, through each student's growth in the areas of knowledge, understanding and skills. Growth in these areas is fostered through rehearsal and performance of wind band music written in a variety of styles. This music is presented at several concerts spread over the course of the school year.

It is also the course's goal to create an atmosphere of thoughtful reflection and critical thinking and to foster a community in which students respect the music, the ensemble and each other.

Students enrolled in Symphonic Band, Concert Band or Wind Ensemble have the option of participating in the LHS Parade Band. This ensemble rehearses for and participates in Lexington's town celebrations of Veterans Day, Patriots Day and Memorial Day. Students who participate receive community service hours.

### 6928 – Concert Band

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*Audition*

The LHS Concert Band provides students the opportunity to take their study of wind band performance to the next level. The rehearsal process is focused on producing high-level performances that are musically expressive and technically polished. Central to attaining the course's goals is the achievement of ensemble performance



excellence, through each student's growth in the areas of knowledge, understanding and skills. Growth in these areas is fostered through rehearsal and performance of wind band music written in a variety of styles. This music is presented at several concerts spread over the course of the school year. The Concert Band additionally participates in the Massachusetts Instrumental and Choral Conductors Association (MICCA.) festival, a statewide music festival that gives ensembles the chance to perform for and receive feedback from university and conservatory conductors.

It is also the course's goal to create an atmosphere of thoughtful reflection and critical thinking and to foster a community in which students respect the music, the ensemble and each other.

Students enrolled in Symphonic Band, Concert Band or Wind Ensemble have the option of participating in the LHS Parade Band. This ensemble rehearses for and participates in Lexington's town celebrations of Veterans Day, Patriots Day and Memorial Day. Students who participate receive community service hours.

## 6948 – Wind Ensemble

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*Audition*

The LHS Wind Ensemble is for students wishing to perform wind band literature at a very advanced high school and college/professional level. Students taking this class almost universally study their instrument with a professional teacher out side of the school setting. The rehearsal process is focused on producing high-level performances that are musically expressive and technically polished. Central to attaining the course's goals is the achievement of ensemble performance excellence, through each student's growth in the areas of knowledge, understanding and skills. Growth in these areas is fostered through rehearsal and performance of wind band music written in a variety of styles. This music is presented at several concerts spread over the course of the school year. The Wind Ensemble additionally participates in the MICCA festival and may travel to national and international music festivals. Students will have quarterly written projects and playing assessments.



It is also the course's goal to create an atmosphere of thoughtful reflection and critical thinking and to foster a community in which students respect the music, the ensemble and each other.

Students enrolled in Symphonic Band, Concert Band or Wind Ensemble have the option of participating in the LHS Parade Band. This ensemble rehearses for and participates in Lexington's town celebrations of Veterans Day, Patriots Day and Memorial Day. Students who participate receive community service hours.

## 6910 – Repertoire Orchestra/Strings

**4 credits – year**

**Level: No Level**

*Prerequisite:*

*Three years of string study*

This ensemble reads and performs musical works written for full and string orchestra. Music selections reflect a variety of musical styles and periods from the standard repertoire. The ensemble performs four to five times per year including performances at festivals and competitions. Attendance at all programs is required. All students participate in small ensembles for one quarter. This course is a prerequisite for 6938 - Symphony Orchestra/Strings.

## 6938 – Symphony Orchestra/Strings

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*One year in Repertoire Orchestra and successful entry audition. Upperclass students with equivalent knowledge and experience may request an audition for placement in this class.*

This ensemble is open by audition only to any string player who has successfully participated in 6910-Orchestra/Strings for one or more years. The orchestra performs music of a wide variety of musical styles, accompanies soloists, and participates in concerts and festivals throughout the year. Each member will work for one quarter in a small ensemble. Attendance at all performances is required.



## 6958 – Chamber Orchestra/Strings

4 credits – year

**Level: Honors**

*Prerequisite:*

*One year in Symphony Orchestra and successful entry audition. Upperclass students with equivalent knowledge and experience may request an audition for placement in this class.*

This ensemble is open by audition only to any string player who has successfully participated in 6938, Symphony Orchestra/Strings, for one or more years. Students will perform five to six times per year and will be available for extracurricular performances. Students will be expected to be involved in private lessons on their instrument, lead sectionals and rehearsals, mentor younger players and form small ensembles that will perform within the school and community.

## 6850 – Beginning Jazz Improvisation

4 credits – year

**Level: No Level**

*Prerequisite:*

*6610 or Students must be able to read music and must be able to play, write and verbally spell all 12 major scales. Students must have proficiency on the instrument they intend to play in class.*

Beginning Jazz Improvisation is the starting point for students interested in learning to improvise musically. **ALL instruments are welcome; but we ESPECIALLY NEED BASS, DRUMS, PIANO AND GUITAR!** In this class you will be exposed to jazz through listening, playing, writing and performing. Other course activities will include composition, music theory and transcription. There are four concerts called “Jazz Nites” over the course of the year; the Beginning Jazz Improvisation classes perform at two of them, though are required to attend all four. This class is limited to 15 students at registration time. Additional students may be added, at the instructor’s direction, as instrumentation permits.



## 6860 – Seminar in Jazz Improvisation

**4 credits – year**

**Level: No Level**

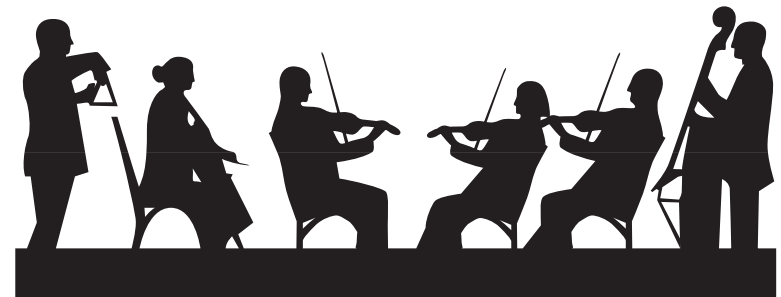
*Prerequisite:*

*completion of the Beginning Jazz Improvisation course.  
(Students with the equivalent knowledge and experience may  
request an audition for placement in this class).*

Seminar in Jazz Improvisation is the next step for students interested in continuing their study of improvisation in the unique musical idiom of jazz. In this class you will be exposed to jazz through listening, playing, writing and performing; other course material will include composition, music theory and transcription.

There are four concerts called “Jazz Nites” over the course of the year; attendance at all four is required. The Seminar in Jazz Improvisation classes present performances at 2-3 of them.

This class is limited to 15 students at registration time. Additional students may be added, at the instructor’s direction, as instrumentation permits. This class may be elected repeatedly for credit.





## 6878 – LHS Jazz Combo

**4 credits – year**

**Level: Honors**

*Prerequisite:*

*Permission of instructor and audition*

Performance class to continue the study of jazz improvisation at a higher level. Generally open only to upperclassmen who have participated in 6860 or have comparable background. The class is limited to one player on a part. Students must have experience in the jazz idiom, be able to read chord symbols, improvise, and be technically proficient on their instruments. Many concert performances are required of all members in this class.

## 6870 – Jazz Ensemble

**4 credits – year**

**Level: No Level**

*Prerequisite:*

*Audition in fall*

Two groups are formed by auditions in the fall, Jazz Ensemble and Big Band. Each group will study level-appropriate ensemble literature in the jazz idiom. Rehearsals are scheduled after school and during the evening. Members are expected to participate in all concerts, festivals and events as determined by the directors.

## 6890 – Independent Study

**1 credit – semester**

**Level: No Level**

*Prerequisite:*

*Students must have completed their Fine and Performing Arts graduation requirements before enrolling in an Independent Study. Students must be concurrently enrolled in one or more performing groups listed in the Course Catalogue.*



# Interdisciplinary Studies

## 2780 – Introduction to Journalism

English  
Social Studies

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Open to students in grades 9-11 Priority will be given to underclassmen.*

Journalism is an introduction to the news media, especially print journalism, that emphasizes news-gathering and news-writing skills. Students will learn fundamental journalism skills and principles that will enable them to produce pieces for The Musket, Lexington High School's student-run newspaper. In addition to the history of the news media, students will learn to write pieces in news, features and opinions and to copy-edit newspaper stories. The course will also look at the changing role of the news media today. (Academic Expectations 1, 2 and 8)

## 6430 – Web Design

Fine Arts  
Math

**4 credits (2 in math, 2 in fine arts) – full year course**

**Level: No Level**

*Prerequisite:*

*Foundations of Art*

This course is for students interested in developing web-design and leadership skills. Students develop their organizational and presentation skills through a series of web-design projects ranging from the creation of a personal web page to complete site design for outside clients. Additionally, students will apply universal design strategies to promote access for everyone. Through project-based learning, students develop skills in problem solving, presentation, research and critical thinking.



The first semester relies heavily on composition, typography, logo creation and color theory. Students will sketch ideas on paper before moving to digital media.

During the second semester, students will learn basic HTML and CSS skills, as they design web pages utilizing web standards. Throughout the course students will work in various teams to develop their sites, including interactive web sites for school and community clients. Each group will take their clients through the entire web-development process, including project plan, design mock-up, development, test and launch.

## 6631 – Jazz in Society – Civil War to Great Depression

Music

Social Studies

**2 credits – 1st semester**

**Level: No Level**

*Prerequisite:*

*None*

Jazz In Society studies the culture in America that lead to the creation of jazz, our greatest original art form, and the subsequent development of the various strands of jazz throughout the 20th century. Students will be immersed in readings about jazz and the surrounding American culture, listening to jazz recordings, attending live jazz performances, and finally writing about jazz and sharing these experiences with the class.

This first semester will be divided into two sections:

- 1) **What is jazz?** The course will begin by exploring the specific aspects of jazz that make it unique from other forms of music. We'll listen to a great variety of jazz and compare it to other music, watch segments of Ken Burns' celebrated Jazz documentary miniseries , and study Leonard Bernstein's album entitled "What Is Jazz?"
- 2) **How jazz started** .This section of the course explores the cultural and musical climate in America during period starting after the civil war and going through the jazz age. During this section of the course, we'll read texts by Leroi Jones,Langston Hughes, short stories by F. Scott Fitzgerald, and listen to some of the earliest jazz recordings.



6632 – Jazz in Society –  
Great Depression to the present

Music

Social Studies

**2 credits – 2nd semester**

**Level: No Level**

*Prerequisite:*

*None*

This second semester of Jazz in Society will begin with the explosion in jazz popularity during the Great Depression and follow its development to the present day. This second semester will also be divided into two sections:

- 1) **Early jazz artists.** We will study the artists (Louis Armstrong, Bix Beiderbecke, Duke Ellington, Count Basie and Benny Goodman) who came to prominence later in the jazz age and during the Great Depression, a unique time in American history when popular and art music were one and the same.
- 2) **Bebop and Beyond.** We will explore post WWII America and bebop, the strand of jazz that came to prominence with musicians such as Charlie Parker, Dizzy Gillespie, and Thelonious Monk. We'll then follow the development of free jazz and its effect on the civil rights movement, and finally examine its Renaissance in the last decades of the twentieth century as academia came to finally afford jazz the legitimacy it had been denied since its inception.



# Mathematics

## Program Overview

The Mathematics Department offers a comprehensive four-year mathematics program whose goal is to enable all students to reach high standards and full potential in a supportive, academically focused environment. We seek to engage students in meaningful mathematics that stimulates curiosity and enjoyment, while providing a balance between skill development and conceptual understanding. Throughout our curriculum, we emphasize these eight Mathematical Practices identified in the *Common Core State Standards* and the *Massachusetts Curriculum Framework for Mathematics*:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

## Academic Expectations

The Mathematics Department assumes “primary responsibility” for assisting students in achieving proficiency in Academic Expectations 5 (Data Analysis), 6 (Logical Reasoning), and 7 (Technology). We also reinforce and support the school’s other academic expectations.

## Technology Use

Graphing calculators are a key everyday tool for learning mathematics in the 21st century. Lexington High School strongly recommends that all students purchase a Texas Instruments graphing calculator from the TI-83 or TI-84 family. A calculator purchased at the start of 8th or 9th grade will be useful for class work, homework, and assessments in math and science classes through all four years of high school. Our school has a limited supply of calculators for loan to students who are



not able to get their own due to need; see the Mathematics Department section of the LHS website for details.

Mathematics courses at LHS also make use of a variety of computer programs and tablet applications where relevant to the curriculum, including First Class conferencing, algebra and geometry software, spreadsheets, and programming environments.

## Placement Changes

Mathematics course placements at Lexington High School are based primarily on teacher recommendation. These recommendations should be considered very carefully, and students and families should consult with the teacher if there is a disagreement about placement. After consultation, if a student still wishes to take a course or level that was not recommended by the teacher, he/she may request a “placement review” for this change to be considered. To do so, request a Math Placement Appeal Form from the current teacher by March 7, complete the form, and submit it to the Mathematics Department Office (room 711) no later than March 14. The request will be adjudicated by a team of teachers including the Math Department Head, and the student will be notified of the decision by May. **Students who do not request a placement review will not be permitted to change their math course or level at a later date.**

Occasionally a student may wish to skip over a whole course based on outside learning such as summer school. The Mathematics Department generally discourages this practice; most students are better served by taking a full-year course at LHS rather than a condensed summer offering. Students are permitted to change their LHS math course on the basis of completing an outside course only if that outside course has been pre-approved. To seek pre-approval, request a Math Placement Acceleration Form from the current teacher by March 21, complete the form, and submit it to the Mathematics Department Office (room 711) no later than March 28. The request will be adjudicated by a team of teachers including the Math Department Head, and the student will be notified of the decision by May. **Students who do not obtain this pre-approval will not be permitted to change their math course or level at a later date.**



## Curriculum for the Classes of 2016 – 2018

For the Classes of 2016, 2017, and 2018, the LHS Mathematics Department is offering a sequence of integrated mathematics courses that is fully aligned with the 2011 *Massachusetts Curriculum Framework for Mathematics* incorporating the *Common Core State Standards*. In each of the core courses Math 1, Math 2, and Math 3, there is a blend of topics from algebra, geometry, and statistics/probability. The aim of this integrated approach is to present mathematics as a cohesive whole, while emphasizing vital mathematical practices such as reasoning, problem solving, and modeling.

Classes of 2016, 2017, 2018: typical course sequences				
8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
Grade 8 Mathematics	3314 CP2 Math 1 (Alg/Geom/ Stat)	3324 CP2 Math 2 (Alg2/Geom/ Stat)	3334 CP2 Math 3 (Alg2/Geom/ Stat)	senior course options involving precalculus, statistics, and/or advanced quantitative reasoning
Grade 8 Algebra 1A	3325 CP1 Math 1B/2A (Alg/Geom/ Stat)	3335 CP1 Math 2B/3A (Alg2/Geom/ Stat)	3345 CP1 Math 3B/4A (Alg2/Geom/ Precalculus)	
Grade 8 Algebra 1	3326 CP1 Math 2 (Alg2/Geom/ Stat)	3336 CP1 Math 3 (Alg2/Geom/ Stat)	3346 CP1 Math 4 (Precalculus)	3356 CP1 Calculus <i>or</i> other senior courses (see above)
	3328 Hon Math 2 (Alg2/Geom/ Stat)	3338 Hon Math 3 (Alg2/Geom/ Stat)	3348 Hon Math 4 (Precalculus)	3359 AP Calculus AB <i>or</i> 3369 AP Calculus BC <i>or</i> 3459 AP Statistics





## Courses for Grade 9 (Class of 2018)

### 3314 – Math 1: Algebra/Geometry/Statistics

**4 credits**

**Level: CP2**

*Prerequisite:*

*Successful completion of any grade 8 math course.*

Math 1 students will learn to reason quantitatively, interpret mathematical expressions, create equations to describe relationships, and use the concept and notation of functions. They will examine linear and exponential functions using algebraic and graphical approaches, and use these function types for modeling and problem solving. Students will solve linear equations and inequalities, as well as systems of equations. They will use descriptive statistics to summarize, represent, and interpret one-variable and two-variable data involving categorical or quantitative variables, with an emphasis on linear modeling and regression. Students will develop knowledge of transformations of the plane, use transformations to establish triangle congruence criteria, make geometric constructions, and use coordinate geometry.

Math 1 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, modeling, and using structure and regularity. They will use tools including graphing calculators and spreadsheets.

### 3325 – Math 1B/2A: Algebra/Geometry/Statistics

**4 credits**

**Level: CP1**

*Prerequisite:*

*Algebra 1A in grade 8 with at least a B-range grade. Also appropriate for students who took Algebra 1 in grade 8 but did not meet the prerequisite grade for Math 2.*

Math 1B/2A students will examine functions of varied types, with an emphasis on exponential and quadratic functions and their use in modeling. They will solve linear inequalities, systems of equations, and quadratic equations. They will use descriptive statistics to summarize, represent, and interpret one-variable and two-variable data



involving categorical or quantitative variables, with an emphasis on linear modeling and regression. Students will develop knowledge of transformations of the plane, use transformations to establish triangle congruence criteria, and make geometric constructions. They will begin developing geometric proofs using deductive geometry and/or coordinate geometry.

Math 1B/2A students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, modeling, and using structure and regularity. They will use tools including graphing calculators, spreadsheets, and geometry software

### 3326 – Math 2: Algebra 2/Geometry/Statistics

**4 credits**

**Level: CP1**

*Prerequisite:*

*Algebra 1 in grade 8 with at least a B-range grade. This course may also be taken by a grade 10 student after Math 1 by teacher recommendation.*

### 3328 – Math 2: Algebra 2/Geometry/Statistics

**4 credits**

**Level: Honors**

*Prerequisite:*

*Algebra 1 in grade 8 with an A-range grade.*

Math 2 students will examine functions of varied types, with an emphasis on quadratic functions and their use in modeling. They will develop skills in rewriting expressions, using exponent properties, and solving equations and inequalities. Students will understand the geometric concepts of congruence and similarity in terms of transformations. They will investigate geometry theorems about triangles, parallel lines, and circles, and prove them by writing deductive proofs and coordinate proofs. Students will use descriptive statistics to summarize, represent, and interpret two-variable data involving categorical or quantitative variables, with an emphasis on linear modeling and regression. They will compute and interpret probabilities of compound events and conditional probabilities.



Math 2 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, modeling, and using structure and regularity. They will use tools including graphing calculators, spreadsheets, and geometry software.

### **Availability of more advanced courses for grade 9 students**

Since each year of the LHS mathematics curriculum has vital and distinct content, skipping courses is generally discouraged. Entry of grade 9 students into courses beyond Honors Math 2 is granted only in very exceptional cases. The student must have already learned substantially all of the contents of any courses to be skipped, must be recommended by the student's current teacher during the recommendation process in early March, must submit a Math Placement Acceleration Form to the LHS Mathematics Department Head by March 28, and must receive final approval from the LHS Mathematics Department. **Late requests to skip over grade 9 math will not be considered under any circumstances.**

## Courses for Grade 10 (Class of 2017)

### **3324 – Math 2: Algebra 2/Geometry/Statistics**

**4 credits**

**Level: CP2**

*Prerequisite:*

*Successful completion of Math 1.*

Math 2 students will examine functions of varied types, with an emphasis on quadratic functions and their use in modeling. They will develop skills in rewriting expressions, using exponent properties, and solving equations and inequalities. Students will understand the geometric concepts of congruence and similarity in terms of transformations. They will investigate geometry theorems about triangles, parallel lines, and circles, and prove them by writing deductive proofs and coordinate proofs. Students will use descriptive statistics to summarize, represent, and interpret two-variable data involving categori-



cal or quantitative variables, with an emphasis on linear modeling and regression. They will compute and interpret probabilities of compound events and conditional probabilities.

Math 2 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, modeling, and using structure and regularity. They will use tools including graphing calculators, spreadsheets, and geometry software.

### 3335 – Math 2B/3A: Algebra 2/Geometry/Statistics

**4 credits**

**Level: CP1**

*Prerequisite:*

*Math 1B/2A with at least a C-range grade.*

Math 2B/3A students will examine functions of varied types, with an emphasis on polynomial and trigonometric functions and their use in modeling. They will extend their use of coordinate and deductive geometry to include circles, similarity, and right triangle trigonometry. Students will use compound and conditional probabilities, and will apply methods from probability and statistics to draw inferences and conclusions from data.

Math 2B/3A students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, modeling, and using structure and regularity. They will use tools including graphing calculators, spreadsheets, and geometry software.

### 3336 – Math 3: Algebra 2/Geometry/Statistics

**4 Credits**

**Level: CP1**

*Prerequisite:*

*Honors or CP1 Math 2 with at least a C-range grade.*



### 3338 – Math 3: Algebra 2/Geometry/Statistics

**4 credits**

**Level: Honors**

*Prerequisite:*

*Honors Math 2 with at least a B-range grade.*

Math 3 students will expand their understanding of functions to include polynomial, rational, exponential, logarithmic, and trigonometric functions. They will use trigonometric functions for general triangle solving, sinusoidal modeling, and other algebraic uses. They will extend their use of number systems to include the complex numbers, and make use of sequences and series. Students will apply methods from probability and statistics to draw inferences and conclusions from data.

Math 3 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, and using structure and regularity. They will use functions and geometry to create and critique mathematical models and solve contextual problems. They will use tools including graphing calculators, spreadsheets, and geometry software.

## Courses for Grade 11 (Class of 2016)

### 3334 – Math 3: Algebra 2/Geometry/Statistics

**4 credits**

**Level: CP2**

*Prerequisite:*

*Successful completion of Math 2.*

CP2 Math 3 is a new course in 2014-2015 so this course description is subject to change.

Math 3 students will expand their understanding of functions to include polynomial, rational, exponential, logarithmic, and trigonometric functions. They will use trigonometric functions for general triangle solving, sinusoidal modeling, and other algebraic uses. They will extend their use of number systems to include the complex numbers, and make use of sequences and series. Students will apply methods from probability and statistics to draw inferences and conclusions from data.



Math 3 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, and using structure and regularity. They will use functions and geometry to create and critique mathematical models and solve contextual problems. They will use tools including graphing calculators, spreadsheets, and geometry software.

### 3345 – Math 3B/4A: Algebra 2/Geometry/Precalculus

**4 credits**

**Level: CP1**

*Prerequisite:*

*Math 2B/3A with at least a C-range grade.*

Math 3B/4A is a new course in 2014-2015 so this course description is subject to change.

Math 3B/4A students will examine functions of varied types, with an emphasis on trigonometric, exponential, logarithmic, and rational functions. They will develop their understanding of general function concepts such as function operations, composition and inverses, and transformations. They will use trigonometry for general triangle solving, sinusoidal modeling, and other algebraic uses. They will extend their use of number systems to include the complex numbers.

Math 3B/4A students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, and using structure and regularity. They will use functions and geometry to create and critique mathematical models and solve contextual problems. They will use tools including graphing calculators, spreadsheets, and geometry software.



## 3346 – Math 4: Precalculus

**4 Credits**

**Level: CP1**

*Prerequisite:*

*Honors or CP1 Math 3 with at least a C-range grade.*

## 3348 – Math 4: Precalculus

**4 credits**

**Level: Honors**

*Prerequisite:*

*Honors Math 3 with at least a B-range grade.*

**Note:** In 2014-2015, Math 4 courses 3346/3348 are only for students who took a Math 3 course at LHS. Students who took an Algebra 2 course at LHS and seek a precalculus course should take 3347 Advanced Mathematics. Transfer students will receive individual advice about which precalculus course to take.

Math 4 is a redesigned course for 2014-2015 so this course description is subject to change.

Math 4 students will develop their understanding of general function concepts such as function operations, composition and inverses, and transformations. They will investigate the graphical characteristics of rational functions. They will expand their knowledge of trigonometric functions, focused on function graphs, equation solving, identities, and modeling. They will work with complex numbers in rectangular and polar forms and investigate the graphs of polar equations. They will perform vector and matrix operations and use vectors for simple proofs and for solving practical problems. They will work with conic sections described algebraically and geometrically.

Math 4 students will engage in mathematical practices such as making sense of problems, reasoning and constructing arguments, and using structure and regularity. They will use functions and geometry to create and critique mathematical models and solve contextual problems. They will use tools including graphing calculators, spreadsheets, and geometry software.



## 3459 – AP Statistics

**4 credits**

**Level: Advanced Placement**

*Prerequisite (for grade 11 students):*

*Must have completed with Honors Math 3 with a B-range grade and must be taking a Math 4 course concurrently (or completed Advanced Mathematics previously).*

The purpose of this course is to introduce students to the major concepts and tools for exploring data, planning a study, analyzing patterns, and drawing conclusions from data. The course will rely heavily on graphing-calculator-based processes and the analysis of data produced by graphing calculator and some data produced by computer software packages. The Advanced Placement Statistics exam is expected of all students in this course. More information can be found at [http://www.collegeboard.com/student/testing/ap/sub\\_stats.html](http://www.collegeboard.com/student/testing/ap/sub_stats.html).

## Curriculum for the Class of 2015 and Courses for Grade 12

For the Class of 2015, the LHS Mathematics Department is offering courses that complete course sequences shown in the chart below.

Class of 2015: typical course sequences			
9th Grade	10th Grade	11th Grade	12th Grade
3210 Algebra 1	3224 CP2 Geometry	3234 CP2 Algebra 2	3344 Adv. Alg. & Trig
3212 Algebra 1B	3226 CP1 Geometry	3236 CP1 Algebra 2	3347 CP1 Adv. Math <i>or</i> 3456 CP1 Statistics
3236 CP1 Algebra 2	3226 CP1 Geometry	3346 CP1 Adv. Math	3356 CP1 Calculus <i>or</i> 3456 CP1 Statistics
3238 Hon Algebra 2	3228 Hon Geometry	3348 Honors Adv. Math	3359 AP Calculus AB <i>or</i> 3369 AP Calculus BC <i>or</i> 3459 AP Statistics





## 3344 – Advanced Algebra and Trigonometry

**4 credits**

**Level: CP2**

*Prerequisite:*

*Successful completion of CP2 Algebra 2.*

This course provides an extension of Algebra 2 and a beginning study of more advanced topics in algebra including probability and statistics, number theory, and some discrete mathematics. The course includes a thorough treatment of trigonometry. This is a course for students who wish to reinforce their knowledge of algebra and to gain an appreciation for trigonometry in preparation for further mathematics study.

## 3347 – Advanced Mathematics

**4 credits**

**Level: CP1**

*Prerequisite:*

*CP1 Algebra 2 and CP1 Geometry with at least B-range grades, or possibly C-range grades with teacher recommendation*

**Note:** In 2014-2015, 3347 Advanced Mathematics is only for students who took an Algebra 2 course at LHS. Students who took a Math 3 course at LHS and seek a precalculus course should take 3346 or 3348 Math 4: Precalculus. Transfer students will receive individual advice about which precalculus course to take.

This precalculus course provides students with an in-depth study of families of functions including polynomial and rational, exponential and logarithmic, and trigonometric and circular functions. Emphasis is placed on both conceptual understanding and practical problem solving. An introduction to probability and statistics is also an integral part of the course. This course will enable students to continue their mathematics education in statistics, calculus, or a related field.



## 3356 – Calculus

**4 credits**

**Level: CP1**

*Prerequisite:*

*CP1 Advanced Mathematics with at least a B-range grade, or successful completion of Honors Advanced Mathematics.*

The focus of this course is on understanding the concepts of calculus from a geometric or intuitive point of view. Units from differential and integral calculus provide the main themes, but time will be taken to master topics not adequately studied in pre-calculus. Practical applications will be emphasized rather than theoretical aspects. This course is not intended as preparation for the Advanced Placement Calculus exam. While some students may be eligible for advanced standing in college calculus, all students will be thoroughly prepared for a beginning college calculus course.

## 3359 – AP Calculus AB

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Honors Advanced Mathematics with a B-range grade. Also open to strongly successful students from CP1 Advanced Mathematics by teacher recommendation.*

This is a college-level course in differential and integral calculus, equivalent to one semester of calculus at most universities. Topics include a review of functions, an introduction to limits and continuity, derivatives and their applications, integrals and their applications, anti-derivatives and the Fundamental Theorem of Calculus, and an introduction to differential equations using slope fields. There is an emphasis on conceptual understanding and working with functions represented graphically, numerically, analytically, and verbally. The Advanced Placement Calculus AB exam is expected of all students in this course. More information can be found at [http://www.collegeboard.com/student/testing/ap/sub\\_calab.html](http://www.collegeboard.com/student/testing/ap/sub_calab.html).



## 3369 – AP Calculus BC

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Honors Advanced Mathematics with a B-range grade.*

This is a college-level course in differential and integral calculus, equivalent to the first two semesters of calculus at most universities. Topics include an introduction to limits and continuity, derivatives and their applications, integrals and their applications, anti-derivatives and the Fundamental Theorem of Calculus, an introduction to differential equations using slope fields and Euler's Method, Taylor polynomials and series, and calculus using parametric, vector and polar equations. There is an emphasis on conceptual understanding and working with functions represented graphically, numerically, analytically, and verbally. The Advanced Placement Calculus BC exam is expected of all students in this course. More information can be found at [http://www.collegeboard.com/student/testing/ap/sub\\_calbc.html](http://www.collegeboard.com/student/testing/ap/sub_calbc.html).

## 3456 – Statistics

**4 credits**

**Level: CP1**

*Prerequisite:*

*CP1 Algebra 2 with a C-range grade, or successful completion of any more advanced course. Open to seniors only.*

This is an introductory course which provides student-centered learning of statistical concepts, properties, and techniques. Emphasis is on active learning, conceptual understanding, use of genuine real-world data, and technology integration with the TI-83/84 graphing calculator. Students will explore the design of surveys, polls, and experiments to assess the validity of their results, to identify potential sources of bias, and to identify the types of conclusions that can be drawn. Many activities lend themselves to collaborative learning and emphasis is placed on the importance of students' communication skills. Other topics include probability through simulations and experimental design.



## 3459 – AP Statistics

**4 credits**

**Level: Advanced Placement**

*Prerequisite (for grade 12 students):*

*Must have taken Honors math courses or been strongly successful in CPI math courses.*

The purpose of this course is to introduce students to the major concepts and tools for exploring data, planning a study, analyzing patterns, and drawing conclusions from data. The course will rely heavily on graphing-calculator-based processes and the analysis of data produced by graphing calculator and some data produced by computer software packages. The Advanced Placement Statistics exam is expected of all students in this course. More information can be found at [http://www.collegeboard.com/student/testing/ap/sub\\_stats.html](http://www.collegeboard.com/student/testing/ap/sub_stats.html).

## Elective Courses

### 3510 – Accounting

**4 credits**

**Level: No Level**

*Prerequisite:*

*None. Open to students in all grades.*

Accounting is the language of business. This is a beginning course for those students preparing for college work in business management or business administration or for those students interested in a business career in the field of accounting. It is also a useful course for those who are considering operating their own businesses. Emphasis is placed upon the reasons and the purpose, use, and understanding of accounting rather than on mechanical procedure alone. At the end of the course, students are expected to be able to journalize, post, prepare a trial balance and financial statements, and manage customer and/or vendor accounts. This course is computer-based where students will be learning and applying their skills using accounting software.



## 3716 – Introduction to Programming I

**2 credits – semester**

**Level: CP1**

*Prerequisite:*

*None, but note that this is a Level CP1 course.*

This is an introductory course in computer science using C++ as the programming language. The course will emphasize the analysis of problems, the careful selection of an appropriate algorithm, and the implementation of the algorithm in C++. Topics covered include input and output streams, variables, operators, conditional statements, functions, looping, strings, recursion, arrays, and computer number systems. Course grades will be based primarily on success in completing programming projects.

## 3726 – Introduction to Programming II

**2 credits – semester**

**Level: CP1**

*Prerequisite:*

*Introduction to Programming I (or permission of the Department Head for students having past programming experience)..*

This is a continuation of the introductory course in computer programming which will explore some of the more intricate aspects of computer programming. Using C++, students will study string manipulation, matrices, sorting, and be introduced to object-oriented programming. As preparation for continued studies in computer science, Java will be introduced in the second half of the course. Course grades will be based primarily on success in completing programming projects.



## 3739 – AP Computer Science

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Introduction to Programming II (or permission of the Department Head for students having past programming experience).*

The goals of this course are comparable to those of a first-semester college course in computer science. The course is intended to serve both as an introductory course for computer science majors and as a substantial course for those who will major in other disciplines that require significant involvement with computing. The course uses Java as the programming language and emphasizes object-oriented programming methodology, algorithm development, and problem solving. It also includes the study of data structures and abstraction. The Advanced Placement Computer Science exam is expected of all students in this course. More information can be found at [http://www.collegeboard.com/student/testing/ap/sub\\_compscia.html](http://www.collegeboard.com/student/testing/ap/sub_compscia.html).

## 3746 – Advanced Computer Programming

**2 credits – semester (may be repeated for credit)**

**Level: CP1**

*Prerequisite:*

*Teacher recommendation.*

This course is designed to allow students to experience how a real-world computer application comes to life. This course builds on their previous programming skills and includes more advanced GUI techniques. In addition to smaller projects, students will work together to complete a large programming project of their choosing by the end of the semester. After many weeks of coding, they will complete an online help file and present their work to the class.



## 3610 – Computer Applications

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*None*

This is an introductory course in the computer applications that are used daily in such activities as presentation, desktop publishing, information processing and decision-making. The course will prepare students to create documents, presentations, and spreadsheets using Microsoft Office, to edit images and video using iPhoto, the Photoshop creative suite, and iMovie, to create a basic web page that incorporates many of the projects completed in the class, and to begin writing computer programs using Scratch. Classes will be project-based. Students from all grades and academic levels are encouraged to enroll.

## 6430 – Web Design

See Interdisciplinary Studies – page 43

## 3093 – Math Teaching Assistant Program

**Credits: Variable based on teaching blocks per week (maximum of 0.5 credit per quarter)**

**Level: No Level**

*Prerequisite:*

*Teacher recommendation and Department Head approval.*

**Grading: Pass/Fail**

Under the close supervision and guidance of mentor teachers, students serve as teaching assistants to provide additional support for students who struggle mathematically in our ninth grade courses. Teaching assistants experience first-hand the teaching and learning process from an educator's perspective, come to understand and value what it takes to make mathematics accessible to all students, and make connections with younger students that foster academic achievement and meaningful relationships. If you are interested in becoming a teaching assistant, please see your current mathematics teacher or the Mathematics Department Head for more information.



# Physical Education & Wellness

## Academic Expectations

The Physical Education and Wellness Department assumes primary responsibility for assisting students in achieving proficiency in Academic Expectations 4 (Listening), and 9 (Awareness of aesthetic principles). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations outlined on page vi of this *Program of Studies*.



The Physical Education and Wellness Department addresses the Massachusetts Comprehensive Health Framework. This includes topics of Growth and Development, Physical Activity and Fitness, Nutrition, Reproduction and Sexuality, Mental Health, Family Life, Interpersonal Relationships, Disease Prevention and Control, Safety and Injury Prevention, Tobacco, Alcohol, and Other Substance Use/Abuse Prevention, Violence Prevention, Consumer Health and Resource Management, Ecological Health, and Community and Public Health.

The Wellness Model educates and supports practice in balancing six dimensions of health. Physical Wellness prepares students for an active life that prevents diseases of sedentary living. Emotional Wellness reflects physical activity and accessing mental health resources that support a positive attitude and reduce stress. Intellectual wellness provides a foundation for living well. Spiritual Wellness assures time for reflection, rest, and calm. Occupational Wellness focuses on having balance and health in careers and workplaces. Social Wellness supports interpersonal relationships and connections. A collaborative, coordinated school health model infuses the concept of wellness into the daily life of schools. Our goal is to provide and support a positive, proactive, dynamic wellness model that supports health.

**Note: All Physical Education and Wellness courses are taught at the College Preparatory - No Level designation**





# Health Education

Health Education offers a prevention-based course of study designed to provide students with the necessary knowledge, skills and strategies to act responsibly in a rapidly changing world. The curriculum promotes healthy decision-making and teaches personal skills that enable students to confront the many social, physical and emotional challenges that occur throughout their lifetime. The curriculum also addresses issues of adolescent development including: emerging sexuality, drug and alcohol use, peer pressures, separation from parents, and feelings of invulnerability and immortality – all part of the journey from adolescence to adulthood. Interwoven into the curriculum are skill-based strategies including problem solving, communication techniques, conflict resolution and decision-making models.

## 7810 – Adolescent Health Issues I

**1 credit – semester**

**Level: No Level**

Required of all freshmen, second semester only.

This course focuses on family relationships and being in charge of one's life; it provides a format for students to explore the various health issues that affect their lives and the community/world they live in. Students are encouraged to increase their cognitive understanding of contemporary health issues through a variety of mechanisms including writing reflection papers, researching specific topics and discussing the variety of perspectives that apply to each topic area. Through large and small group discussion students are required to use higher order thinking skills as they analyze and consider the range of affective experiences connected with healthy and unhealthy behaviors. Students have the opportunity to practice and apply specific skills such as decision making, evaluating risk-taking behaviors, analyzing actions and their consequences and addressing the realities of peer pressure.

Issues specific to Lexington High School are interwoven into the curriculum. Outside speakers and members of the school community such as members of the Gender Sexuality Alliance (GSA), and LHS peer educators enhance the curriculum with content-related presentations.



## 7830 – Adolescent Health Issues II

**1 credit – semester**

**Level: No Level**

*Prerequisite:*

*Adolescent Health Issues I*

Required of all juniors, first semester only.

This course focuses on responsible health choices and the changing nature of health issues that juniors, soon-to-be college students, face. The curriculum incorporates common threads throughout each subject area including decision-making, communication skills and understanding the consequences of one's actions. Students are encouraged to examine and debate the complex range of health behaviors that are encompassed by abstinence, drug and alcohol use and relationships. Through a variety of classroom activities students are required to increase their cognitive understanding of health issues and to use higher order thinking skills to analyze their affective experiences.

Issues specific to Lexington High School are interwoven into the curriculum through classroom presentations and guest speakers. As in the freshman course, members of the community with particular training and expertise emphasize key health messages that enhance the curriculum. Classroom speakers include representatives from Speak Out, a Gay and Lesbian Speaker's Bureau.

### **Grades and Credit**

Grades and credits earned in Health Education are dependent on regular attendance and active participation. Students are expected to engage in, and complete, a variety of classroom and homework activities that enable the students to apply their analytical skills and demonstrate their grasp of the curriculum.



## Criteria for Home Schooling for Health Education

7891 – Adolescent Health Issues I  
– Independent Study

**1 credit**

**Level: No Level**

7893 – Adolescent Health Issues II  
– Independent Study

**1 credit**

**Level: No Level**

Home schooling is a legal option (regulated by state law) that has been offered to Lexington parents (by the School Committee, 5/93) who have philosophical, religious and/or cultural differences with the Health Education curriculum (or any other curricular area for that matter). Home schooling offers parents the option of covering the specific curricular material from their own perspective. Parents assume the legal responsibilities for providing home schooling in this particular curricular area.

Parents need to request that their child(ren) be home schooled through a written request (form available from the Physical Education and Wellness office). In this request parents must describe what materials will be used, what topics will be covered and how they will be assessed. A student who is home schooled will need to demonstrate whether s/he has the basic knowledge and skills that are expected of any student who receives credit for taking the Adolescent Health Issues course.

Students who are home schooled will be expected to devote approximately the same amount of time to their home schooling as do students in the Adolescent Health Issues course (20 weeks, two hours/week). The curricular content should reflect the same topics as are covered in the Adolescent Health Issues course (see Course Description). The student needs to be able to demonstrate satisfactory proficiency in both course content and skill development as reflected by written demonstrations developed by the parent(s) and submitted to the school authorities upon completion of the home schooling.



The schools will review requests for home schooling and approval of credit based upon these criteria. For further information call the Director of Physical Education and Wellness (781-861-2320, ext. 1573).

Completed forms requesting home schooling for health education can be mailed to:

Coordinator of Physical Education and Wellness  
Lexington Public Schools  
251 Waltham Street  
Lexington, MA 02421

### Parental Notification Relative to Sex Education

In accordance with Massachusetts General Laws Chapter 71, Section 32A, the Lexington Public Schools afford parents or guardians the flexibility to exempt their children from that portion of the curriculum that specifically involves human sexual education or human sexuality issues. Parents must request the exemption in writing to the school principal. No child so exempted shall be penalized by reason of such exemption. Students will be assigned related coursework and materials to occupy the exempted curricular time. For information call the Director of Physical Education and Wellness (781-861-2320, ext. 1573).



# Physical Education

**P**hysical Education courses consider the need for an educated person to understand and appreciate the importance of movement in his/her complete development. Students are offered opportunities for development, for enrichment, and for the pleasures that come from achievement and excellence—whether through the development of fitness, opportunities for self-expression, skills learned for later utilization, or the lessons of life experienced in sports and games.

It is recommended that all students successfully complete one quarter of a racket activity, one quarter of an individual activity, and one quarter each of two different team activities as part of their graduation requirements. Students will have the opportunity to complete their course selections during the sign up period and should refer to the individual elective descriptions listed in this section to make appropriate selections. *Students should not sign up for the same elective more than one quarter during each school year.*

Activities are offered each year based on the number of students that select activities and staff

**Racket Activities**

Badminton  
Table Tennis  
Tennis

**Individual Activities**

Athletic Training  
Cardio Kick-Boxing  
CPR/AED Certification  
Fencing  
Fitness Concepts &  
Practices  
Golf  
Pilates  
Student Leadership Preparation

**Recreational Activities**

Rollerblading  
Strength & Fitness Training  
Total Body Conditioning  
Yoga

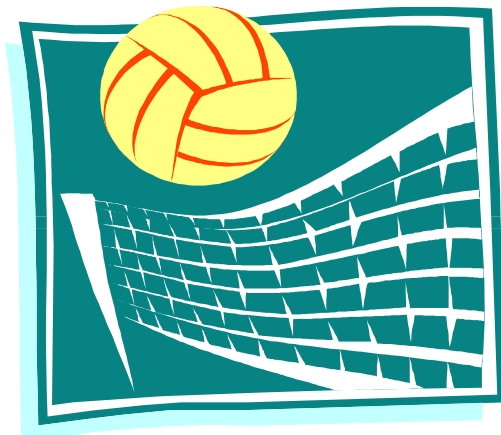
**Team Activities**

Basketball  
Basketball  
Outdoor Games/Frisbee  
Floor Hockey  
Football  
Olympic Sports  
Soccer  
Softball  
Team Handball  
Volleyball

**Dance Activities\***

Jazz  
Dance for Musical Theater  
Choreography & Performance  
Partner Dance, Swing, Latin  
Stretch and Strength for Dancers

\* These electives may be designated for  
Performing Arts credit with Coordina-  
tor approval





# Physical Education

## Grades and Credits

Grades and credits earned in Physical Education are very dependent on regular attendance and active participation and assessment in skill and activity application which will ensure that students will have the knowledge and ability to design and pursue activities which will promote a healthy and active lifestyle outside of the school community. All unexcused absences will result in grade reduction. If more than two excused absences have not been made up at the end of a marking period, there will be a reduction in the grade for the quarter. Excused absences in excess of two must be made up by participating in another Physical Education class period (with the permission of the teacher of the makeup class) and the presentation of a make-up confirmation to the regular teacher. Students must initiate their own makeup arrangements and may participate in no more than two makeup sessions during one school day. A detailed two-page explanation of requirements and grading policy is available from any Physical Education teacher.

## 7175, 7275, 7375, 7475 – Athletic Training

**1 credit or ½ credit option – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This is a classroom based but hands on elective where students will be introduced to the athletic training and sports medicine profession which will include basic first and athletic training practices such as taping techniques for musculoskeletal injuries, the prevention, treatment and recognition of sports injuries and dealing with medical emergencies in sports. Students will also learn the basic concepts of anatomy, physiology and biomechanics during this course. Students will meet twice per week for one quarter. Students who take the one-credit option will be required to complete 15 hours of after-school or weekend time assisting the athletic trainer at sports practices and contests as well as in the athletic training room.



## 7180, 7280, 7380, 7480 – CPR/AED Certification

**½ credit – quarter**

**Level: No Level**

*Prerequisite:*

*None*

This course will train students in CPR and AED application through the American Heart Association (AHA) guidelines. Students will learn their role in the “Chain of Survival” and will also learn how to recognize and respond to life-threatening emergencies in the adult, child and infant population. Students will learn CPR for all three groups and understand the purpose and use of AEDs (Automatic External Defibrillators) to improve the chances of survival in victims with sudden cardiac arrest. Students will also have the option of becoming certified in CPR/AED use through the AHA.

## 7192, 7392 – Jazz

**½ credit – quarter**

**Level: No Level**

*Prerequisite:*

*None*

This dance class will combine the expression of modern, ballet and the syncopation of Jazz. Students will learn to move through the positions, balances, combinations and rhythms that make Jazz. From the heartbeat of its West African roots, through its development in Swing, to the wide variety of studio and street dance styles, Modern/Jazz can move students through history, physical fitness and performance and provide students with an appreciation of the interdisciplinary nature of dance styles.





## 7194, 7394 – Dance for Musical Theater

**½ credit – quarter**

**Level: No Level**

*Prerequisite:*

*Interest in Dance and Theater needed*

From Isadora Duncan's reminder that dance is expressive to Bob Fosse's experimentation with shape and form, dance has helped change the direction of musical theater. From being decorative/mobile scenery to an essential means of storytelling, dance in musical theater has changed the idea of popular expression. Students will experience the development of ideas by learning original musical theater choreography. They will also have a chance to create their own musical theater dances. Exercise mind, body and imagination.

## 7297, 7497 – Choreography

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*Interest in Dance and Theater needed*

This course will provide an opportunity for students interested dance technique to experiment with movement. Students will create and evaluate dances in a positive, open forum. The course will expose students to choreography through various musical forms, spoken word, kinesthetic elements such as shape, space, force, flow and sheer imagination. The course will be highly focused and require previous dance experience and/or the willingness to experiment.



7193, 7293, 7393, 7493

– Stretch and Strength for Dancers

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Strength/Stretch for Dancers will focus on dance techniques combined with principles of safe weight training to help avoid injury, to balance muscle groups and focus energy.

7296, 7496 – Partner Dance, Swing Latin

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Dance is a great way to “feel” the ideas of a time or place. Lindy/Jit-terbug/Swing or Flamenco/Salsa can lead to a new way to communicate that is universal. Learn the historical progression of dance in popular culture. Move through the ideas of time and place. Exercise through partner work and combinations.

7395 – Student Leader Preparation

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Open to Freshman, Sophomores and Juniors The Student Leader Preparation course helps students to learn practical skills that will be utilized in future Student Leader assignments, as well as in any position of leadership. These skills include: Public speaking, organizing groups, teaching skills, sports officiating, leading warm-up and cool-down activities, applying the basic concepts of a healthy personal fitness program. The course includes several sessions of practicum during which the students are able to assist in other Physical Education classes and/or with exceptional students. Successful completion



of the Student Leader Prep class and a Physical Education Department recommendation are prerequisites for enrollment in this class.

## 7185, 7285, 7385, 7485 – Pilates

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

A body conditioning system created over 80 years ago by Joseph H. Pilates, which consists of a series of controlled movements on mats; designed to improve strength, flexibility and range of motion; also to encourage musculoskeletal alignment. Pilates coordinates mind, body and breath to develop sleek and functionally strong abdominal muscles, a strong and supple back, and aligns the shoulder girdle.

## 7190, 7290, 7390, 7490 – Yoga

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

For centuries eastern medicine has sought to study the invisible energy, or Chi/Qi, which powers the human being. With modern technology/ science the Chi/Qi has become visible in our neurological pathways. What was once called “Blocked Chi/Qi” can now be described in biomechanical terms as injury, low oxygen intake, and muscular imbalance/ fatigue. The ancient practice of Yoga is helpful in promoting balance in the total human body. Asanas-poses, work proper anatomical alignment, increase muscular coordination and endurance, as well as stretch and tone muscle systems. Focus on efficient breathing aids in the work of the asanas, and helps break “stress cycles.” The coordination of Yoga helps with injury prevention.





## 7100, 7400 – Badminton

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This elective will teach participants proper technique and practice of the serve, forehand, backhand, clear, smash, drop shot skills required to effectively perform the activity. Students will learn the rules of doubles and singles play along with game strategy for both defense and offense and effective partner communication during competition. Tournament play will also be introduced to students during this elective.

## 7215, 7315 – Games/Basketball

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This elective will introduce students to a variety of mini units such as floor hockey, indoor soccer Olympic handball and basketball. Students will learn, practice and utilize the necessary skills and technique to effectively perform these activities during game situations. Emphasis is also placed on knowledge of the rules as well as in game participation and strategies for successful outcomes.

## 7260,7360 – Cardio Kick-Boxing

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This activity is a popular offering at health clubs throughout the country. It is a lifetime activity that promotes cardio-vascular health through a total body workout. This class will develop the student's flexibility, upper body strength, coordination, timing, and cardiovascular strength. The combination of boxing and lower extremity routines put to music promotes overall strength while maintaining an element



of fun. It is also a good lead-up activity to related areas such as muscle toning, general fitness and enhancing self-confidence along with introducing students to physiology concepts such as target and resting heart rate, recovery times and endurance.

## 7135,7435 – Outdoor Games/Ultimate Frisbee

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Students will have the opportunity to participate in a variety of traditional and non-traditional games with the emphasis on the fun of playing and group cooperation, rather than winning. Students will also learn the throwing and catching skills, rules and strategy of Ultimate Frisbee which will be applied to both game and recreational activities.

## 7240, 7340 – Fencing

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This class will introduce students to the sport of fencing. The skills to be covered include: salute, on guard, advance, retreat, beat, disengage, thrust, lunge, four parries. Once the skills are taught, students will bout against each other and learn how to direct and judge a bout. Fencing is not simply about overpowering or outpacing an opponent. Students will be introduced to planning and strategy concepts which will consider not just use of the foil, but every movement of your body and how this combination leads to a successful outcome in fencing bouts.



## 7150, 7450 – Fitness Concepts and Practices

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Students selecting this activity will examine a variety of means to develop cardiovascular endurance. Students will learn lifetime fitness activities such as fitness walking, geo-caching and how to perform fitness assessment skills such as assessing resting and target heart rates, cardiovascular fitness, flexibility and muscular strength and endurance. Students will develop fitness plans based on these assessment scores.

## 7110 – Football (Theory/Skills)

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

The aim of this course is to increase the knowledge and appreciation of football in a non-contact setting. Basic skills such as throwing, catching and punting will be taught in preparation for game situations. Offensive and defensive techniques will be taught along with teamwork and game strategies.

## 7445 – Golf

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

The course will include basic instruction using woods and irons in the golf swing for driving and putting along with rough and bunker play strategies. Golf etiquette and scoring will be learned and applied while playing on our pitch and putt course. A field trip to driving range/golf courses will be planned near the end of the quarter.



## 7220, 7320 – Volleyball

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Students will be taught all of the requisite skills to play the game which will include forearm pass, overhead pass, serving techniques and spikes/kills. Students will learn to effectively communicate in modified game situations and learn position and game play strategies. Students will then apply the learned skills to a tournament round robin format at the end of the unit.

## 7130, 7430 – Recreational Games

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This elective will be a series of mini units which will introduce students to the less traditional activities such as bocce ball, croquet, table tennis and bowling. Students will learn the basic techniques and rules required to effectively perform these activities and apply the learned skills and knowledge to activity situations.

## 7365 – Total Body Conditioning

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Total body conditioning will teach students how to achieve muscular, strength and endurance, cardiovascular fitness, flexibility and agility in the non-traditional setting. Students will work with thera-bands, medicine balls agility ladders and use student partners to develop progressive resistance exercise routines which will be goal oriented in achieving and learning how to improve all components of physical fitness using minimal equipment.



## 7155, 7455 – Rollerblading

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This course will provide students with the basic fundamentals of rollerblading, beginning with gliding, stopping and turning and progressing to more advanced skills. All students will be required to wear all safety equipment which includes a helmet, elbow pads, knee pads, and wrist guards. All equipment, including skates, are provided by the school. This course will be taught in an indoor setting, the field house, before progressing to outdoor activities. Cardiovascular fitness and other programs developed for rollerblading will be introduced.

## 7425 – Softball

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This unit will teach students the basic skills of fielding grounders and fly balls, throwing, catching, batting and bunting. Students will be introduced to game play in a fun and non-competitive environment which will stress team play, strategy and rules and fun! All equipment will be provided by the department.

## 7270, 7370 – Strength and Fitness Training

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

This course will introduce proper strength and fitness training principles which will include muscular strength and endurance, flexibility, cardiovascular endurance and agility. The will take place in the LHS Fitness Center and students will be introduced to safety concepts, proper lifting technique, basic cardiovascular training, core





training, and will apply this knowledge to design an individualized exercise program. Students will apply these principles with use of selectorized, plate loaded and free weights along with proper use of the cardiovascular equipment in the center.

## 7105 – Tennis/Games

**½ credit – quarter**

**Level: No Level**

*Prerequisites:*

*None*

Students will learn the following skills: serving the ball and returning the ball with forehand and backhand strokes, the drop shot, overhead smash, top and reverse spins, ball placement, scoring, game rules and strategies. Students will be divided by ability within each class and will apply the learned skills and strategies to singles and doubles game play. Students will also be introduced to outdoor game options which will include Pickle Ball, Frisbee, and modified tennis games.



# Science

## Program Overview

The Science Department offers a comprehensive program designed to satisfy a variety of student interests and needs. All freshmen are required to take environmental earth science. Sophomores study biology. Juniors study chemistry and seniors either physics or astronomy. Two elective courses (in robotics and physics) are offered for seniors who are co-enrolled in physics. Science courses are offered at varied levels of study as described below. Special interest courses are not leveled. Students are urged to discuss course selection with staff members if they are not sure of appropriate placement. Students should observe any listed pre- and/or co-requisites. Deviation from the stated pre- or co-requisite for any course requires the approval of the Science Department Head. In those instances where a final exam is indicated, this exam will count as 10-20% of the year's grade. In courses where there are multiple sections, the final exam will be common across all sections.

## Academic Expectations

The Science Department assumes “primary responsibility” for assisting students in achieving proficiency in Academic Expectations 5 (Data Analysis), 6 (Reasoning), 7 (Technology), and 8 (Understanding Context). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other school-wide academic expectations.





## Environmental Earth Science

Environmental Earth Science courses are full-year courses that introduce the student to the basic principles of astronomy (4106 & 4108 only), meteorology, climatology, ecology, engineering, fresh water systems and oceanography. These courses emphasize experimental investigations and encourage the development of analytical thinking.

### 4108 – Honors Environmental Earth Science

**5 credits**

**Level: Honors**

*Prerequisite:*

*Grade of A in eighth-grade Science, completion of Algebra I and teacher recommendation*

This course and its laboratory component are designed to provide a comprehensive study of Environmental Earth Science concepts for students who are interested in the subject and are highly motivated, independent learners. Reading skills well above grade level and an ability to deal with abstract concepts are required. Students will develop their investigatory skills through laboratory and project work that builds on middle school experiences. Students are expected to be able to meet deadlines and to have well-developed organizational skills. Students will fulfill an environmental stewardship requirement and complete a long-term family energy survey outside of class time. An extensive assignment including readings and written work will be given over the summer preceding the course. Mid-year and final exams will be given.

### 4106 – Environmental Earth Science

**5 credits**

**Level: CP1**

*Prerequisite:*

*Teacher Recommendation*

This college preparatory course and its laboratory component are designed to provide an investigative survey of the scientific principles associated with the Environmental Earth Sciences. Laboratory work includes directed study that continues to build upon the skills



developed in middle school. Grade-level reading skills are expected. Students will conduct a long-term family energy survey. Mid-year and final exams will be given.

## 4104 – Conceptual Environmental Earth Science

**5 credits**

**Level: CP2**

*Prerequisite:*

*Teacher recommendation*

This course and its laboratory component are designed to provide an investigative survey of the scientific principles associated with the Earth Sciences. Laboratory work will continue to build on the inquiry skills developed in middle school. A strong emphasis will be placed on the continued development of organizational skills, previewing and other reading tactics, note taking, measurement, graphing and analysis of data. In addition to regular class work, students will participate in an independent project. Mid-year and final assessments will be administered.



## Biology

All Biology courses are full-year introductory survey courses which cover characteristics of all living things. The units include, but are not limited to biochemistry, cell biology, genetics, evolution, physiology, anatomy, reproduction, development and biodiversity. Students regularly participate in laboratory investigations including (but not limited to) microscopy, cell physiology, food biochemistry, dissection, natural selection models, DNA extractions, chromatography, genetics, human physiology and plant anatomy.



## 4209 – AP Biology

**6 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Teacher recommendation*

This course and laboratory component provide for study at the most advanced conceptual level. Because the introductory survey curriculum is so rich, students are required to complete an independent study of a curricular unit, following guidelines provided by the department, during the summer before sophomore year. In addition to the regular class work, students will design and execute an original research investigation independent of class time. A final exam will be given. Those who work successfully in this course are encouraged to take the Advanced Placement Examination in Biology.

## 4206 – Biology

**5 credits**

**Level: CP1**

*Prerequisite:*

*Teacher recommendation*

This course and laboratory component are designed to provide a survey of biological principles for students who are interested in the subject and have demonstrated high motivation. Reading skills above grade level and ability to deal with abstract concepts are expected. A final exam will be given. Students who work successfully in this course are encouraged to take the SAT Subject Test in Biology.

## 4204 – Conceptual Biology

**5 credits**

**Level: CP2**

*Prerequisite:*

*Teacher recommendation*

This course and laboratory component are designed to provide students with a working knowledge of biological principles. It can serve as an important component of college preparatory study. Students enrolled in this course will use an iPad as a learning tool. Grade-level reading skills are expected. A final exam will be given.



## Chemistry

Students who take full-year courses in chemistry become familiar with chemical principles and applications including the SI metric system of measurement, scientific notation, dimensional analysis, atomic structure, periodic relationships, chemical bonding, gases and kinetic theory, molecular structure, types of chemical reactions and quantitative relationships, solution chemistry, energy relationships, and equilibrium.

### 4309 – AP Chemistry

**6 credits**

**Level: Advanced Placement**

*Pre-requisite:*

*Math 3 (or exceptional performance in Math 2B/3A).*

*Co-requisite:*

*Math 4 (or Math 3B/4A) and teacher recommendation*

This course and laboratory component provide for study at an advanced conceptual level. Each student will design and execute an independent research investigation outside of class time. Because the chemistry curriculum is so demanding, students are required to complete an independent study of curricular units, following guidelines provided by the department, during the summer before junior year and during the school year. A final exam will be given. Those who work successfully in this course are encouraged to take the Advanced Placement Exam in Chemistry.



## 4306 – Chemistry

**5 credits**

**Level: CP1**

*Pre-requisite:*

*Math 2*

*Co-requisite:*

*Math 3 and teacher recommendation*

This course and laboratory component are designed to provide a survey of chemical principles for students who are interested in the subject and who have demonstrated high motivation. An ability to deal in abstract concepts is expected. Mid term and final exams will be given.

## 4304 – Conceptual Chemistry

**5 credits**

**Level: CP2**

*Prerequisite:*

*Teacher recommendation*

This course and laboratory component are designed for students who want a working knowledge of chemical principles. It can serve as an important component of college preparatory study. In Conceptual Chemistry a number of techniques and activities will be used to investigate the composition, structure and properties of substances and the changes they undergo. As the year progresses, students will learn the means by which chemical information is collected and use that information to solve problems and develop an understanding of the role of chemistry in society and everyday life. Mid-term and final exams will be given.





## Physics

Physics studies the interrelationship between matter and energy. Students will become familiar with concepts from the areas of kinematics, force and motion, momentum, energy and work. Additional units may include wave motion, optics, electrostatics, electricity, and magnetism.

### 4419 – AP Physics C

**6 credits**

**Level: Advanced Placement**

*Co-requisite:*

*AP Calculus 3359 or 3369 and teacher recommendation*

APC Physics is designed at a mathematically advanced level to provide in-depth treatment of the two cornerstone topics of classical physics: mechanics and electricity and magnetism. Calculus is used where appropriate in presenting derivations, in problem solutions, and in laboratory work. In addition to the regular class work, students will complete an independent project. A final exam will be given. All students enrolled in this course are encouraged to take the Physics C Advanced Placement Examinations.

### 4409 – AP Physics I

**6 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Advanced Mathematics (3348, 3346)  
and teacher recommendation*

AP Physics I is a course designed at an advanced level to provide in-depth treatment of the two cornerstone topics of classical physics: mechanics and electricity and magnetism without using calculus. Most of the assignments, tests and class work deal with problem solving using mathematical relationships. In addition to the regular class work, students will complete an independent project. A final exam or project will be given. Students who work successfully in this course are encouraged to take the Physics I Advanced Placement Exam.





## 4448 – Extended Physics Topics

**1 credit(s) – 2 blocks per week for 1 semester**

**Level: Honors**

*Co-requisite:*

*AP Physics I or AP Physics C*

Extended Physics Topics is a course designed at an advanced level to provide treatment of additional physics topics not covered in the AP Physics courses. This course will not require the use of calculus. Most of the assignments, tests and class work deal with problem solving using mathematical relationships. Topics include fluids, thermodynamics, geometric and physical optics, wave-particle duality, and radioactive decay. Students who work successfully in this course may choose to take the Physics 2 Advanced Placement Exam.

## 4406 – Physics

**5 credits**

**Level: CP1**

*Prerequisite:*

*Algebra 2 and Teacher recommendation*

This course and laboratory component are for motivated students who are interested in science. Homework will be assigned on a regular basis. Students will use algebra and basic trigonometric functions to do lab work and solve problems. An in-class engineering project will be assigned and a final exam will be given.

## 4404 – Conceptual Physics

**5 credits**

**Level: CP2**

*Prerequisite:*

*Teacher recommendation*

This course will provide students with a working knowledge of basic physics concepts. Students will strengthen their ability to gather and make sense of data through lab investigations and classroom activities. An in-class engineering project will be assigned. Mid-year and final exams will be given.



## Other Courses

### 4516 – Astronomy

**4 credits**

**Level: CP1**

*Prerequisite:*

*Algebra 2*

An introduction to Astronomy, this class will focus on the application of physics to the study of the universe. Intended for highly motivated seniors interested in science, this class expects students to think critically as well as to make use of mathematical reasoning in the solving of problems related to astronomical phenomena. Students will be expected to complete bi-weekly problem sets and a year-long research project. Topics covered: the night sky; the history of observational astronomy; physical laws of radiation and motion; stellar evolution including supernovae and black holes; binary stars; galaxies; cosmology. A final exam will be given.

### 4550 – Introduction to Robotics and Engineering

**2 credits – semester**

**Level: No Level**

*Co-requisite:*

*Physics*

This course is designed to introduce students to the practical engineering applications of basic principles in the fields of computer programming and electricity and electronics. The course activities take a hands-on approach to the design process used by engineers and technicians in creating programmable electronic devices. The course begins with an introduction to microcontrollers and progresses through the many challenges associated with the building and programming of a small robot, incorporating the concepts of motor control and interfacing to the real world through the use of sensor input.

## 4095 – Research Projects

**1 to 6 credits**

**Level: No Level**

This course is available to juniors and seniors who are self-motivated and interested in working in a specific area of science. This course may not replace core science requirements. The projects can involve individual research, surveys, drawings, model building, equipment construction, multi-media material development, computer program design or student teaching. All projects are individually designed. Students are required to make a presentation of their work to members of the science faculty. The students must obtain a sponsor teacher and must present the project plan through the sponsor to the Science Department Head. Grading will generally be on a pass/fail basis.

## 4093 – Science Teaching Assistant Program

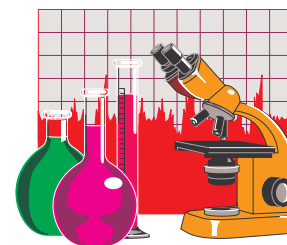
**1-4 credits**

**Level: No Level**

*Prerequisite:*

*Teacher and Department Head recommendation*

Under the close supervision and guidance of mentor teachers, students serve as teaching assistants to provide additional support for students who struggle in our science courses. Teaching assistants experience first-hand the teaching and learning process from an educator's perspective, come to understand and value what it takes to make science accessible to all students, and make connections with younger students that foster academic achievement and meaningful relationships. If you are interested in becoming a teaching assistant, please see your current science teacher or the science department head for more detailed information





# Social Studies

## Academic Expectations

The Social Studies Department assumes “primary responsibility” for assisting students in achieving proficiency in Academic Expectations 1 (Writing), 2 (Reading), 5 (Data Analysis), and 8 (Understanding Context). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations outlined on page *vi* of this *Program of Studies*. In addition to the areas of primary responsibility listed above, the debate courses also assume primary responsibility for the Academic Expectations 3 (Speaking) and 4 (Listening).



**T**he Social Studies Department offers programs for each of the four grade levels at the High School: World History I for grade 9, World History II for grade 10, Issues in United States History for grade 11, and social science electives for grades 9 through 12. Most social studies courses require a summer reading assignment.

## Summer Reading

The summer reading list will be available in the Main Office and online <<http://lps.lexingtonma.org/domain/419>> after June 1.

## Social Studies Required Classes

### Ninth Grade

2100 - World History I

### Tenth Grade

2204 - Level 2 World History II

2206 - Level I World History II

2209 - AP World History II

### Eleventh Grade

2304 - Level 2 Issues in American History

2306 - Level 1 Issues in American History

2309 - AP United States History

## Grade 9 – Requirement

### 2100 – World History I

**4 credits**

**Level: No Level**

World History I is organized by geographic regions and addresses the ways leadership, trade, innovation, religion and philosophy impacted ancient and medieval societies. The course is teamed with 9th grade English and required of all ninth grade students. The English/Social Studies team works together to build a foundation of knowledge, academic skills and study habits. There will be a clear and consistent inclusion of non-western cultures so that the cultural pluralism of our present world can be better appreciated.

## Sophomores will select one of the following:

### 2204 – World History II

(paired with English 1204)

**4 credits**

**Level: CP2**

*Prerequisite:*

*Recommendation of World History I teacher in accordance with the procedure as described in “The Course Selection Process”*



This course emphasizes the study of the modern world from 1500 to the present. The course is global in nature examining history throughout the world. It is a presentation of fundamental concepts and principles inherent in the study of history including economic, social, and political forces. There is a strong emphasis placed on the continued development of organization skills, previewing and other reading tactics, note taking, geography, and map reading. Students will be expected to complete regularly assigned reading and writing assignments. Materials employed in this course include primary source documents, selected literature, and a high school level text.

## 2206 – World History II

**4 credits**

**Level: CP1**

*Prerequisite:*

*Recommendation of World History I teacher in accordance with the procedure as described in “The Course Selection Process”*

The study of modern world historical events (1500 to the present) constitute the main thrust of this course. The course is global in nature examining history throughout the world. There will also be an emphasis on analysis of global issues relevant to the present. Good writing skills are essential for success in this course. Students will be expected to complete regularly assigned major reading and writing assignments including short research papers, projects and presentations. Materials employed in this course include primary source documents, selected world literature and a high school-level text.

## 2209 – AP World History II

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*A- or better in World History I and recommendation of World History I teacher in accordance with the procedure as described in “The Course Selection Process”*

The focus of this course is to prepare students to take the Advanced Placement Exam in World history. The course will focus upon the time period from approximately 6000 B.C.E. to the present. Students will



look at truly global history by identifying global patterns and processes that have affected human history throughout time. The course will stress six themes: the impact of interaction, change and continuity, the impact of technology and demography, social structure and gender, cultural and intellectual developments, and politics. Students will read extensively from new scholarship, as well as primary source documents, literature, and a college level text. Class discussions are important in this non-lecture based course and will revolve around dilemmas in world history. Students will be assessed through participation in reading discussions as well as through extensive writing practice.

Free response essay question practice will include change-over-time essays as well as comparative essays. Students will also learn the art of reading, answering, and creating document-based questions. Strong writing, analytic, and reading skills, as well as a strong work ethic, are needed to succeed in this class. Students enrolled in this course are expected to take the AP Exam in World History.

## **Courses Open to Juniors**

### **Juniors will select one of the following:**

#### **2309 – AP United States History**

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Successful completion of 2204, 2206, 2209 in accordance with the procedure as described in “The Course Selection Process”*

This course is designed for students who have a strong interest in history as a discipline and want to work with advanced materials in an enriched program. Course 2309 is a survey of United States History focusing on key controversies and conflicts which helped to shape the social, political, economic and diplomatic history of this nation. Students will acquire a comprehensive knowledge of American history while developing skills to deal with documentary and interpretive materials. Class discussions will revolve primarily around significant issues of each historical period. Both interpretive and research papers are required. Students will be expected to complete regularly assigned major reading and writing assignments. Excellent writing skills are



essential for success in this course. Materials employed in this course include primary source documents, selected literature and a college-level text. This course prepares students for the AP exam in U.S. History.

## 2306 – Issues in American History

**4 credits**

**Level: CP1**

*Prerequisite:*

*Successful completion of 2204, 2206, 2209 in accordance with the procedure as described in “The Course Selection Process”*

This course includes a unit on the Constitution but focuses on issues of the post-Civil War to the contemporary era and is taught with greater attention given to the practice and development of academic and thinking skills. There will also be an emphasis on analysis of public issues relevant to the present. A research paper is required. Good writing skills are essential for success in this course. Students will be expected to complete regularly assigned major reading and writing assignments. Materials employed in this course include primary source documents, selected literature and a high school-level text.

## 2304 – Issues in American History

**4 credits**

**Level: CP2**

*Prerequisite:*

*Successful completion of 2204, 2206, 2209 in accordance with the procedure as described in “The Course Selection Process”*

Beginning with a unit on the U.S. Constitution, the primary focus of instruction is on issues of the post-Civil War to the contemporary era. This course is designed to devote more attention and time to both basic and secondary skills. There will also be a greater emphasis placed on the discussion of current public issues. The post-1865 period will be the primary focus. Students will be expected to complete regularly assigned reading and writing assignments. Materials employed in this course include primary source documents, selected literature and a high school-level text.





## Social Studies Electives

### Electives open to grades 9 -12

- 2656 – Introduction to Law
- 2616 – Child Psychology
- 2780 – Introduction to Journalism (Interdisciplinary)
- 2820 – Introduction to Lincoln-Douglas Debate
- 2810 – Introduction to Policy Debate
- 2716 – Introduction to Business
- 2726 – Introduction to Personal Finance
- 2666 – Introduction to Economics

### Electives open to grades 10 -12

- 2626 – Adolescent Psychology
- 2818 – Policy Debate
- 2828 – Lincoln-Douglas Debate
- 2838 – Public Forum
- 2756 – Marketing
- 2536 – International Relations
- 2556 – East Asian Studies

### Electives open to grades 11-12

- 2516 – United States Government and Politics
- 2580 – Facing History: The Holocaust and Other Genocides
- 2576 – Civil Rights Movement
- 2456 – Conflict in the Modern World
- 2590 – Race, Gender & Human Behavior (not offered in 2014-15)
- 2776 – Media Studies
- 2438 – Political Thought
- 2766 – Positive Psychology: The Pursuit of Happiness

### Electives open to grade 12 only

- 2416 – American Popular Culture in the 20th Century
- 2479 – AP Human Geography
- 2488 – Field Research in America's History
- 2649 – AP Psychology
- 2469 – AP European History (not offered in 2014-15)
- 2679 – AP Economics
- 2090 – Independent Study (approval required)



## 2416 – American Popular Culture in the Twentieth Century

**2 credits – semester**

**Level:** May be taken for honors or level one credit. Students may sign up for honors credit (2418) during the add/drop period through consultation with the teacher

*Prerequisite:*

*Open to seniors only*

From vaudeville to television; from Valentino to Elvis; from Stephen Foster to the Beatles; from Houdini to hip hop; from the Model T to muscle cars—what were the cultural styles, trends and myths which linked Americans together throughout the 20th century, and in doing so helped shape our national character? This course will focus upon trends in popular culture that were embraced by mainstream Americans in the 20th century. By studying theater, film, music, fashion, television, eating habits, magazines, advertising, cars and other aspects of our culture students will gain a broader understanding of the non-political aspects of American history. The teacher will generally focus on popular entertainment, especially music, film and television while students will be required to do several individual projects on aspects of American popular culture that appeal to their personal interest areas. The goal of this class is to give students cultural literacy and an opportunity to view history from a different perspective than focusing primarily on the deeds and accomplishments of great men and women.

## 2479 – AP Human Geography

**4 credits – year**

**Level:** Advanced Placement

*Prerequisite:*

*Open to seniors only in accordance with the procedure as described in “The Course Selection Process”*

This course will provide students with advanced training in thinking spatially about their world. Units of study will focus on demography (population), culture, women, politics, economics, and the environment from geographic perspectives. Through this approach, students will gain an awareness of the relevance of geography in preparing them for the global marketplace. By employing sophisticated technol-

ogy, students will be able to analyze and interpret geographic data and its connections to economic factors around the globe. The course content prepares students to take the AP Geography exam.

## 2469 – AP European History

– (Not offered in 2014-2015)

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Recommendation of U.S. History teacher. Open to seniors only in accordance with the procedure as described in “The Course Selection Process”*

The focus of this course is to prepare students to take the Advanced Placement Exam in European History. In addition to providing a basic narrative of events and movements in European History from 1450 to the present, there are four goals addressed in this course: 1) to develop an understanding of the principal themes in Modern European History; 2) to develop an ability to analyze historical evidence; 3) to develop historical habits of mind; and, 4) to develop an ability to express historical understanding in writing. The major categories for study will be Intellectual and Cultural History, Political and Diplomatic History, and Social and Economic History. Class discussions will revolve primarily around significant issues in European History. Students will be expected to complete regularly assigned major reading and writing assignments. Excellent writing skills are essential for success in this course. Materials employed in this course include primary source documents, selected literature and a college-level text. Students enrolled in this course are expected to take the AP Exam in European History.

## 2616 – Child Psychology

**2 credits – semester**

**Level: May be taken for honors or level one credit for students in grade 10-12. Grade 9 students may only take the course for Level 1 credit only. Students may sign up for honors credit (2618) during the add/drop period through consultation with the teacher**

This course is designed to introduce students to various aspects of child development including physical growth, intellectual develop-



ment, moral and social development. The students will gain an awareness of how children think, behave, and reason at various ages and how they develop socially as it relates to gender and culture.

## 2626 – Adolescent Psychology

**2 credits – semester**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2628) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to sophomores, juniors and seniors.*

Adolescence is a time of change, growth, experimentation and development of identity. The course will focus on the social and cognitive development of the adolescent. Units examining various psychological perspectives, personality and identity development, communications, and well-being will be discussed.

## 2649 – AP Psychology

**4 credits – year**

**Level: Advanced Placement**

*Prerequisite:*

*Open to seniors only in accordance with the procedure as described in “The Course Selection Process”*

This rigorous, full-year AP Psychology course is designed to introduce students to the scientific study of behavior and mental processes. The fundamental principles of psychology will be introduced with an emphasis on research and application of theory to everyday life. Numerous subfields in psychology will be studied such as perception, learning, motivation, personality and social psychology, among others. There is an additional emphasis on ‘active’ learning and critical thinking. The course will offer a learning experience equivalent to that obtained in a college introductory course. In addition to a college-level text, there will be substantive required readings, and several analytical papers. Students will be prepared to take the AP Psychology exam. See the Social Studies Department website for further information.



## 2656 – Introduction to Law

**2 credits – semester**

**Level: May be taken for honors or level one credit for students in grade 10-12. Grade 9 students may only take the course for Level 1 credit only. Students may sign up for honors credit (2658) during the add/drop period through consultation with the teacher**

This course addresses the “Bill of Rights,” criminal law, civil law, contemporary legal issues and cases, and great trials in American History. Students will participate in mock class trials, discussions, readings and class activities.

## 2438 – Political Thought

**2 credits – semester**

**Level: Honors**

*Prerequisite:*

*Open to juniors and seniors only upon recommendation of the teacher in accordance with the procedure as described in “The Course Selection Process”*

This course examines the ideas of various philosophers from ancient through modern times. Extensive outside reading is a crucial component of the class.

## 2516 – U.S. Government and Politics

**2 credits – semester**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2518) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to juniors and seniors*

U.S. Government and Politics will give students an analytical perspective on government and politics in the United States. This course includes both the study of the national government structure and general concepts used to interpret U.S. politics. Students will gain a familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. politics.



## 2776 – Media Studies

2 credits – semester

**Level: May be taken for honors or level one credit. Students may sign up for honors credit during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to juniors and seniors only.*

Understanding the role media plays in our lives is imperative. Information is constantly updated, available, streaming into our lives, whether from TV, movies, newsprint, and, of course, the internet. Where is the information coming from? Who controls its flow? How do we determine the merit and value of the information? In this course, students will compare documentary films to Hollywood productions; compare the different ways news is presented, from newsprint and radio, to network and cable TV; and research the role the internet plays in access to information. Students will analyze their roles as information providers by examining their own digital footprints. How do we want to appear to the outside world (to future employers or college admissions officers) vs how we actually appear with just a few simple internet searches.

## 2780 – Introduction to Journalism

See Interdisciplinary Courses – page 43

## 6631 – Jazz in Society – Civil War to Great Depression

See Interdisciplinary Studies – page 43

## 6632 – Jazz in Society – Great Depression to the present

See Interdisciplinary Studies – page 43



## 2810 – Introduction to Policy Debate

**4 credits**

**Level: No Level**

*Prerequisite:*

*Priority will be given to freshmen. Permission of the instructor required for Upperclassmen.*

This is an introductory course in policy style team debate and other oral competition. Thinking skills, current events, research, and oral expression are stressed. Students will work closely with both a partner in the class and a mentor from the varsity program. Policy students learn how to advocate for themselves and consider all sides of an issue. All students participate in interscholastic forensics tournaments. After-school practice is required. Weekend travel in the Northeastern United States is involved, with most expenses paid. Prizes may result from tournament competition. This course is required for any student who wants to compete interscholastically in the nationally-ranked policy team while at Lexington High School. The Policy format differs from Lincoln-Douglas debate in it requires work with a partner. You need no previous experience to start, although it helps if you like to think and argue!

**Note: The debate team relies on the fundraising efforts of the active parents organization that all parents are encouraged to join.**

## 2818 – Policy Debate

**4 credits**

**Level: Honors**

*Prerequisite:*

*Permission of the instructor required for students who have successfully completed 2810*

This course explores argumentation theory, attempts to prepare debaters for varsity competition and introduces additional forensic activities. Interscholastic forensic competition and after-school practices are required.

**Note: The debate team relies on the fundraising efforts of the active parents organization that all parents are encouraged to join.**



## 2820 – Introduction to Lincoln-Douglas Debate

**4 credits**

**Level: No Level**

*Prerequisite:*

*Priority will be given to freshmen. Permission of the instructor required for Upperclassmen.*

This is an introductory course in competitive speaking and the requirements of formal one-on-one Lincoln-Douglas debate. Thinking skills, development of skills of philosophical reasoning, and oral argument are stressed. Like Policy Debate, students are required to participate in interscholastic tournaments that involve regional weekend travel with most expenses paid and in which they may win awards. Practice after school is also required. Lincoln-Douglas debaters compete on multiple resolutions, which have ranged in the past from topics such as environmental law to First Amendment rights. This course is required for any student who wants to compete interscholastically in Lincoln-Douglas or Public Forum debate while at Lexington High School. The Lincoln-Douglas format differs from policy debate in its emphasis on philosophy and individual competitions.

**Note: The debate team relies on the fundraising efforts of the active parents organization that all parents are encouraged to join.**

## 2828 – Lincoln-Douglas Debate

**4 credits**

**Level: Honors**

*Prerequisite:*

*Permission of the instructor required for students who have successfully completed 2820.*

This course explores argumentation theory and advanced philosophical concepts in order to prepare debaters for varsity competition. Interscholastic forensic competition is required.

**Note: The debate team relies on the fundraising efforts of the active parents organization that all parents are encouraged to join.**





## 2838 – Public Forum

4 credits

**Level: Honors**

**Description and prerequisite updated after publication (3/16/12)**

*Prerequisite:*

*Permission of the instructor required for students who have successfully completed 2810 or 2820.*

This is a varsity course in public forum style team debate. Thinking skills, current events, research, and oral expression are stressed. Students will work closely with a partner in the class. Public forum students debate the National Forensics League topics, which change monthly. All students participate in interscholastic forensics tournaments. After-school practice is required. Weekend travel in the Northeastern United States is involved, with most expenses paid. Prizes may result from tournament competition. This course is required for any student who wants to compete interscholastically in the nationally-ranked debate team while at Lexington High School. The Public Forum format differs from Lincoln-Douglas and Policy debate in that speeches are tailored for judges with little or no debate experience. You need to have completed either the Introduction to Lincoln-Douglas or Policy Debate course to join the Public Forum class.

**Note: The debate team relies on the fundraising efforts of the active parents organization that all parents are encouraged to join.**

## 2536 – International Relations

2 credits – semester

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2538) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to sophomores, juniors and seniors*

International Relations seeks to evaluate the priorities of U.S. Foreign Policy and how these priorities should be balanced alongside the various interest groups and stake holders involved. Some of the themes might include human rights, globalization, nuclear proliferation, economic development, sovereignty, international law, terrorism, international organizations, and geography. Current events and case studies will be examined throughout the course.



## 2556 – East Asian Studies

**2 credits – semester**

**Level: 1 or honors credit**

*Prerequisite:*

*Open to sophomores, juniors and seniors.*

The East Asian Studies course allows students to not only explore the distinct yet intertwined histories of China, Japan and Korea, but also the social, political and economic issues facing these nations in the 21st century. East Asian Studies also looks at the interactions of China, Japan and Korea in the context of international events. The course is, by nature, interdisciplinary, and material for the course will draw from historical and contemporary texts, art and pop culture.

## 2666 – Introduction to Economics

**2 credits**

**Level: May be taken for honors or level one credit for students in grade 10-12. Grade 9 students may only take the course for Level 1 credit only. Students may sign up for honors credit (2668) during the add/drop period through consultation with the teacher**

Economics is a discipline that is deeply intertwined in our everyday lives. Every decision that we make as individuals and as nations is an economic decision. The study of economics not only endows students with a content rich framework for understanding many complex institutions that impact our lives, but it also fosters the development of critical thinking skills. In order for students to successfully participate in an increasingly complex and globally interconnected world it is critical that students acquire a basic level of economic literacy along with analytical and conceptual skills that enable students to interpret complex events, interactions and sets of data. The primary goals of this course are to foster basic economic literacy and economic thinking skills that will enable students to think critically and to make better informed personal and public decisions.



## 2679 – AP Economics

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*Open to seniors only in accordance with the procedure as described in “The Course Selection Process”*

The purpose of this course in micro and macroeconomics is to provide students with a thorough understanding of the principles of economics that apply to economic systems. Students will develop an economic way of thinking and problem solving for decisions they will make as consumers, members of the work force, citizens, voters, and participants in a larger economic system and global marketplace. The course places particular emphasis on the study of national income and price determination and develops students’ familiarity with economic performance measures, economic growth, and international economics. Students will have the opportunity to compete in the Annual National Council on Economic Education Economics Challenge. This course will prepare students for the AP exams in microeconomic and macroeconomics.

## 2580 – Facing History and Ourselves: The Holocaust and Other Genocides

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Open to juniors and seniors*

Using the Holocaust as our central case study, students will examine how these atrocities began, what role “ordinary” citizens had in the genocides, and what we can do today to keep crimes against humanity from occurring again. We will supplement this by studying other genocides, such as those that have taken place in Armenia, Cambodia, the former Yugoslavia, Rwanda, and Darfur. Students will investigate the reaction of other countries, especially the United States, to these genocides. Students will also examine ideas of justice and how to achieve justice after atrocities. They will contemplate their roles and responsibilities as American and global citizens and the potential for wide-reaching impact that every individual has daily. By examining



crimes against humanity, students have the opportunity to reflect not only upon the universality of racism and social injustice but also upon the importance of global awareness.

## 2590 – Race, Gender and Human Behavior

– (Not Offered in 2014-2015)

**2 credits – semester**

**Level: No Level**

*Prerequisite:*

*Open to juniors and seniors*

This course will examine ideas of race and gender and the notion of difference: What do you do with a difference? What has our society done with a difference? How has difference resulted in discrimination? These concepts and questions will be considered by examining what happens in a society when people are identified and assigned a social value based on these ‘differences.’ Students begin this examination by looking at the realities and fictions of race and gender: what is race? What is gender? How are they understood by our society at large? How do we understand both of these concepts? How do they relate to power? What can we do to stop the discrimination that has resulted from perceived differences? These ideas will be examined through readings, films and discussion.

## 2576 – The Civil Rights Movement

**2 credits – semester**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2578) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to juniors and seniors*

“We want our freedom and we want it now,” said John Lewis on August 28, 1963 during the famous March on Washington. This course is open to juniors and seniors. The goal of this course will be to analyze the quest for freedom of “Ordinary Americans” in the twentieth century. We will focus on the African American Civil Rights Movement and its legacy. Topics will include: the early movement; the rise of the Southern Christian Leadership Council; the movement in the North;

the Nation of Islam; the Black Panther Party; and the Boston Busing Crisis. Students will come to realize the impact that the movement had on their education and the Lexington community.

All students will write two to three analytical papers as well as an interview about 'historical memory.' This course is offered for either honors or level one credit; student work will be graded according to the level they choose. Students will be expected to write a book review and read supplementary reading.

## 2766 – Positive Psychology: The Pursuit of Happiness

**2 credits – semester**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to juniors and seniors only*

What makes people happy? How do we find satisfaction in our lives? How can we flourish? This course is designed to awaken within students a higher sense of what it means to live fully both in the present and throughout their lives. Through the analysis of personal and community patterns of living, the course aims to assist students in the search for personal satisfaction and well-being. This investigation naturally pulls from students' personal experiences as a valid starting point for examination of what it means to be human. Students will employ research driven strategies to develop resiliency and work to improve their abilities to deal with life's many challenges and thrive. There will be a focus on application of positive health research connected with subjects such as resilience, self-control, optimal experience, positive relationships and optimism. Students will make use of contemporary psychology frameworks in the construction of positive individual plans for both their present and future. In the process of evaluating strategies for improving their own wellness, students will consider implications of the same concepts for humanity as a whole.



## 2716 – Introduction to Business

2 credits

**Level: May be taken for honors or level one credit for students in grade 10-12. Grade 9 students may only take the course for Level 1 credit only. Students may sign up for honors credit (2718) during the add/drop period through consultation with the teacher.**

*Prerequisite:*

*None. This class is open to all students.*

This course is designed to help students become knowledgeable consumers, informed citizens, and productive workers in today's changing world. Through classroom discussions, projects, reports and students learn to develop an awareness of business practices and procedures that will influence their daily lives.

## 2726 – Introduction to Personal Finance

2 credits

**Level: May be taken for honors or level one credit for students in grade 10-12. Grade 9 students may only take the course for Level 1 credit only. Students may sign up for honors credit during the add/drop period through consultation with the teacher.**

*Prerequisite:*

*None. However, it is recommended that you take Introduction to Business before you take Introduction to Personal Finance. Open to All students.*

This course is designed to help students become knowledgeable about the world of personal finance. With topics including: time value of money, budgeting and money management, saving and investment strategies, consumer credit and credit fraud, students should develop an understanding of personal finance. This class will also try to bring in an outside speaker(s) from local bank to help give students a complete picture regarding their finances.



## 2756 – Marketing

**2 credits**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2758) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to sophomores, juniors and seniors*

Why are some products and services successful in the economic life of our country while other products never reach the consumer? This course is designed to help students become knowledgeable about the process of marketing from concept to sale. Topics covered include the development of product based on demand, the response to demand, marketing surveys, the development of a marketing plan, production, advertising and promotion. Learn the functions of marketing as practiced in business and industry today. Case studies and the creation of various marketing strategies are included in the course. The art and psychology of effective marketing techniques will also be covered.

## 2456 – Conflict in the Modern World

**2 credits**

**Level: May be taken for honors or level one credit. Students may sign up for honors credit (2458) during the add/drop period through consultation with the teacher**

*Prerequisite:*

*Open to juniors and seniors*

As we enter the 21st century the students need to understand how and why conflicts have evolved in the world today. Using a variety of sources students will learn to be consumers of the news and examine the political, military, cultural and economic conflicts through the study of current events.



## 2488 – Field Research in America’s History

**2 credits – semester**

**Level: Honors**

*Prerequisite:*

*Seniors only upon the recommendation of the US History teacher in accordance with the procedure as described in the “The Course Selection Process”*

This course will acquaint students with the process of researching and writing history. With a wealth of readily available primary sources, Lexington’s history will serve as the context for investigation. The Lexington Historical Society archives, materials in Lexington Room at Cary Library, Town Hall records, and the National Archives Northeast Branch are among the local resources the class will use. Besides shorter writing assignments, the centerpiece of the course requires students to craft a piece of original research regarding the town’s history. Students will learn to analyze a variety of evidence such as gravestone iconography, census records, photographs, oral history diaries, film. In addition, the class will address broader issues of historical interpretation and what makes “good” history.

## 2090 – Independent Study

**2 credits**

**Level: No Level**

*Prerequisite:*

*A written contract between a Social Studies staff member and the student must be formally approved in writing by the Social Studies Department Head prior to the beginning of the fall or spring semester. Seniors only.*

This elective is a planned program of study in history, geography or social science undertaken by an individual student under the guidance of a member of the Social Studies staff. The plan must represent an area of study not currently offered within the Social Studies program for senior students. *This course will be graded on a pass/fail basis.*





# World Languages

## Academic Expectations

The World Language Department assumes “primary responsibility” for assisting students in achieving proficiency In Academic Expectations 1 (Writing), 2 (Reading), 3 (Speaking), and 4 (Listening). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations .



**T**he World Languages Department offers courses in American Sign Language, Mandarin, French, German, Italian, Latin and Spanish. The department recommends that students pursue the study of at least one world language throughout their high school experience. Mastering a language is a difficult task: the longer one works at it, the more competent one will become.

In nearly all cases, it is extremely important that students follow the recommendations of their teachers when selecting courses and levels. Once a year has begun, it is often very difficult to move students from one level of instruction to another without a major schedule disruption. Final examinations comprise 20% of the year grade. The content of final examinations is the same for all sections of a given course. The study of a world language is sequential and requires continuity. Trying to resume a world language after a period of not taking any generally requires the repetition of a level previously taken and for which one cannot again receive credit.

### NOTE:

**The proficiency stages for ASL, French, German, Italian, Latin, Mandarin and Spanish are in accordance with the Massachusetts Foreign Languages Curriculum Framework and represent the level the student will strive to achieve by the end of the course. For further information, please refer to the Massachusetts Department of Education website: <http://www.doe.mass.edu/frameworks/current.html>**



# American Sign Language

## 5816 — American Sign Language I

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course provides an introduction to American Sign Language. Areas studied include the grammatical structure, usage and history of ASL. Classwork and homework assignments focus on ASL expressive and receptive skill development, utilizing interactive reinforcement drills, roleplays, dialogues and ASL storytelling. Through hands-on activities, partner and group work, students will learn to develop and enhance their receptive and expressive signing skills, while creating their own signing style.

Successful completion of ASL I fulfills Lexington High School's world language graduation requirements.

## 5826 — American Sign Language II

**4 credits**

**Level: CP1**

*Prerequisite:*

*Successful completion of ASL I.*

This course is a continuation of ASL I and it allows for students to experience a more advanced opportunity to develop and expand their ASL receptive and expressive signing skills. This course will reinforce the vocabulary and grammar skills that were already introduced in ASL I, as well as introduce more complex ASL vocabulary and grammatical structure. The goal of this course is to help students become more conversational in American Sign Language and to feel more comfortable when signing to their peers, in group and partner work and during signing presentations to the class.

Successful completion of ASL II fulfills Lexington High School's world language graduation requirements.



# French

## 5116 — French I (Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course is for students who are beginning their study of French and for those coming into the high school that would like to strengthen their basic skills. Through hands-on activities, students will learn the four basic language skills of listening, speaking, reading and writing. Songs, presentations, skits and group activities will allow students to express themselves in a variety of everyday situations. Emphasis will be on speaking and listening activities in order to give students confidence in their ability to communicate in French. Students will encounter various francophone countries throughout their studies. This course is taught progressively in French.

## 5128 — French II (Proficiency Stage 2)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or higher in 5116 and teacher recommendation*

This course is for students of proven linguistic ability who are able to rapidly acquire new vocabulary and structures. Written and oral precision will be emphasized. Using a wide variety of verb forms including the subjunctive, students will learn to communicate more confidently and spontaneously. Students will read and discuss French literature and film, including *Du lait au fiel*, *La Belle et la Bête*, and *Kirikou et la Sorcière*. Students will learn about the francophone world and gain cultural knowledge to negotiate various social contexts. This course is taught exclusively in French.



## 5126 — French II

(Proficiency Stage 2)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or higher in 5116 and teacher recommendation.*

This course will reinforce basic language skills in action. Students will learn to express themselves in a more sophisticated way, creating sentences and narratives in the past, present, and future tenses. Students are encouraged to listen, read, write, and speak in a variety of ways and contexts. Students will work to create a character that will travel with the class to Francophone settings including Switzerland, Belgium, Morocco, Senegal, Québec, and France. This course will give students a background in Francophone cultures by studying products, practices, and texts emerging from those cultures. This course is taught exclusively in French.

## 5138 — French III

(Proficiency Stage 3)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or higher in 5128 and teacher recommendation.*

This course is for very motivated students who are able to build upon a strong foundation of structures and vocabulary. The rapid acquisition of grammatical structures and idiomatic vocabulary is emphasized. Students will learn to be more creative and precise in their expression and to use language independently to inform, narrate, describe, question, and persuade as well as to express feelings and attitudes. Listening and speaking skills will be developed systematically through communicative activities related to course topics. Students will engage with and analyze *Le Petit Prince* and *Cyrano de Bergerac*. The course is taught exclusively in French.



## 5136 — French III

(Proficiency Stage 3)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5126 and teacher recommendation.*

This course is for students who are ready to appreciate the subtleties of real French speech and culture. Through the study of short films, articles, songs, poems and a popular French film, students will acquire vocabulary and speech patterns that go beyond the average textbook. Students will significantly improve their ability to understand authentic spoken French while using the language to learn about and discuss francophone cultures, and other topics of interest. On a structural level, students will use compound tenses and the subjunctive mood to articulate emotions and reactions in real-life situations, both orally and in writing. Materials include *Le Petit Prince* and *Au Revoir les Enfants*. This course is taught exclusively in French.

## 5148 — French IV

(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5138 and teacher recommendation*

In this course, students will progress into a serious study of language from both a structural and literary angle. Students analyze complex, full-length, authentic texts to attain linguistic precision and cultural knowledge. Students will master and perfect their use of language, both written and oral, with an eye towards native-like proficiency. Materials include *La Parure*, *L'étranger*, and *Candide*. This class prepares students for the French SAT II test and the French AP Language and Culture course. This course is taught exclusively in French.



## 5146 — French IV

(Proficiency Stage 3-4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5136 and teacher recommendation.*

In this course, students will apply their linguistic skills to increasingly diverse and culturally-rich multi-media realia. A variety of analytic and communicative activities will enable students to pursue more open-ended and creative communication. Through authentic materials, such as *Petit Nicholas*, *Arsène Lupin*, *La Parure* and *Au revoir les enfants*, students will gain confidence and fluidity in a variety of structures. This course is taught exclusively in French.

## 5156 — French V Film and Conversation

(Proficiency Stage 4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5146 and teacher recommendation.*

In this course, students prioritize thematic discussion above grammar exercises. As a topical course taught exclusively in French, this class emphasizes speaking and participation rather than written work. Students will discuss numerous francophone films: their themes, styles, perspectives, and contexts. French V is structured around key themes presented in all types of francophone cinema, including modernity, colonization, and personal responsibility towards others. The course culminates in a film festival in which students present their original French films. This course is taught exclusively in French.



## 5169 — French AP Language & Culture

(Proficiency Stage 4)

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*B or better in 5148 and teacher recommendation.*

This French V AP course is based on the six themes put forth by the AP Board: personal and public identities, global challenges, science and technology, families and communities, contemporary life, and aesthetics. This class emphasizes the interrelatedness of the themes and their relevance to global, local, and individual culture and identity. Each context unit is developed to focus discussion and encourage students to examine each sub-context from varied angles and viewpoints. The course focuses on the three modes of communication (interpretive, interpersonal, and presentational) that students have been building since their first days of French study. While this course will prepare students to take the AP exam, it is more importantly a broad look at French and francophone cultures and their relationship to our global society. This course is taught exclusively in French.

## 5195 — French Exchange Seminar

**1 credit**

**Level: No Level**

*Prerequisite:*

*This seminar is intended solely for exchange program participants.*

The course will further enhance the students' linguistic skills in listening, speaking, reading and writing. It provides students with French culture and history. Students are helped in developing oral presentations and projects to be given in the host school. Help with the necessary documentation for the trip and travel preparations are provided.



# German

## 5216 — German I

(Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course is for beginners of German. Students will learn the four basic language skills of listening, speaking, reading and writing. Presentations, skits and group activities will allow students to express themselves in a variety of everyday situations. Emphasis will be on speaking and listening activities in order to give students confidence in their ability to communicate in German. German Fest, towards the end of the school year, will be an opportunity for students to show off these skills. This course is taught progressively in German.

## 5226 — German II

(Proficiency Stage 2)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5216 and teacher recommendation.*

This is a course for students who, having developed elementary skills in German from German I and are ready to increase their proficiency in oral comprehension and in speaking, reading and writing skills. Somewhat higher levels of grammatical structures and vocabulary than in German I are studied throughout the year. Language laboratory recordings are part of this course. German Fest, towards the end of the school year, will be an opportunity for students to show off these skills. The class will be conducted exclusively in German throughout the year. Language laboratory recordings are part of this course. The class will be conducted exclusively in German.



**5236 — German III**  
(Proficiency Stage 3)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5226 and teacher recommendation.*

This is a course for students who, having successfully completed German II, are ready to substantially improve their proficiency in listening, speaking, reading and writing. This course provides an increased opportunity for idiomatic usage and self-expression, both oral and written. A variety of reading selections are introduced. Language laboratory listening and taping are an integral part of this course. German short films in the context of the discussions of modern German life are also an integral part of this course. German Fest, towards the end of the school year, will be an opportunity for students to show off these skills. This class is conducted exclusively in German.

**5248 — German IV**  
(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*C or better in 5236 and teacher recommendation.*

This course is for students who, having successfully completed German III, are ready to improve substantially in their proficiency in listening, speaking, reading and writing. This course provides an increased opportunity for idiomatic usage and self-expression, both oral and written. A great variety of reading selections are introduced, such as children's stories, Grimm fairytales, detective short stories and a novel. The writing exercises range from paragraph writing of summaries to creating a children's story or fairytale into opinion pieces in the format of an essay. German films in the context of the discussions of modern German life are also an integral part of this course. German Fest, towards the end of the school year, will be an opportunity for students to show off these skills. This class is conducted exclusively in German.



# Italian

## 5316 — Italian I

(Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course is for students who wish to begin the study of Italian. It provides a foundation in the basic skills of reading, writing, listening and speaking. There is written and oral practice with systematic repetition of words for vocabulary building. Audiovisual materials and ancillary materials are utilized. There is regular use of the language lab. This course is taught progressively in Italian.

## 5328 — Italian II

(Proficiency Stage 2)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5316 and teacher recommendation.*

This course is for students of proven linguistic ability who are able to continue the rapid acquisition of new vocabulary and structures. It continues the development of listening, speaking, reading and writing skills. Most verb tenses and basic structures are covered. Students will read and discuss authentic Italian texts. Readings are short episodes emphasizing practical use of Italian with the goal of developing vocabulary and fluency. There is regular use of the language lab. Films and cultural topics will also be explored. This course is taught exclusively in Italian.

**5326 — Italian II**

(Proficiency Stage 2)

**4 credits****Level: CP1***Prerequisite:**C or better in 5316 and teacher recommendation*

For students who have successfully developed strong basic skills in Italian I. Italian II expands reading, writing, listening, speaking skills in Italian. Speaking and writing are further emphasized. Regular language lab activities are an integral part of this course. This course is taught exclusively in Italian.

**5338 — Italian III**

(Proficiency Stage 3)

**4 credits****Level: Honors***Prerequisite:**B or better in 5328 and teacher recommendation.*

This course is for highly motivated students who are able to build upon a strong foundation of structures and vocabulary. Students will learn to be more creative in their expression and to use language independently to inform, narrate, describe, ask questions, as well as express feelings and attitudes. The analysis of literary and journalistic excerpts will increase students' vocabulary and ability to comprehend written texts. Cultural topics and Italian films in the context of modern Italian life are an integral part of this course. This class is conducted exclusively in Italian.

**5336 — Italian III**

(Proficiency Stage 3)

**4 credits****Level: CP1***Prerequisite:**C or better in 5326 and teacher recommendation*

This course builds on previously learned skills of understanding, speaking, reading and writing Italian. The vocabulary, which is reviewed and



introduced, will cover such topics as the house, arts and drama, politics, the work force, driving, the environment and multicultural society. Students will be required to utilize these topics to write creative dialogues and compositions. Grammatically, students will continue to express themselves in past, present and future situations, using the tenses learned in Italian I and Italian II. To express more abstract situations, the subjunctive will be studied. Selections from Italian literature will be studied. There will be regular work in the language lab. This class is conducted exclusively in Italian.

## 5346 — Italian IV Film and Conversation

(Proficiency Stage 4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5336 and teacher recommendation*

The main goal of this course is to speak and interact as much as possible in the target language; student participation counts for a very large percentage of the overall grade. Rather than focusing on grammar exercises, students will discuss different genres of Italian films from post World War II to modern day Italy. Students will also practice their speaking skills by presenting films of their choice and creating movies as part of their final project.

## 5348 — Italian IV

(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5338 and teacher recommendation*

The goal of this course is to prepare students to perform at a high level of proficiency in the four basic language skills: listening, speaking, reading and writing. The guidelines meet the ACTFL proficiency standards for advanced students. Upon completing the course, students are expected to be able to comprehend formal and informal Italian; to speak, read and write with a high level of proficiency. This course is taught exclusively in Italian.



## 5349 – Italian AP Language

(Proficiency stage 4)

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*B or better in 5338 and teacher recommendation*

The overall goal of this course, as set fourth by the College Board, is to prepare students to perform at a high level of proficiency in the four basic language skills: listening, speaking, reading and writing. Upon completing the course, students are expected to be able to comprehend formal and informal Italian, to speak read and write with a high level of proficiency. The course thus challenges able students while providing them a means of obtaining college credit and/or placement. Students will be prepared to take the Advanced Placement Italian Language Examination in the spring. This course is taught exclusively in Italian.

## 5395 — Italian Exchange Seminar

**1 credit**

**Level: No Level**

*Prerequisite:*

*Selection to participate in the exchange program with Italy.*

This seminar is intended solely for exchange program participants. The course will further enhance the students' linguistic skills in listening, speaking, reading and writing. It provides students with Italian culture and history. Students are helped in developing oral presentations and projects to be given in the host school. Help with the necessary documentation for the trip and travel preparations is provided.



# Latin

## 5416 — Latin I

(Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

Latin I is a fast-paced introduction to inflected language, requiring academic rigor and attention to detail. Coursework will consist of the basic grammatical structures of the Latin language, with emphasis throughout on the language as a reflection of the values and attitudes of its speakers. These concepts will be reinforced and practiced in class with individual and small-group activities and occasional games. Readings in Roman culture and study of English vocabulary through its Latin origins will be included.

## 5426 — Latin II

(Proficiency Stage 2)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or higher in 5416 and teacher recommendation*

Latin II covers the remaining Latin grammar, including the uses of infinitives, participles, and subjunctives. Students read authentic and slightly adapted readings in prose and poetry from a variety of sources, with emphasis on placing these readings within their cultural (historical, social, religious) context. At the completion of this course, students will be ready to transition to reading un-adapted, authentic Latin.

## 5436 — Latin III

(Proficiency Stage 3)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or higher in 5426 and teacher recommendation*

This is a reading course on the Aeneid of Vergil, with consideration of how the poem reflects the social/political milieu in which it was composed. There will be considerable emphasis on Vergil's adaptation of Homeric material. All students in the class (Level 1 and Honors) will

read the same selections. Students in this section will be assessed on a slightly reduced selection of readings.

### 5438 — Latin III

(Proficiency Stage 3)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5426 and teacher recommendation*

This is a reading course on the Aeneid of Vergil, with consideration of how the poem reflects the social/political milieu in which it was composed. There will be considerable emphasis on Vergil's adaptation of Homeric material. All students in the class (Level 1 and Honors) will read the same selections.

### 5446 — Latin IV

(Proficiency Stage 4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or higher in 5436 and teacher recommendation*

This is a survey of the literature of the Roman Republic from its origins to the Age of Augustus, through representative selections from a variety of authors. All students in the class (Level 1 and Honors) will read the same selections. Students in this section will be assessed on a slightly reduced selection of readings and will have alternative assignments rather than prose composition.

### 5448 — Latin IV

(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*A- or better in 5436 or B or better in 5438 and teacher recommendation*

This is a survey of the literature of the Roman Republic from its origins to the Age of Augustus, through representative selections from a variety of authors. All students in the class (Level 1 and Honors) will read the same selections. Students in this section will have graded prose composition assignments



# Mandarin

## 5516 — Mandarin I (Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course is for students who wish to begin the study of Mandarin Chinese. Through student-centered activities, students will learn the four basic language skills of listening, speaking, reading and writing. The focus will be on the development of conversational skills. Culture content is also incorporated into instruction. In addition, students will master the Pinyin system and begin the acquisition of Chinese characters. This course is taught progressively in Mandarin.

## 5528 — Mandarin II (Proficiency Stage 2)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5516 and teacher recommendation*

This course is for students of proven linguistic ability who are able to continue the rapid acquisition of new characters and structures. Written and oral precision will be emphasized. Readings are real-life dialogues emphasizing proper use of Mandarin Chinese with the goal of developing vocabulary and fluency. Authentic materials will be studied. Culture content is incorporated into instruction. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.





## 5526 — Mandarin II

(Proficiency Stage 2)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5616 and teacher recommendation*

This course is for students who, having successfully developed strong basic skills, are ready to increase proficiency in oral comprehension and in the speaking, reading and writing skills of Mandarin Chinese. Readings are real-life dialogues emphasizing proper use of Mandarin Chinese with the goal of developing vocabulary and fluency. Authentic materials will be studied. Culture content is incorporated into instruction. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.

## 5538 — Mandarin III

(Proficiency Stage 3)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5528 and teacher recommendation*

This course is for motivated students who are able to build upon a strong foundation of structures and vocabulary. The rapid acquisition of grammatical structures and idiomatic vocabulary is emphasized. The ability to question, to present, to tell stories and to express their opinions will be emphasized. A variety of authentic reading selections as well as films will be introduced. Culture content is also incorporated into instruction. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.

## 5536 — Mandarin III

(Proficiency Stage 3)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5526 and teacher recommendation*

This course builds on previously learned skills of understanding, speaking, reading and writing Mandarin Chinese. There will be increased op-



portunity for idiomatic usage and self-expression, both oral and written. A variety of authentic reading selections as well as films will be introduced. Culture content is also incorporated into instruction. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.

## 5548 — Mandarin IV

(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5538 and teacher recommendation*

This course is for very motivated students who are able to build upon a strong foundation of structures and vocabulary. The rapid acquisition of grammatical structures and idiomatic vocabulary is emphasized. Students are expected to be independent learners. Students will read and discuss a variety of authentic materials. Oral and written reports will be an integral part of this course. This course is a prerequisite for the Mandarin Advanced Placement Language course. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.

## 5546 — Mandarin IV

(Proficiency Stage 3-4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5536 and teacher recommendation.*

In this course, students will apply their linguistic skills to increasingly diverse and culturally rich materials. Old vocabulary and grammatical structures will be strengthened. New vocabulary and grammatical structures will be introduced, enabling students to pursue more open-ended and creative communications. Reading comprehension will be developed through a variety of authentic reading selections as well as films. Students can choose to write in either traditional characters or simplified characters. This course is taught exclusively in Mandarin.

**5558 — Mandarin V**  
(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5548 and teacher recommendation*

In this cumulative course, students apply their linguistic skills to increasingly diverse and culturally rich materials. In the process, students learn to be more creative with their expressions and learn to use language independently to inform, narrate, describe, explain and persuade as well as to express feelings and attitudes. The course provides an increased opportunity for idiomatic usage and self-expression, both oral and written. Quarterly projects expand students' speaking, writing, reading and listening skills. Students may choose to write in either traditional characters or simplified characters. The course is taught primarily in Mandarin. Honors students are required to complete graded composition assignments.

**5556 — Mandarin V**  
(Proficiency Stage 4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5546 and teacher recommendation*

In this cumulative course, students apply their linguistic skills to increasingly diverse and culturally rich materials. In the process, students learn to be more creative with their expressions and learn to use language independently to inform, narrate, describe, explain and persuade as well as to express feelings and attitudes. The course provides an increased opportunity for idiomatic usage and self-expression, both oral and written. Quarterly projects expand students' speaking, writing, reading and listening skills. Students may choose to write in either traditional characters or simplified characters. The course is taught primarily in Mandarin.



## 5559 — Mandarin AP Language and Culture

(Proficiency Stage 4)

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*B or better in 5548 and teacher recommendation*

The overall goal of this course, as set forth by the College Board, is to deepen students' immersion into the language and culture of the Chinese speaking world, providing students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills: listening, speaking, reading and writing. The course integrates cultural content knowledge and language skills, developing proficiencies within the context of students' learning. The course challenges advanced students while providing them a means to obtain college credit and/or placement. Students will be prepared to take the Advanced Placement Chinese Language and Culture in the spring. Students can choose to write in either traditional characters or simplified characters. The course is taught exclusively in Mandarin.

## 5595 — China Exchange Seminar

**1 credit**

**Level: No Level**

*Prerequisite:*

*Selection to participate in the exchange program with China.*

This seminar is intended solely for exchange program participants. The course will further enhance the students' linguistic skills in listening, speaking, reading and writing. It provides students with Chinese culture and history. Students are helped in developing oral presentations and projects to be given in the host school. Help with the necessary documentation for the trip and travel preparations is provided.

# Spanish

**5616 – Spanish I**  
(Proficiency Stage 1)

**4 credits**

**Level: CP1**

*Prerequisite:*

*None*

This course is for students who are beginning the study of Spanish and for those students coming into the High School who would like to strengthen their skills. Students will learn the four basic learning skills: listening, speaking, reading and writing. Stress will be on the development of practical language. This class is taught progressively in Spanish.

**5614 — Spanish I**  
(Proficiency Stage 1)

**4 credits**

**Level: CP2**

*Prerequisite:*

*None*

This course is designed for students who wish to begin to study the Spanish language. All four skills of speaking, listening, reading, and writing will be taught. Students will learn thematic vocabulary, grammatical concepts, rules of pronunciation, and communicative skills. Ancillary materials such as workbook activities, overhead transparencies, pre-recorded CD's, and DVD's will be used. This class is taught progressively in Spanish.

**5628 — Spanish II**  
(Proficiency Stage 2)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5616 and teacher recommendation*



This course is conducted in Spanish and is for students of proven linguistic ability. It continues the development of listening, speaking, reading and writing skills. Many new verb tenses and vocabulary are integrated into the themes of the chapters. There are frequent language laboratory sessions. At times the students will make recordings. This class is taught exclusively in Spanish.

## 5626 — Spanish II

(Proficiency Stage 2)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5616 and teacher recommendation*

For students who have successfully developed strong basic skills and are ready to increase proficiency in oral comprehension, speaking, reading and writing. Specific attention is given to vocabulary acquisition. Regular language laboratory activities are an integral part of this course. This class is taught exclusively in Spanish.

## 5624 — Spanish II

(Proficiency Stage 2)

**4 credits**

**Level: CP2**

*Prerequisite:*

*C- or better in 5614 and teacher recommendation*

This course is for students who wish to continue their study the Spanish language. All four skills of speaking, listening, reading, and writing will be taught. Students will learn thematic vocabulary, grammatical concepts, rules of pronunciation, and communicative skills. Ancillary materials such as workbook activities, overhead transparencies, pre-recorded CD's, and DVD's will be used. This class is taught progressively in Spanish.

**5638 — Spanish III**  
(Proficiency Stage 3)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5628 and teacher recommendation*

The basic structure of the language is reviewed and refined. Oral work is stressed through classroom participation and language lab activities. A variety of reading material is presented, ranging from Hispanic short stories to full-length novels. The four skills, listening, speaking, reading and writing are extensively covered in this class. This class is taught exclusively in Spanish.

**5636 — Spanish III**  
(Proficiency Stage 3)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5626 and teacher recommendation*

This course is designed for highly motivated students with a strong foundation in Spanish. The course will build upon vocabulary and grammar skills learned in previous years, while introducing new vocabulary and grammar concepts. Students are required to read and understand informational text, to read authentic Spanish literature and to discuss the information in both oral and written forms. This class is taught exclusively in Spanish.

**5648 — Spanish IV**  
(Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5638 and teacher recommendation*

This course is for students of proven linguistic ability who can speak and write in Spanish effectively. A variety of methods will be used



such as weekly use of the language laboratory, compositions, readings from text and literary sources and student presentations. This course helps prepare students for the SAT II exam and for the AP Spanish Advanced Placement course. This is taught exclusively in Spanish.

## 5646 — Spanish IV

(Proficiency Stage 3-4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5636 and teacher recommendation*

Grammar topics are reviewed and used as the class is conducted in Spanish. The aural/oral skills are also employed in the language laboratory. A variety of readings is covered through short stories, novels and plays. Students further develop speaking and writing skills when discussing the themes in their compositions. This course does not prepare students for the Spanish Advanced Placement exam. This class is taught exclusively in Spanish.

## 5659 — Spanish AP Language

(Proficiency Stage 4)

**4 credits**

**Level: Advanced Placement**

*Prerequisite:*

*B or better in 5648, teacher recommendation, and a speaking and writing placement assessment.*

The principal goal of the course is to ensure that all students attain an advanced level of proficiency in the areas of reading, writing, listening, and speaking. These skills are never taught in isolation but rather in an integrative way. The Advanced Placement Spanish Language Examination is not based on specific course content but instead attempts to evaluate levels of performance in the use of the language, both in understanding written and spoken Spanish and in writing and speaking with ease in correct and idiomatic Spanish. Students will regularly demonstrate proficiency using each of the three communicative modes: interpersonal, interpretative, and presentational. In addition, students



will learn to synthesize information amassed from authentic sources, both print and aural. Students who elect this course will successfully complete a speaking and writing assessment which will be administered in the spring. This class will be taught exclusively in Spanish.

## 5658 — Spanish Literature, Culture & Civilization (Proficiency Stage 4)

**4 credits**

**Level: Honors**

*Prerequisite:*

*B or better in 5648 and teacher recommendation*

In this year long course the students will improve their fluency in Spanish through the study of the Culture, Civilization, and Spanish Literature from different time periods and countries in the original language. This will include short stories, poetry, a novel and a play. The works read will be thoroughly discussed in class to develop communication skills, reading comprehension and vocabulary. This course is for students who want to continue to be challenged without having to prepare for the AP exam. Course work will include oral reports, written compositions and text analysis. This course is taught exclusively in Spanish.

## 5656 — Spanish V Film and Conversation (Proficiency Stage 4)

**4 credits**

**Level: CP1**

*Prerequisite:*

*C or better in 5646 and teacher recommendation*

The main goal of this course is to speak and interact as much as possible in the target language; student participation counts for a very large percentage of the overall grade. Rather than focusing on grammar exercises, students will discuss numerous films from Spanish-speaking countries: their themes, styles, perspectives and contexts. Students will also practice their speaking skills by presenting films of their choice and creating movies as part of their final project.



## 5090 — Independent Study

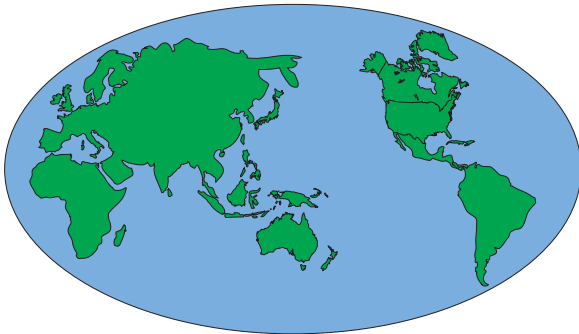
**4 credits**

**Level: No Level**

*Prerequisite:*

*Program approval by the language teacher and Department Head*

A student/teacher contract containing the goals and program proposal must be submitted before entering. Time and credit arrangements will then be made.





# Other Courses

## 8910 – Introduction to Special Education

**2 credits first semester**

**2 credits second semester**

**Level: No Level**

This course will introduce students to the field of Special Education. Students will attend class two periods per week to learn about Special Education theory, methods and application. Students will also complete a two-hour-a-week practicum in one of the LABBB classrooms. Times of the practicum will be arranged.

Classroom sessions will include a broad overview of the field of Special Education, historical perspectives, discussion of various disabilities, e.g., Autism, Asperger's Syndrome, federal and state laws pertaining to students with disabilities, and the IEP process.

Participants will complete their practicums and work concurrently with many disciplines which may include: adaptive physical education, physical therapy, occupational therapy, speech and language therapy, vocational and individual counseling.

This interactive and fun course will include guest speakers, films, field visits and presentations. This experiential course represents an exciting opportunity to learn about special education while making a difference in another young person's life.



# Counseling Department

## 8040 – School to Work Experience

**1 credit – quarter**

**Level: No Level**

The School to Work Experience gives students the opportunity to earn non-distributional credit for out of school paid employment. Participants must work at least ten hours per week, maintain and submit weekly employment logs and allow communication between their employer and guidance counselor. Students can earn up to one credit per quarter, are graded pass/fail, and should see their guidance counselor to enroll in this program.

## 8530 – The Experiential Classroom

Junior Year

**7 credits**

**Level: No Level**

Lexington High School and Minuteman Regional Technical High School offer a one semester (second semester) exploratory program for qualified juniors. Interested students will sign up for this program during course selection and work closely with their counselor to build a schedule that allows them to fit in courses that fulfill our graduation and promotional requirements, and still attend Minuteman part-time for semester 2. Juniors who enroll in this course will attend Minuteman from 7:45-10:05 and return to LHS for the rest of their scheduled courses.

## 8540 – The Experiential Classroom

Senior Year

**14 credits**

**Level: No Level**

Lexington High School has made special arrangements with Minuteman Regional High School to provide a part-time alternative for grade 12 students with technical interests and/or a desire for more laboratory experience in planning a college or career path.



Both colleges and employers view such experiential learning as very valuable. This program is not intended to substitute for Minuteman's regular enrollment program. It does, however, allow Lexington High School seniors to add an important element to their education.

Lexington High School seniors who elect this program will attend Minuteman Regional High School for the first two hours (7:50 a.m. - 10:05 a.m.) of each school day. At Minuteman, each student will be matched (based on his/her abilities and interests) with an experiential laboratory or shop area. Students will earn fourteen (14) credits for successful completion of this year-long specialized and selective program. Transportation provided by Minuteman Regional Technical High School.

Areas at Minuteman that may provide openings are the following: Auto Body, Auto Mechanics, Carpentry, Computer-Aided Drafting, Computer Programming, Electrical, Heating & Ventilation, Landscaping, Plumbing, Retail, Welding.

## 8010 – Personnel Services

**Quarter(s) - variable credits or community service hours**

**Level: No Level**

Lexington High School students frequently learn much about themselves and their community through their service activities. In order to both recognize and encourage such participation, non-distributional credits or community service hours will be awarded for these activities. Through the personnel service program, students engage in activities that benefit their fellow LHS community members. Participants also have the opportunity to develop meaningful relationships with other students, staff and faculty. Projects include volunteering with the LABBB program or assisting main, house, department and/or guidance offices with non-confidential tasks. Personnel service is scheduled on a quarterly basis. A grade of P and appropriate credits are awarded once the program is completed. Community service hours may be awarded on an ongoing basis. No more than four credits per year may be earned when taken for credit. Students should see their guidance counselor if they wish to take advantage of this opportunity.



## Counselor Seminar

<b>Counselor Seminar</b>	<b>9</b>	<b>1st term</b>	<b>no credit</b>
<b>Counselor Seminar</b>	<b>10</b>	<b>3rd term</b>	<b>no credit</b>
<b>Counselor Seminar</b>	<b>11</b>	<b>3rd term</b>	<b>no credit</b>
<b>Counselor Seminar</b>	<b>12</b>	<b>1st term</b>	<b>no credit</b>

Each year, students are scheduled in small group developmental seminars with their counselors. In addition to fostering effective relationships between students and counselors, these seminars provide interactive dialog and information on adjusting to Lexington High School, academic and personal issues that students face, and post-secondary planning





# English Learner Education

The English Learner Education Department assumes “primary responsibility” for assisting limited English proficient (LEP) students in achieving English proficiency in Academic Expectations #1 (writing), #2 (reading), #3 (speaking), and #4 (listening). We also acknowledge our collaborative efforts in reinforcing and supporting all of the other academic expectations outlined on page *vi* of The Lexington High School *Program of Studies*.



The overall Goals and Objectives of the English Learner Education Program in grades 9-12 include the following in support of the High School’s Academic Expectations. The specific objectives for individual courses are outlined in the heading of each course description.

## Program Goals

The goal of the English Learner Education Department is to prepare English language learners for full participation in the academic and cultural life of the school, while recognizing and celebrating the diversity they bring to the community.

## 8816 – English as a Second Language I

**4 credits**

**Level: CP1**

*Prerequisite:*

*Placement Test*

Open to all students grades 9-12. This course is open to all students with beginning and early intermediate levels of English proficiency. It provides comprehensive instruction to English learners in reading, writing, speaking and listening. The goal of the course is to provide beginning and early intermediate English speakers with the vocabulary, language functions, patterns and structures, plus the reading and writing necessary to participate in social and academic settings.



## 8826 – English as a Second Language II

**4 credits**

**Level: CP1**

*Prerequisite:*

*Placement Test*

Open to all students grades 9-12. This course is open to all students with intermediate levels of English proficiency. It provides comprehensive instruction to English learners in reading, writing, speaking and listening. The goal of the course is to provide intermediate English speakers with the informal and academic vocabulary, language functions, patterns and structures, plus the reading and writing necessary to participate in social and academic settings. The emphasis of this course is on increasing the English learners' interactions with grade level textbooks and on developing students' academic writing skills.

## 8836 – English as a Second Language III

**4 credits**

**Level: CP1**

*Prerequisite:*

*Placement Test*

Open to all students grades 9-12. This course is open to all students with transitioning levels of English proficiency. It provides comprehensive instruction to English learners in reading, writing, speaking and listening. The goal of the course is to provide transitioning English speakers with the vocabulary, language functions, patterns and structures, plus the reading and writing necessary to participate in social and academic settings. The emphasis of this course is on increasing the students' interactions with grade-level academic content, including effective use of technical and abstract ideas and vocabulary. Students' fluency and comprehension of academic language are expressed orally and in standard conventional writing.





# Transition Program

The Transition Program provides services and instruction in career exploration and planning, selected independence skills and work experience to students on educational plans who need extra help to transition from high school to suitable post-secondary education, training and/or employment. The program, funded under IDEA, is aimed primarily at juniors and seniors (some underclassmen) who are unclear about available career, work, and/or educational options or are indefinite about post-high school plans. Referrals, based on need for services, are part of the educational team process.

## 9601 – Introduction to Careers

**1 credit – semester**

**Level: No Level**

**Grade 11 – group format.** Students will learn about possible careers, majors, and areas of study for the future. Activities will include an interest inventory, learning about strengths and skills, and using active strategies and multimedia materials to explore careers and post-high school options. If desired, information may be shared with parents and school professionals.

## 9602 – Introduction to Careers

**1 to 2 credits – year**

**Level: No Level**

Open to Grades 11 and 12 – individual format

Grade 11 – Similar to 9601, but more attention to individual career exploration and planning needs.

*Note:*

*Sophomores by special arrangement.*



## 9605 – Career Options Prep

**1 to 2 credits – year**

**Level: No Level**

Grade 12 – Individual format. Continuation of career exploration and planning aimed at implementation of post-high school plan. Assistance with school/college application process and self-advocacy skills, as needed, for those who require or could benefit from appropriate support services at the post-secondary level.

## 9607 – Transition Work Experience

**1 to 2 credits/quarter**

**Level: No Level**

*Prerequisite:*

*9601, 9602, 9605 or currently enrolled*

**Open to Grades 11 and 12.** Students participate in work experiences 6-20 hours per week for work exposure, career exploration or as a career major. Emphasis on job holding, and workplace competencies for the current decade, with continuation of career exploration and post-high school planning. Students must carry acceptable health insurance coverage.



# Policy of Non-Discrimination

Lexington Public Schools does not discriminate in admission to, access to, treatment in, or employment in its services, programs and activities, on the basis of race, color or national origin, in accordance with Title VI of the Civil Rights Act of 1964 (Title VI); on the basis of sex, in accordance with Title IX of the Education Amendments of 1972; on the basis of disability, in accordance with Section 504 of the Rehabilitation Act of 1973 (Section 504) and Title II of the Americans with Disabilities Act of 1990 (ADA); or on the basis of age, in accordance with the Age Discrimination Act of 1974 (Age Discrimination Act). Nor does it discriminate on the basis of race, color, sex, religion, national origin, sexual orientation, or religion, in accordance with Chapter 622 of the Acts of 1971 (M.G.L.c.76,§5) and Chapter 151B of the General Laws.

To file a complaint alleging discrimination or harassment by Lexington Public Schools on the basis of race, color, national origin, sex, disability, age, sexual orientation, or religion or to make inquiry concerning the application of Title VI, Title IX, section 504, the ADA, the Age Discrimination Act or applicable state laws and their respective implementing regulations, please contact:

Assistant Superintendent for Human Resources  
146 Maple Street  
Lexington, MA 02420  
(telephone 781-861-2580, ext. 200)