

PROGRAM OF STUDIES

2017 – 2018

Chelmsford High School



Principal's Message

In early March, you will begin the process of scheduling your course of study for the 2017-2018 school year. This process will culminate in June. The Program of Studies is published annually as a catalogue of courses offered at Chelmsford High School. It also contains detailed information and guidance to support you in choosing a course program that interests, challenges, and inspires you. Please take the time to read through the program of studies provided and consult with your teachers, your counselor, and your parents to making informed decisions as you progress toward meeting the graduation requirements of Chelmsford High School.

Chelmsford High School offers a wide variety of courses at a number of different academic levels to stimulate your curiosity, challenge your thinking, and promote your development as a 21st century learner. The course offerings that follow are designed and articulated to provide you with the depth and breadth of a comprehensive academic program while supporting your growth and progress toward our 21st Century Learning Expectations. Choose courses that carefully balance the rigor of a challenging academic course load with opportunities to broaden your horizons through our many extracurricular clubs, activities, and athletics.

In the Spring, students in grades 8, 9, 10, and 11 will be selecting courses for the 2017-2018 school year. Course offerings and staffing for the courses will be developed based upon student requests. Since the scheduling process only occurs once per year, it is critical for you to choose your classes and level of difficulty wisely. After this period of selecting classes, changes to student schedules cannot be made except in rare circumstances. Since the scheduling process occurs concurrently with the school budgeting process, **please note that some of the courses in this program may be modified or may not be offered as a result of student requests and/or budgetary constraints.** In situations like these, you will be able to enroll in classes required to meet graduation requirements. Choosing up to five (5) meaningful alternative courses will be an effective way to expedite this process.

We look forward to working together with you as you plan for your future at Chelmsford High School and beyond. The best part about being in a large school are the opportunities you have to explore a variety of different academic, co-curricular, and extracurricular offerings. I encourage you to take advantage of this opportunity, and choose an array of courses that challenges you academically, broadens your horizons, and stimulates your own curiosity, maturity, and growth.

Sincerely,



Stephen D. Murray
CHS Principal

“We foster PRIDE in the pursuit of excellence.”

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21st CENTURY LEARNING EXPECTATIONS: Academic, Social, and Civic

1. Demonstrate trans-literacy by communicating across a range of platforms, tools, and media.
2. Utilize real-world tools and other resources to access, evaluate, and share information in an authentic task.
3. Demonstrate information, flexibility, and adaptability in thinking patterns, work habits, and working/learning conditions.
4. Work independently and collaboratively to solve problems and accomplish goals.
5. Value and demonstrate personal responsibility, ethical behavior, and global awareness in both academic and social communities.

OVERVIEW OF COURSE SELECTION PROCESS

The processes of selecting courses and building students' schedules are complex and time-consuming. Please take the time to read through the course descriptions, and confer with your parents, teachers, and guidance counselor to choose courses carefully and request a course schedule that is appropriately challenging for you. Once student requests are compiled, course tallies are taken. Courses without sufficient enrollment are cancelled and a master schedule is built. Individual student schedules are then programmed and finalized. Students are notified of any scheduling issues and are given opportunities to amend their schedules and/or selections with their counselors. Courses needed to meet graduation requirements will be available.

The Program of Studies is a valuable resource for planning an appropriate educational program. Read through it the first time to get a general overview of the graduation requirements, course sequence, and overall expectations. Think about the courses in which you have an interest, and begin to read through these

descriptions more closely to identify the ones you will elect for your next year of schooling. Talk to your parents about your interests and aspirations, and continue to narrow your selections. If you have questions or need more information, the most valuable sources of information will be your current teachers and your guidance counselors. Your current teachers have strong insight into the course curriculum, course expectations, and your current performance, while your counselor has a strong sense of graduation requirements and skills you will need to be successful as you plan for life after high school.

For any course that represents continued study within a department, the current teacher will confer with the student and then record the placement on the computer's Course Request File. When making a recommendation, the teacher will consider current and previous academic performance in the subject area and related subject area(s), current and previous performance on standardized tests (if applicable), performance on departmental placement tests (if necessary), and other classroom behaviors and habits that may be indicative of future success. This student-teacher conferencing will begin in late February/early March. Parents should speak directly to the teacher to answer questions about course or level placement. If the issue is still unresolved after conferring with the teacher, the parent may request an override. An override form can be obtained from the teacher, counselor or counseling office, and must be submitted to the Department Coordinator - for current 9th, 10th, and 11th graders the deadline is **March 16, 2017**; the deadline for current 8th graders is **March 31st, 2017**. *****Please understand that a recommendation for an elective course does not equate enrollment in the course as some courses have class size and section number limits.**

We strongly encourage students to maintain a reasonable balance among academic course load, extracurricular activities, and personal time to contribute to their social and emotional well-being. It is extremely important for students and parents to make informed decisions regarding which course and level are most appropriate for the student. Due to a variety of factors, the selection of a course should be considered a yearlong commitment. To maintain class sizes that are equitable for all students, it is very difficult to switch levels and/or courses once the schedule has been completed. As a result there can be no guarantee that space will be available in another course or level during a preferred block.

Students will enter their elective course choices online using the X2 Aspen Student Portal. Information about this process will be distributed through PLUS Blocks prior to the beginning of the course selection process. Please review the grid provided below to help focus your choices for the next school year.

| | Students Entering Grade 9 | Students Entering Grade 10 | Students Entering Grade 11 | Students Entering Grade 12 |
|---|--|--|--|---|
| Typical Courses or Departments where they may be offered | English Social Studies Science Math World Language Health (1 semester) PE (1 semester) | English Social Studies Science Math World Language PE (1 semester) | English Social Studies Science Math World Language Health (1 semester in Grade 11 or 12) | English Math Health (1 semester in Grade 11 or 12) |
| Number of Electives /other courses you may add | 1 full year course or 2 semester courses from any department | 1 full year course and 1 semester course or 3 semester courses from any department | 2 full year courses, or a combination of full year courses and/or semester courses totaling 4 semesters of academics from any department | 5 full year courses or a combination of full year courses and semester courses totaling 10 semesters of academics from any department |

**Please note, students interested in pursuing post-secondary educational opportunities should consider enrolling in 3 years of a World Language. Students contemplating post-secondary opportunities in the sciences should consider completing a full year physics course in high school.

Students are encouraged to select their academic program carefully. We believe that decisions about courses can be made within a reasonable period of time to best capitalize on the educational process.

Our intention is to complete the scheduling process by early June so that any schedule conflicts can be resolved before the end of the school year. **Opportunities for schedule changes during the summer and fall are very limited.** Do not hesitate to call for further information. Contact information is provided on **page 64.**

GRADUATION REQUIREMENTS

In compliance with the requirements set forth by the Commonwealth of Massachusetts and those affiliated with the recognition of Chelmsford Public Schools as a Federal Race to the Top school district, CHS will be shifting graduation requirements over the next few years to align with MassCore. In accordance with the change, MassCore provides a course of studies to better prepare students to meet the career/college readiness standards. Given the rigorous standards CHS already employs, the shift impacts students in mathematics and in the fine and performing arts. After review of the graduating class of 2013, we found 93% of our graduates met the new standards in math for MassCore, while 100% of our graduates met the new standards for the arts.

In addition to meeting the CHS course requirements below, all students in the Commonwealth are required to meet certain performance criteria on the Massachusetts Comprehensive Assessment System (MCAS). To receive a high school diploma, students must earn scaled scores of at least 240 on the grade 10 ELA and Mathematics tests, or earn a scaled score between 220 and 238 on these tests and fulfill the requirements of an Educational Proficiency Plan (EPP). Students must also earn a scaled score of at least 220 on one of the Science, Technology, Engineering MCAS (i.e., Biology, Chemistry, Introductory Physics, or Technology-Engineering).

| Department/Academic Area | Classes of 2018, 2019, 2020, 2021 |
|-------------------------------------|-------------------------------------|
| English | 40 credits * |
| Mathematics | 40 credits |
| Science | 30 credits |
| Social Studies | 30 credits ** |
| World Language | 20 credits *** |
| Arts (Fine/Performing/Practical) | 30 credits **** |
| Physical Education | 10 credits |
| Health Education | 10 credits (Starts w/Class of 2019) |
| Other Courses/Electives | 30 credits |
| Total Credits for Graduation | 240 credits |

* Writing for High School and Reading for High School are required for 9th graders who are in English 9.

** Requirements: World History 2, US History 1 & 2.

*** Two years of the same World Language.

**** 10 Credits must be from Fine and/or Performing Arts; 5 credits must be from Practical Arts

Please note: 10 Credits are awarded for the successful completion of a full year course; 5 Credits are awarded for the successful completion of a semester course.

For a student to make successful progress toward graduation requirements and remain on par with her/his grade level, she/he must earn a minimum of 60 credits per school year. **Seniors, in addition to meeting all other requirements, you must earn at least 60 credits in your senior year.**

COURSE LEVELS

All of our courses are designed to prepare our students for the rigors of college and other post-secondary paths. Students will receive teacher recommendations regarding the course level in sequential subjects within departments. Although current grades are not the only indicator to be considered in placement decisions, your current performance in a course can serve as a reasonable indicator of future success. A student who has been earning grades in the B range or better should consider continuing in the same course level or advancing to the next level. A student who has been earning grades of D or an F may not be able to continue in the current level or sequence unless recommended or approved by the teacher. A student earning grades in the C range should consider continuing in the same course level or dropping a level. In each of these instances regarding level placement, it is recommended that students engage in a conversation with their teacher to determine the most appropriately challenging level for the student. The following course level descriptions are provided as a general guideline to students and parents to help determine the most appropriately challenging course level for students to participate. More detailed descriptions can be found within the specific course descriptions on the pages that follow.

All offered courses (except those considered not predictive of future academic achievement in college) are assigned a level according to the following criteria:

LEVEL AP Advanced Placement Courses

Advanced Placement (AP) courses are designed to move at a faster pace, cover a broader and potentially deeper curriculum than the Massachusetts Curriculum Frameworks articulates, and require significant independent work both inside and outside of the classroom. Successful students in these courses have a strong track record of high academic achievement as evidenced by academic grades in previous courses, standardized test scores, and motivation in the classroom. Students can typically grasp concepts from initial presentation. As a result, little class time will be spent practicing and/or reviewing concepts, but rather will be dedicated to extensive analysis, synthesis, and problem-solving. Students are expected to independently seek help and to organize and to budget their time for long-term assignments. The AP program is offered in the specific interest of three groups: secondary school students who wish to pursue college level studies while still in high school, schools that desire to offer these students the opportunity to do so, and colleges that wish to encourage and recognize such achievement.

AP Courses are offered in Art Portfolio, English, Calculus, Computer Science, Music Theory, Biology, Chemistry, Physics, US History, World History, American Government, Statistics, Psychology, French, and Spanish. In order to complete the AP curriculum and earn AP credits, a student must remain in the course for the full year. No partial credit will be awarded. Students are expected to take the AP Exam.

For more detailed information, follow the course description as described in the AP Course Description booklet - apcentral.collegeboard.com/highered

LEVEL 1 Honors 1 College Preparatory Courses (H)

These courses are more intensive than other courses experienced by the majority of our students. Classroom activities require a great deal of independent learning. Course content demands critical, creative, and analytical thinking. Courses will require that students demonstrate a comprehensive understanding of the structure of the discipline. Assignments of original design are required. These courses require: extensive reading, intensive application, analytical & creative thinking, and study to a greater depth of understanding.

LEVEL 2 Honors 2 College Preparatory Courses (H2)

Classroom activities are designed with a moderate amount of teacher assistance. While introducing new skills and concepts, the students are extensively involved in interpretation, analytical, and creative thinking. Homework is both short-term and long-range and allows students to explore skills and concepts in more depth.

LEVEL 3 College Preparatory Courses

Classroom activities are designed with a varying amount of teacher assistance. Through a variety of instructional strategies, learned skills and concepts are reinforced with increasing emphasis on interpretation, analysis, and other higher level thinking. Homework assignments are both short and long-term in duration and allow students to practice and explore skills and concepts in more depth.

POLICY FOR PROGRAM CHANGE CONSIDERATION

Allocation of staff, rooms, and the number of sections offered are determined by the number of student requests received for a specific course; therefore, students selecting full year courses are committed to remain in the course for the entire year. Also students selecting semester courses are committed to remain in these courses for the semester scheduled. Please choose your course carefully. Your choices, both for first semester and second semester, represent a commitment on your part. Exceptions are permitted under certain circumstances.

A course change, even if approved, cannot always be granted. When the proposed course has been closed due to class size or a change would create a conflict in a student's schedule, the intended change cannot be granted. If a level change is granted, the student will take with them the grade they earned from the previous class. All students are expected to stay in their assigned classes until at least the first mid-term grade report, unless an obvious need for change exists. Obvious need might include:

1. A computer generated scheduling error
2. Having the same teacher in the past, with an unsuccessful academic experience the previous year
3. Incorrectly leveled students
4. Career path changes

There are two types of schedule changes that are processed during the school year:

1. Students can move from one level of a course to a different level of the same course. This is called a level change.
2. Students can add a course and drop a different course. This is called a course change.

The deadlines for making these changes are as follows:

- Level changes may occur at any time during the school year IF initiated or approved by a Department Coordinator.
- The add/drop period takes place during the first two full weeks of classes in September. After the add/drop period, schedule changes need to be processed using an add/drop form with approval from the Department Coordinator.

During the last two weeks of any marking period no courses will be added or dropped. First semester and full-year courses dropped before the last two weeks of quarter one will be completely removed from the official transcript. Second semester courses dropped before the last two weeks of quarter three will be completely removed from the official transcript. All courses dropped after these periods will receive a W (withdrawal) as a final grade, and receive no credit for the course.

The following procedure for schedule changes will be strictly adhered to:

1. Students seeking a schedule change should see their guidance counselor and receive an "add/drop" form.
2. Students obtain the signature of the teacher and department head/coordinator of the course(s) to be *added* first.
3. Students then obtain the signature of the teacher and department head for the course(s) to be *dropped*, giving that teacher an opportunity to work out any problem area *before* the student leaves the class.
4. Students take the "add/drop" form home to be signed by a parent/guardian.
5. Schedule changes taking place more than one week after the first mid-term of the course require permission of the appropriate Department Coordinator. In this case, students take the "add/drop" form to the Dean to be signed, and for the schedule changes to be implemented assuming there is room in the class(es) to be added.
6. There will be a 24-hour minimum waiting period for all schedule changes, unless determined to be of an emergency nature by the Dean or Principal.
7. Students must attend classes as assigned until schedule changes are processed and new assignments are made. *Students violating this policy will not be allowed to change courses.*

This policy is set in place to assure students the opportunity to change for legitimate reasons and discourage whimsical requests. Exceptions to the above policy might be changes made to balance classes; changes made to correct programming errors; or changes made in the interest of good mental health.

Appeal of Denied Schedule Change

1. Students who wish to appeal a denied schedule change must request a meeting with their Dean, their guidance counselor, and any faculty member or department coordinator who has denied the change. Parents/guardians must attend this meeting.
2. A copy of the appeal form will be distributed to the student, his or her guidance counselor, and each affected teacher.
3. If the problem is not resolved at the Dean's level, students and their parent/guardian should request an appeal hearing with the Principal at which all interested parties will be present.

Senior Year Schedule Changes

If a senior student changes his or her schedule after applying to a post-secondary school or program, the student must inform the school or program of the schedule change. At the conclusion of the school year, a final official transcript will be sent to the school or program the student is planning on attending. If there has

been a change and the student did not inform the school or program, the student's integrity may be questioned. This may result in a rescission of an acceptance, especially if the change involved the dropping of a core subject class.

POLICIES ON ANTI-DISCRIMINATION

CHAPTER 622

An important piece of legislation affecting the public schools was passed in August of 1971. This law, Chapter 622 of the General Laws, Acts of 1971, is referred to as "An Act to Prohibit Discrimination in the Public Schools." The law reads as follows: *"No person shall be excluded from or discriminated against in admission to a public school of any town, or in obtaining the advantages, privileges and courses of study of such public school on account of race, color, sex, religion or national origin. This law makes it clear that all aspects of public school education must be fully open and available to members of both sexes and of minority groups. No school may exclude a child from any course, activity, service or resource available in that public school on account of race, color, sex, religion or natural origin of such child."*

On June 24, 1975, the State Board of Education approved regulations for Chapter 622. These regulations address five areas of school policy: school admission to courses of study, guidance, course content, extra-curricular, and athletic activities.

REHABILITATION ACT OF 1973 - SECTION 504

It is the policy of the Chelmsford Public Schools to comply with the regulations of the Department of Health, Education, and Welfare in implementing Section 504 of the Rehabilitation Act of 1973 which provides that: *"No otherwise qualified handicapped individual.....shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."* The act defines a person with a handicap as anyone who:

1. has a mental or physical impairment which substantially limits one or more major life activities (major life activities including activities such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working)
2. has a record of such an impairment; or
3. is regarded as having such an impairment.

The Chelmsford Public Schools recognizes a responsibility to avoid discrimination in policies and practices regarding its personnel and students. No discrimination against any person with a handicap will knowingly be permitted in any of the programs and practices in the school system.

The school district has specific responsibilities under the Act, which include the responsibility to identify, evaluate, and if the child is determined to be eligible under Section 504, to afford access to appropriate educational services.

If the parent(s) or guardian(s) disagrees with the determination of the professional staff of the school district, he/she has the right to a hearing with an impartial hearing officer.

Inquiries regarding compliance with Section 504 may be directed to: Director of Student Services, 978-25-5100 Chelmsford Public Schools Administrative Offices, 230 North Road, Chelmsford, MA 01824

ENGLISH

- General Guidelines for Course Selection
- Freshman Year
- Sophomore Year
- Junior Year
- Senior Year
- English Electives

Students at Chelmsford High School are required to take a sequential four-year program in English that is designed to encourage each student to master a successive series of skills in reading, writing, speaking and listening. In addition, the program provides each student with a background in the major literature of his or her country, his or her language, and the world. In grades 9 and 10 teachers will review each student's performance and make recommendations for a more appropriate level if needed. To meet the individual needs and interests of students, a number of one-semester courses are offered in the sophomore, junior and senior years, which may be elected in addition to the required 10 credit semester course. Under ordinary circumstances, an elective course may not be taken as a make-up for a course that has been failed.

General Guidelines for Course Selection:

1. Students should read course descriptions very carefully to learn:
 - an overview of each course, including materials and approach
 - the level of reading and writing skills necessary for success in each course
 - the types of activities involved in each course
2. Students should select courses appropriate to their ability and achievement levels and future plans.
3. Students should consult with parents, English teachers, and guidance counselors before making course choices.
4. In addition to 9th and 10th grade English, students in English 9 are required to take Writing for High School which will strengthen their writing and prepare them to successfully complete the MCAS Long Composition.

FRESHMAN YEAR

The freshman English program stresses skills in reading and writing through a balanced exposure to a variety of literature and writing experiences. The emphasis for teaching literature is on the elements of structure within each genre (short story, novel, drama, poetry and non-fiction). While many mechanical skills are a review, advanced grammatical skills are introduced to enable the student to deal with the complexity of thinking, writing and reading.

ENGLISH 9 - H 10 Credits (#00513)

Freshman Honors English is the first of a three-year sequence for students who have demonstrated exceptional motivation, ability and achievement in reading and in writing. This demanding course includes in-depth reading of major genres of literature with an emphasis on literary elements and universal themes. Students will write numerous literary analyses that demonstrate sophisticated and insightful composition. Students are expected to demonstrate their understanding of literature with meaningful contributions in class discussions. Students in this class will be involved in a rigorous vocabulary curriculum. Preparation for the MCAS test is implied but not a part of the classroom environment. These students should be well prepared for the challenges of a post-secondary education.

ENGLISH 9 - H2

10 Credits (#00523)

English 9—H2 is for students who have demonstrated strong motivation, ability and achievement in reading and in writing. This challenging course includes in-depth reading of major genres of literature with an emphasis on literary elements and universal themes. Students will learn to write effective literary analyses. Students are expected to demonstrate their understanding of literature in class discussion. Students in this class will be involved in a demanding vocabulary curriculum. Preparation for the MCAS test will be a part of the curriculum. These students should be well prepared for the challenges of a post-secondary education. Some students may be accepted later into the honors program.

ENGLISH 9

10 Credits (#00533)

English 9 is for students who are dedicated to further developing their reading, writing and analytical skills. This course includes in-depth reading of major genres of literature with an emphasis on literary elements and universal themes. Students will begin to develop the skills necessary to write effective literary analyses. Students are expected to demonstrate their understanding of literature in class discussion. Students in this class will complete progressive vocabulary assignments weekly. Preparation for the MCAS test will be an important part of the curriculum. A student who successfully completes this course should have a solid foundation in freshman English and be able to continue working towards an education beyond the high school level.

Students taking ENGLISH 9 are required to take WRITING FOR HIGH SCHOOL (#07304) and READING FOR HIGH SCHOOL (#08804).

WRITING FOR HIGH SCHOOL

5 Credits (#07304)

Writing for High School is a course designed to provide extra support to freshmen who could benefit from additional instruction in writing. The core of the course consists of multiple types of essay writing experiences that are essential, not only to a student's ability to demonstrate knowledge and understanding in all academic disciplines, but also to effect personal change. The course will focus on content, form, mechanics, and sentence structure. A second and equally important aspect of the course is the continuing development of the student's ability to use the writing process, especially through writer reflection and peer response, as a means to strengthen his/her performance as a writer. The focus on writer reflection and peer response will help students to develop the skills they need to reach their writing goals. Preparation for the MCAS test is another important aspect of the course. Students will write answers to long composition and open response questions similar to those on the statewide test and receive critical feedback to improve their test taking skills.

Students taking ENGLISH 9 are required to take WRITING FOR HIGH SCHOOL (#07304) and READING FOR HIGH SCHOOL (#08804).

SOPHOMORE YEAR

The sophomore English program reviews skills in reading and in writing acquired in the freshman year and exposes students to various types of literature and writing assignments. In addition to a required 10 credit semester course, a sophomore may choose from the following one-semester 5 credit Practical Art electives:

- *Journalism(Practical Art)*
- *Public Speaking(Practical Art)*

ENGLISH 10 - H

10 Credits (#02013)

The sophomore honors program is for students who have demonstrated exceptional motivation, ability, and achievement in literature and in writing. Extensive out-of-class reading, followed by in-class seminar discussion, is required. This accelerated course emphasizes the analysis of various types of literature such as poetry, novel, drama, short story and essay. Students view, discuss and analyze literary aspects and techniques

of film on its own merits and in comparison to novels. Students are expected to demonstrate their understanding of literature by participating in class discussion, by writing analytical and critical papers, and by creating projects, presentations, and performances. Students will be well prepared for the challenge of a post-secondary education.

ENGLISH 10 - H2

10 Credits (#02023)

This course provides challenge and enrichment for the student who has proven to be strong in the language arts program in Grade 9. The reading includes various literary periods and genres including essays, poems, short stories, plays and novels. Readings and films are analyzed, discussed and used as the basis of some of the writing assignments. Extensive out-of-class reading, followed by in-class seminar discussion, is required. The general difficulty of this level and the course work expected of the student demand maturity and self-discipline. A student in this level class can expect regular work in vocabulary, as well as MCAS preparation. The student completing this rigorous English program should be looking forward to furthering his/her education beyond the secondary level. Some students may be accepted later into the honors program.

ENGLISH 10

10 Credits (#02033)

English 10 offers students a course that strengthens reading comprehension skills while developing literature analysis skills through whole class discussion and cooperative learning. The reading includes various literary periods and genres including essays, poems, short stories, plays and novels. The reading is analyzed, discussed and used as the basis of some of the writing assignments. An additional objective of the writing assignments is to develop the skills to organize, edit, write and revise a thesis-supported essay based on literature. A student in this level class can expect regular work in vocabulary, reading, and writing, as well as MCAS preparation. They should expect homework every night and on most weekends. Students satisfactorily completing this course should be prepared for college level work.

JUNIOR YEAR

The junior English program reinforces the skills in reading and writing acquired in the freshman and sophomore years by providing students with an overview of major American writers, movements and literary works. In addition to a required 10 credit semester course, a junior may elect the following one-semester 5 credit electives and/or the new 10 credit AP Seminar Elective:

- *AP Seminar (10 Practical Art credits)*
- *Angels, Demons, Heaven, Hell and Last Things*
- *A Study of the Poetic Form in Reading and Practice*
- *Creative Writing*
- *Fairytales, Folklores and Legends*
- *Journalism (Practical Art)*
- *Public Speaking (Practical Art)*

AP – ENGLISH LANGUAGE AND COMPOSITION

10 Credits (#04013)

The purpose of this course is to help students become both skilled readers and confident writers.

The course is organized around five units: an introductory unit, three thematic units, and a final course unit following the administration of the AP exam in May. While certain units have a thematic focus and contain seminal works of American Literature, the ultimate purpose behind each unit is to develop students' understanding of analytical strategies. Students are exposed to a variety of texts, including speeches, essays, articles, editorials, political or commentary-based cartoons, advertisements (both written and visual), passages from memoirs, plus selected poems and short fiction designed to mirror the rhetorical devices found throughout the readings of the course. By allowing students to read prose written in a variety of rhetorical contexts, they will be able to understand and employ the skills necessary to become writers who can compose

for a variety of purposes (The College Board, *AP English Language and Composition Course Description*, 2010). Student writing features a series of steps, including initial drafts, self-edits, peer and teacher conferences, and final drafts. They will also study how authors take into account aspects such as audience and context. Students will learn how to arrange ideas, structure their arguments, select appropriate rhetorical devices, and master the language that will allow them to become more effective writers.

The Seminar Approach

Students act as daily discussion leaders for assigned readings, first in small teams and later individually, and the instructor acts as facilitator. Students receive evaluations based on both their seminar presentations and interactions with other student presenters.

The Advanced Placement Program

The Advanced Placement Program is a collaborative effort among motivated students, dedicated teachers and committed high schools, colleges and universities that allows high school students to earn college credit or placement while still in high school. The corresponding exam for this course is the English Language and Composition AP Exam. Taking this exam is the expected outcome of taking this course; it is the culminating assessment. Additionally, students may take the English Language and Composition AP Exam without having taken AP English. Although the specific college courses that AP credit will satisfy differ from college to college, each exam represents a year's college-level work (up to two semesters of credit).

(Condensed and summarized from: <http://apcentral.collegeboard.com>)

ENGLISH 11 - H

10 Credits (#03013)

This course is designed for students who have demonstrated exceptional aptitude, interest and achievement in literature and in writing. Through intensive study of major literary works, primarily those of American writers, students will increase their understanding and appreciation of literature.

Writing experiences emphasize the precise use of language and the effective selection and organization of materials for expository and critical papers. Extensive out-of-class reading and writing is required. SAT preparation is included. *(Prerequisite: Teacher Recommendation)*

ENGLISH 11 - H2

10 Credits (#03023)

This course covers American literature from the colonial period to the present in a variety of genres: novels, short stories, plays, poems, essays, and biographies. Students have the opportunity to sample major authors' works and major themes in American literature, as well as to acquaint themselves with the historical, social, and cultural background of the works studied. The course focuses on critical reading and discussion. The writing component emphasizes sophisticated literary analysis. Vocabulary study will be ongoing and students should expect an appreciable amount of homework. Students should have above average reading and writing skills. SAT preparation is included.

ENGLISH 11

10 Credits (#03033)

This course covers the range of American literature from the colonial period to the present in a variety of genres: novels, short stories, plays, poems, essays, and biographies. Students will have the opportunity to sample major authors' works and, with the help of small and large group discussion, will become better acquainted with the major themes in American literature. Class instruction will help students to progress from factual reading to an understanding of more complex symbols and concepts. They will continue to develop the writing skills necessary to write literary analysis essays. Students should have good reading and writing skills and expect nightly homework. Preparation for the SAT is integrated into the instruction.

SENIOR YEAR

Students who have successfully completed the freshman, sophomore, and junior English requirements are eligible to fulfill their senior English requirement. Senior English continues to build on the reading and writing skills of previous years and broaden students' literary experiences in several areas. In addition to a required senior course, students may choose from the following one-semester 5 credit electives:

- *Angels, Demons, Heaven, Hell and Last Things*
- *A Study of the Poetic Form in Reading and Practice*
- *Creative Writing*
- *Fairytales, Folklores and Legends*
- *Journalism(Practical Art)*
- *Public Speaking (Practical Art)*

AP ENGLISH 12 – LITERATURE AND COMPOSITION

10 Credits (#05013)

The senior year Advanced Placement Program in English is quite demanding and is, by definition, equivalent to a freshman Honors English course in college. The course requires active reading and the perceptive examination of literature as well as the mastery of all elements of composition (structure), style, theme and technique. Students participating in this program engage in intensive critical reading and analysis of works chosen for literary merit, complexity of thought, intricacy of structure and richness of style. Several critical and/or research-based essays focusing on literature are required; in addition, there will be exams on the units studied and in-class essays. The course is organized by genre, offering readings in fiction, poetry and drama from around the world and from many different periods of literature (largely from the 16th century to the present). Students will strive to comprehend artistry and context (both social and historical) through several critical “lenses” and write to analyze and/or present arguments. (The basic three-tiered progress of the examination of literature moves from experience to interpretation to evaluation.) A seminar approach is used, but teacher-directed instruction will also take place from time to time. To prepare students for the AP Exam in English Literature and Composition, the teacher will administer an AP Exam previously given by the College Board in addition to several multiple choice and essay practice sessions provided to students over the course of the year. (*Prerequisite: Teacher Recommendation*)

The Seminar Approach

Students act as daily discussion leaders for assigned readings, first in small teams and later individually, and the instructor acts as facilitator. Students receive evaluations based on both their seminar presentations and interactions with other student presenters.

The Advanced Placement Program

The Advanced Placement Program is a collaborative effort among motivated students, dedicated teachers and committed high schools, colleges and universities that allows high school students to earn college credit or placement while still in high school. The corresponding exam for this course is the English Literature and Composition AP Exam. Taking this exam is the expected outcome of taking this course; it is the culminating assessment. Additionally, students may take the English Literature and Composition AP Exam without having taken AP Senior English. Although the specific college courses that AP credit will satisfy differ from college to college, each exam represents a year's college-level work (up to two semesters of credit).

(Condensed and summarized from: <http://apcentral.collegeboard.com>)

A SENIOR ODYSSEY - H2

10 Credits (#06023)

This yearlong course is designed to expose students to a variety of literary themes and genres through the use of both classic and modern literature in order to provide them with a diverse learning experience. A wide range of topics and themes will be covered through genres including: contemporary literature, world literature, film, graphic novel, theology and philosophy. The core themes of this class will include, but are not limited to: ethical choices, the hero, self and society, identity, and the human response to conflict. Reading, writing

and speaking activities that relate to the works and themes studied will foster student skill development and critical thinking. Students will work individually, in pairs, in small groups, and in teacher conferences to continue their development of reading, writing, and analytical skills and to increase their understanding and appreciation of a wide variety of literature.

ELECTIVES

AP SEMINAR

10 Credits (#06113), Open to Grade 11

Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

Exploring different points of view and making connections across disciplines are fundamental components of the AP Seminar experience. Students will consider one topic or issue through a variety of lenses and from multiple perspectives, many of which are divergent or competing. Analyzing topics through multiple lenses aids in interdisciplinary understanding and helps students gain a rich appreciation for the complexity of important issues.

In addition to in-class assignments and assessments, students are assessed with two through-course performance tasks and one end-of-course exam. All three assessments are summative and will be used to calculate a final AP score (using the 1–5 scale) for AP Seminar.

Students who successfully complete AP Seminar are encouraged to enroll in the AP Research course in their senior year. Students who successfully earn a 3 or higher in both AP Seminar and Research and 4 other AP courses will earn the AP Capstone Diploma. This signifies their outstanding academic achievement and attainment of college-level academic and research skills.

Selections from the AP Capstone Implementation Guide 2016-2017

ANGELS, DEMONS, HEAVEN, HELL, AND LAST THINGS -H2

5 Credits (# 06224), Open to Grades 11 + 12

This interdisciplinary course will explore the great verbal and visual texts about “last things”. Topics to be covered will include heaven, hell, purgatory, the soul, the supernatural, angels, demons, the afterlife, eternal punishment, justice, and judgment. We will examine biblical, historical, literary, artistic, and theological foundations of “last things” as well as how contemporary reconstructions and commentaries on these topics might speak to modern society. Images and stories of heaven, hell, and moral judgment from ancient Egypt to modern film will be covered. Texts, artwork, and topics may include: Milton’s *Paradise Lost*; Blake’s *Marriage of Heaven and Hell*; Dante’s *Divine Comedy* (*Inferno*, *Purgatory*, and *Paradise*); Hebrew and Christian biblical texts, especially the *Apocalypse* or *Revelation*; texts about heaven (*Jannah*), hell (*Jahannam*) and angels (*jinn*) from the *Qu’ran*; classical underworlds in *Homer*, *Plato* and *Virgil*; *Michelangelo’s* and *Bosch’s* paintings of last things; and the films *What Dreams May Come*, *The Five People You Meet in Heaven*, or *Ghost*. This course will honor multicultural worldviews and respect the contributions of multiple voices. Interfaith perspectives (Buddhist, Jewish, Christian, Muslim, Hindu, non-religious, etc.) will also be considered.

A STUDY OF THE POETIC FORM IN READING AND PRACTICE - H2

5 credits (#06324), Open to Grades 11 + 12

This course will focus specifically on the poetic form, where it began, how it has evolved and what it's become; it will be a measured balance of reading and creation, culminating in a portfolio of each student's work. Selections from poetry will not be limited to a specific genre or time period but instead will span a few centuries of verse and geographic location, drawing from various artists globally. The works of poets such as Roethke, Whitman, Neruda, Dickinson and Gibran, among others, will be explored. This class reinforces the interpretive skills taught in earlier years and encourages students to extend their ability to analyze and evaluate literary works. This course is designed for students who enjoy reading and writing poetry and wish to further their talents in both.

CREATIVE WRITING – H2

5 Credits (#07624), Open to Grades 11 + 12

This semester course allows students to develop skills and techniques of creative expression in the genre of poetry, short fiction and drama. While students are able to select their own themes and forms of expression, there are also class activities to strengthen such writing skills as selecting precise words, choosing sensory details, eliminating mechanical errors, and recognizing elements of style. Students are asked to establish deadlines for their progress, write daily, and be willing to share their work and ideas in small group discussions and teacher conferences. Students should enjoy writing and have a solid understanding of the writing process.

FAIRYTALES, FOLKLORE AND LEGENDS - H2

5 Credits (#06424), Open to Grades 11 + 12

This course analyzes the structure, meaning, and function of the folk tale, specifically fairy tales & legends and their enduring influence on literature and popular culture. While we will concentrate on the works of the Brothers Grimm, Charles Perrault and Hans Christian Anderson, we will also consider fairy tales drawn from a number of different national traditions and historical periods including the American present. We will investigate the evolution of specific tale types and trace their transformations in various media from oral storytelling through print to film, television, and the stage. In addition, we will explore how interpretations of the tales have changed over time and represent the norms, social consciousness, or will of the period in which they were created. The legend unit will focus directly on the tales of King Arthur and his evolution through time and place. In this class the students will be encouraged to find their own voice and ideas and be able to effectively communicate those thoughts in both oral and written form. This class reinforces the interpretive skills taught in earlier years and encourages students to extend their ability to analyze and evaluate literary works.

JOURNALISM – H2

5 Credits (#07024), Open to Grades 10, 11, 12 (*Practical Art*)

This course is a one-semester elective open to sophomores, juniors and seniors. The purpose of this journalism course is two-fold. First, through learning the history of journalism and the role the media plays in society, students will be challenged to critically analyze the news media. The course will foster an environment where students can question bias and develop the ability to identify authentic and “good” (reliable) sources and information. With this information, students will also build upon the skills taught in their English courses to experience non-academic writing and writing for an audience outside of the high school community. Additionally, students will acquire the knowledge and skills to not only be published, but also to publish newspapers, understand the different story styles and requirements, execute layout and graphic design. Students will study local, metropolitan and national newspapers and magazines. They will examine the work of accomplished journalists and establish standards for their own writing. While the course will focus primarily on journalistic writing for newspaper and magazine, students will investigate the impact of radio, television and Internet on the news media. These units will investigate the writing behind these forms of communication and discuss the impact they have made on newspaper writing and media overall.

PUBLIC SPEAKING – H2

5 Credits (#07704), Open to Grades 10, 11, 12 (*Practical Art*)

In this elective course students learn the fundamentals of communication including interpersonal and group communication in addition to individual public speaking. Students are able to explore their own interests and speaking styles as they write and present speeches to the class; through rehearsal and viewing of their classmates' and their own speeches, they also gain insights as listeners. In their formal speeches, students explore the formats and nuances of verbal explanation, information, persuasion, and argumentation through debate. Participation is a vital component of the course as students work in groups, perform impromptu speeches, and critique speeches they observe. Skills developed will help students in future college and work settings.

WRITING FOR COLLEGE – H2

5 Credits (#07124), Open to Grade 12

(Semester 1 only) To be successful in this class a student must be self-motivated and capable of working independently. Writing for College is a workshop in which students work to develop writing skills that will both help them with their college application process and enable them to be successful writers at the university level. During the semester students prepare essays following the writing process from topic search to final draft. As they bring each essay to publishable form, students develop a number of skills that enable them not only to produce essays for their college admission packages, but also to meet the demands of writing in college classes. Professional and student-written models help students to define good writing and set personal goals. The process of continual response and revision encourages students to work cooperatively with their peers and with their teacher to develop their personal writing strengths and to eradicate persistent problems, especially in the areas of clarity and correctness. In this class, students are expected to be active participants who contribute meaningfully to the peer response process, seek response to their work from their teacher and their peers, and, most importantly, are willing to revise, revise, revise. During the semester students are required to attempt a number of different types of prose writing, drawing upon a variety of resources: observation, personal experience, interviews and research. By the end of the course students should regard and practice writing as a continuing process of drafting, feedback, and revision. Success in this class includes, but is not limited to, writing essays of personal experience, persuasion, description, definition, and social and cultural issues.

FINE AND PERFORMING ARTS

The Fine and Performing Arts Department believes that we are dependent on a visually and aurally literate society that has the ability to cope with multifaceted information and experiences. Students live in a society filled with increasingly complex images and sounds. It is crucial that a Fine Arts education encourage students to take risks, investigate, question, redefine, and invent. Most importantly, the Arts have intrinsic value and are worth learning for their own sake. They possess their own unique body of knowledge, skills, and ways of thinking. There can be no substitute for learning the Arts, and any education that omits the Arts is incomplete. The mission of the Fine Arts Department is to develop life-long participants in, and consumers of, music, visual art, dance, and theater.

“In dance, music, theater, and the visual arts, people express ideas and emotions that they cannot express in language alone. In order to understand the range and depth of the human imagination, one must have knowledge of the arts.” Core Concept, Massachusetts Arts Curriculum Framework, October 1999.

ART

APPRECIATING THE ARTS – H2

5 Credits (#51924) Open to Grades 9-12

This is an introductory course for students interested in learning about the history of art through a wide range of activities including group discussions, written assignments, and a vast number of studio art hands-on projects. Come and explore why and with what materials artists create their art. Go back in time as we explore early Greece and Rome, and create your own clay vessel and mosaic tile. Visit the Renaissance world of Michelangelo and Leonardo da Vinci, and create your own present-day Mona Lisa! Pour your own plaster for a fresco painting, and explore the architecture of the Romanesque and Gothic buildings of the past with simple stain glass creations. Become an Impressionist artist using strokes of colors to capture the light as Claude Monet did in the late 1800s, and then jump into the modern world of Jackson Pollack and splatter an abstract work of controlled chaos. This course will help you become a life-long learner of the arts while also gaining an appreciation for the materials and art of each time period.

No previous art course or experience is required.

STUDIO 1 —FOUNDATION COLOR AND DRAWING – H2

5 Credits (#51224) Open to Grades 9-12

Studio 1 Art Class is designed to introduce basic skills, concepts, and techniques for students to create two-dimensional artwork. An emphasis is on drawing, painting, and color. Studio 1 is the prerequisite for Studio 2. Studio 1 and Studio 2 serve as the prerequisite for Studio 3 Art Class.

No previous art course or experience is required.

Studio 1 and 2 may not be taken during the same semester.

STUDIO 2 —FOUNDATION 2D AND 3D – H2

5 Credits (#51524) Open to Grades 9-12

This class is for all students who wish to continue to develop their artistic skills with an emphasis on 2-dimensional and 3-dimensional artwork (sculpture). Studio 1 and Studio 2 serve as the prerequisites for Studio 3 Art Class.

Prerequisite: Studio 1(#51224).

Studio 1 and 2 may not be taken during the same semester.

STUDIO 3 – H2

10 Credits (#51623) Open to Grades 10-12

This class is for all students who wish to continue to develop their artistic skills. Projects will involve extensions of knowledge and skills learned in Studio 1 and Studio 2 as related to drawing, painting, and 3-dimensional art.

Prerequisite: Studio 2(#51524)

ART SCULPTURE STUDIO – H2

5 Credits (#51124) Open to Grades 9-12

This course applies hands-on activities to explore how space, mass, balance, and form combine to create forms and structures. Instruction may include, but is not limited to, sculpture, ceramics, or assemblage. Media may include, but are not limited to, clay, wood, plaster, and paper maché. Cultural and historical connections will be made, along with career and real world applications.

Prerequisites: Studio 1(#51224).

HONORS ART PORTFOLIO 1 – H

10 Credits (#53013) Open to Grades 11-12

This class is for all students who wish to further their artistic skills and those students who may be considering majoring or minoring in art in college. Students will be encouraged to develop and advance their artistic skills with various materials and to create a portfolio of their work in drawing, painting, and sculpture.

Prerequisite: Studio 3(#51623) and teacher recommendation

AP ADVANCED ART PORTFOLIO 2: DRAWING

10 Credits (#53513) Open to Grades 11-12

This course is designed for the serious study of art. It is strongly recommended for all students attending art school or pursuing an art-related major or minor in college (fine arts, illustration, graphic design, communications, interior design, architecture, computer graphics, fashion design, etc.). The first semester of this course is dedicated to the preparation, development and presentation of each student's individual portfolio as defined by the College Board and various art schools, colleges and universities. The second semester is designed to encourage the student to initiate, develop and carry out an in-depth independent project focusing on a particular area of concentration (a series of pieces developed out of a cohesive area of study, based on a coherent plan, underlying idea that investigates an individual interest, growth and discovery.) Nightly homework will be mandatory. Summer work is also mandatory.

Prerequisite: Studio 3(#51623), and/ OR Honors Art Portfolio(#53013), teacher recommendation, and a 5-piece art portfolio from previous art courses submitted to the AP Art teacher in March prior to enrolling in the class.

AP ADVANCED ART PORTFOLIO 2: 2D DESIGN

10 Credits (#53413) Open to Grades 11-12

This course is designed for the serious study of art. It is strongly recommended for all students attending art school or pursuing an art-related major or minor in college (fine arts, illustration, graphic design, communications, interior design, architecture, computer graphics, fashion design, etc.). The first semester of this course is dedicated to the preparation, development and presentation of each student's individual portfolio as defined by the College Board and various art schools, colleges and universities. The second semester is designed to encourage the student to initiate, develop and carry out an in-depth independent project focusing on a particular area of concentration (a series of pieces developed out of a cohesive area of study, based on a coherent plan, underlying idea that investigates an individual interest, growth and discovery.) Nightly homework will be mandatory. Summer work is also mandatory.

Prerequisite: Studio 3(#51623), and/ OR Honors Art Portfolio(#53013), teacher recommendation, and a 5-piece art portfolio from previous art courses submitted to the AP Art teacher in March prior to enrolling in the class.

INTRODUCTION TO DIGITAL PHOTOGRAPHY – H2

5 Credits (#53824) Open to Grades 9-12 This course will focus on incorporating the principles and elements of art into digital photography. Students will learn how digital cameras work, the history of photographic technologies and artists, as well as Photoshop editing skills. Students will be required to complete weekly homework assignments and will create a portfolio of their work by the end of the course. It is strongly recommended that students use their own digital camera for this course. *Prerequisites: None*

DIGITAL PHOTOGRAPHY II – H2

5 Credits (#53924) Open to Grades 9-12 with Prerequisite

This course will focus on drafting, revising, and exhibiting multiple photographic series. Students will further their technical knowledge of digital cameras, learn how to print their images, and how to display images in a gallery. The class will also be looking more closely at contemporary photographers.

Projects will include:

- Self Portrait
- Artist Emulations
- Photography as Illustration

Prerequisite: Intro to Digital Photography(#53824)

GRAPHIC DESIGN I – H2

5 Credits (#54224) Open to Grades 9-12 with Prerequisite

This course will focus on typography, branding, layout, package design, the history of graphic design, and career choices. Students will learn to use Adobe Illustrator.

Units will include:

- Typography - anatomy of type, quote poster
- Branding - logo, business card
- Layout - Concert poster, magazine layout
- Package Design - Food product

Students will also learn the principles of art and elements of design to improve their use of color and composition. Students are required to keep a sketchbook for this class, and will be given occasional quizzes.

Prerequisite: Studio Art I(#51224) or Digital Photography(#53824)

GRAPHIC DESIGN II – H2

5 Credits (#54424) Open to Grades 10-12 with Prerequisite.

This semester-long course will focus on more complex Graphic Design projects, building on previously obtained knowledge on typography, layout, branding, the history of graphic design, and career choices.

Units will include:

- Typography—Ampersands
- Design—Pattern Creation
- Designing for 3D—Book Cover
- Layout—Movie Poster
- Branding—Creating a Personal Brand

Students will also continue to master Adobe Illustrator. Students are required to keep a sketchbook for this class, and will be given occasional quizzes.

Prerequisite: Graphic Design I(#54224)

3D DESIGN AND ANIMATION (Animation I) – H2

5 Credits (#54324) Open to Grades 9-12 with Prerequisite

In this class you will learn the basic principles of animation in both 2D and 3D programs, along with 3D design. We will use Autodesk Maya, Adobe Flash, and Adobe Premiere. Throughout the class we will also be looking at the history of animation.

Units will include:

- 2D Animation - Timing, walk cycles
- 3D Design - Creating objects and characters
- 3D Animation - Timing, train movement

Students are required to keep a sketchbook for this class, and will be given occasional quizzes.

Prerequisite: Studio Art I(#51224) or Introduction to Digital Photography(#53824)

ANIMATION II – H2

5 Credits (#54524) Open to Grades 10-12 with Prerequisite.

In this semester-long course, students will be creating a short animation with a storyline. Students have the choice of focusing on 2D computer animation (Adobe Flash), 3D computer animation (Maya), or experimental animation (variety). As a class we will continue to look at the history of animation picking up where we left off in Animation I.

Units will include:

- Storyboard—Planning your animation
- Animatic—Timing and sound design
- Final Animation—Completing your animation

Students are required to keep a sketchbook for this class, and will be given occasional quizzes.

Prerequisite: 3D Design and Animation (Animation I)(#54324)

MUSIC

The Music Department at Chelmsford High School provides students with situations in which each individual can develop self-expression and aesthetic sensitivity. Course selections vary from large group performance ensembles to more individualized, non-performance courses.

MUSIC THEORY 1 – H2

10 Credits (#54623) Open to Grades 9-12

In Music Theory 1 the fundamentals of note reading, chord structure, chord progressions, scales, key and key signatures are taught. Beginning ear training is introduced. This course is recommended for students seeking basic, fundamental music enrichment. Limited work is assigned outside of class.

No prerequisites.

AP MUSIC THEORY

10 Credits (#56513) Open to Grades 10-12

AP Music Theory is designed for students who require theory for career study as well as those who desire it for enrichment. Emphasis is placed on music of Western tonality from 1600-1900. Geared toward preparation for the AP Music Theory exam, the course includes advanced ear training, melodic and rhythmic dictation, sight singing, figured bass analysis, extensive four-part harmonic composition, and basic formal analysis.

Prerequisite: Successful completion of Music Theory I(#54623) with teacher recommendation OR passing the AP Music Theory entrance exam (See Department Coordinator).

HONORS TRACK PERFORMANCE ENSEMBLES:

BAND-WOODWIND AND BRASS H (#57013) – Open to grade 9-12

BAND-PERCUSSION H (#57113) Open to grade 9-12

TREBLE CHOIR - H (#57513) – Open to treble voices grades 9-12

CONCERT CHOIR-H (#57413) – Open to tenor/bass voices grade 9-12/treble voices grade 11-12

ORCHESTRA-H (#58013) Open to grade 10-12

GRADE 9 CHAMBER ORCHESTRA-H (#58113) Open to grade 9

See individual course descriptions below

Band (Woodwind/Brass and Percussion), Treble Choir, Concert Choir, Orchestra, and Chamber Orchestra may be taken as a Level 1 (Honors) course with the approval of the instructor and the Fine Arts Coordinator if the student agrees to complete the following requirements.

Student must:

1. Meet grade level performance expectations as indicated by the ensemble director.
2. Perform for a Faculty Jury once a semester during finals.
3. Maintain an Honors Portfolio.
4. Prepare and audition for the Junior (Grade 9) or Senior (Grades 9-12) District Ensembles.
5. Honors students are strongly encouraged to participate in other performance music activities outside of school.
6. While not required, private lessons on your voice or instrument are HIGHLY recommended.
7. Students must earn a grade of 90 or higher in their ensemble to enter or continue in Honors Level.

Only scheduled students in their performance ensemble may audition for the Northeastern District Festival and All-State, with the recommendation of their Director.

BAND-WOODWIND AND BRASS – H2

10 Credits (#57023) Open to Grades 9-12

The Band program is open to all students who play a wind instrument. Students enrolled in this course will participate in Marching Band and Symphonic Band. Students are also given the opportunity to audition for Jazz Ensemble and participate in other extracurricular musical activities such as Hoop Band, Woodwind & Brass Choir or various other chamber ensembles. Attendance at all performances is a course requirement. Only scheduled Band students may audition for the Northeast District Festival and All State Festival with the recommendation of the director. There is also an honors option for this course (see description, above).

BAND-PERCUSSION – H2

10 Credits (#57123) Open to Grades 9-12

The Chelmsford High School Band Percussion class is for members of the Chelmsford High School Band percussion section. These students will meet during the school day independently from the woodwinds and brass sections of the CHS Band. This class is a performance-based course. Students enrolled in this class will be a part of the CHS Band program (Marching & Symphonic Band) and will be held to the same after-school rehearsal/performance schedule and expectations. This full-year course offers hands-on experience to drumming skills and the percussive arts. Students will experience drum-set playing, stick control, rhythm reading, hand drumming, melodic percussion and modern theatrical percussion performance. Students will practice on acoustic percussion, African and Latin percussion instruments, concert percussion and marching percussion instruments. This class is open to any student at Chelmsford High School including students with proficiency on other instruments. Only scheduled band students may audition for the Northeastern District Festival and All-State, with the recommendation of the Band Director. There is also an honors option for this course (see description, above).

TREBLE CHOIR – H2

10 Credits (#57523) Open to treble voices in grades 9-12

The Treble Choir is a performing vocal ensemble open to sopranos and altos in grades 9 through 12. Treble Choir is an inclusive class with no prerequisite or audition required. Students from all levels of vocal experience are encouraged to sign up for this fun class! The Treble Choir performs three to four times per year at concerts showcasing a variety of classical and contemporary music. Attendance at these concerts is a course requirement. This course satisfies the prerequisite for membership in select after-school ensembles and eligibility to audition for Northeastern Senior and Junior District festivals. Students desiring a more challenging choral experience are encouraged to sign up for the optional Honors track (TREBLE CHOIR H, # 57513).

Prerequisite: None

CONCERT CHOIR – H2

10 Credits (#57423) Open to bass/tenor voices Grades 9-12, soprano/alto voices Grades 11-12

The Concert Choir is a performing vocal ensemble open to tenors and basses in grades 9 through 12 as well as sopranos and altos in grades 11 and 12. Concert Choir is an inclusive class with no prerequisite or audition required. Students from all levels of vocal experience are encouraged to sign up for this fun class! The Concert Choir performs three to four times per year at concerts showcasing a variety of classical and contemporary music. Attendance at these concerts is a course requirement. This course satisfies the prerequisite for membership in select after-school ensembles and eligibility to audition for Northeastern Senior and Junior District festivals. Students desiring a more challenging choral experience are encouraged to sign up for the optional Honors track (CONCERT CHOIR H, #57413).

Prerequisite: None

GRADE 9 CHAMBER ORCHESTRA – H2

10 Credits (#58123) Open to Grade 9

Grade 9 Chamber Orchestra is a performing ensemble in which string instrumentalists advance their musical skills. Any grade 9 student who wishes to be in the orchestra must be scheduled for this class. This ensemble will focus on building more advanced performance techniques. Attendance at all concerts is a requirement. This ensemble performs string and symphonic literature in a variety of musical styles from the Baroque to the present. **Instruments include violin, viola, cello, and bass.** Only scheduled string students may audition for the Northeastern District Festival and All-State, with the recommendation of the orchestra director. There is also an honors option for this course (see description, above).

Prerequisite: None

ORCHESTRA – H2

10 Credits (#58023) Open to Grades 10-12

This performance ensemble is for students who wish to perform advanced orchestral repertoire. It is open to any student who has completed one year of orchestra at the high school level. Attendance at all concerts is a requirement. Instruments include violin, viola, cello, and bass. Only scheduled string students may audition for the Northeastern District Festival and All-State, with the recommendation of the Orchestra Director. There is also an honors option for this course (see description, above).

Prerequisite: One year of Grade 9 Chamber Orchestra(#58123)

MUSIC APPRECIATION – H2

5 Credits (#58224) Open to Grades 9-12

This course is open to ALL students, musicians and non-musicians alike! It requires listening, sharing, and discussion. What are the elements of music? What makes music important and relevant in our lives? How has American popular music changed over the years? How do musicians earn a living in today's economy? How has music been used to inspire social and political change? These and other questions will be discussed, and examples of many styles of music will be played, listened to, and compared by the students.

Prerequisite: None

MUSIC IN A DIGITAL WORLD– H2

5 Credits (#58324) Open to Grades 9-12

This course will focus on incorporating the principles and elements of music with current technology programs. Students will explore technology to create, edit, and notate music.

Prerequisite: None

GUITAR 1 – H2

5 Credits (#59024) Open to Grades 9-12

This introductory guitar course is for the beginning guitarist with little or no experience. It is also for guitarists who need to improve their note reading skills and theory. The course will cover 14 basic chords with application to folk and modern pop styles, guitar structure, tuning, elementary rhythms applied to strumming, blues form, first position melody playing, trios, and accidentals. Students may bring their own guitars to class, or use the guitars provided by the school.

Prerequisite: None

ADVANCED GUITAR – H2

5 Credits (#59124) Open to Grades 9-12 with Prerequisite

This course is a continuation of Guitar 1. Initially, this course will be a review of Guitar One's curriculum – reviewing chords and note reading. It will then pick up to major scale construction and playing, key signatures, development of the right hand position with application to scales and accompaniment, arpeggio playing, tab, natural notes up the fret board, transposition, trios and ensemble playing in many styles: blues, country, classic and rock.

Prerequisite: Guitar 1(#59024)

THEATRE

INTRO TO ACTING AND PLAY PRODUCTION – H2

5 Credits (#59724) Open to Grades 9-12

This course will be designed to meet the needs of the beginning actor or student who is also interested in some technical elements of theater. Course work will include aspects of both acting and play production. The chief area of concentration will be in the basic tools an actor needs (projection, diction, eye contact, theater games). Student will also work on scenes for the beginning actor. In addition, students will learn the basics of stage make up and design, hair, set design, lighting design and sound design. This course is extremely hands-on, and trips to the CHS Performing Arts Center will be integral to the study.

Course Materials: Acting One by Robert Cohen, various plays, theatrical make up, films - What's Eating Gilbert Grape, A Streetcar Named Desire.

Prerequisite: None.

ADVANCED ACTING – H2

10 Credits (#59823) Open to grades 10-12

Advanced Acting offers the student who has already completed the Intro to Acting Workshop the opportunity to explore much more. Plays will be read, playwrights will be studied. Students will perform in a minimum of eight scenes from various plays. Students will begin to explore role building from the inside out: methods of acting will be taught and explored. These methods include the teachings of Stanislavsky, Meisner, Lee Strasberg, Robert Cohen, Uta Hagen and others. Students will write their own scenes, helping them further understand the playwright and character development.

Prerequisite: Intro to Acting(#59724)

IMPROVISATIONAL THEATER – H2

5 Credits (#59824) Open to Grades 9-12

Students will learn and explore some of the core fundamentals and principals of improvisational acting through theater games and exercises. Student will explore movement as an actor using Anne Bogart's VIEWPOINTS. Commedia Del Arte, Italy's oldest Improvisational style of theater will be explored. In addition, social issues of today will be examined through improvisational scenes created by the class. Basic tenets of acting will be examined including: active listening, character, status, making your scene partner look good and "yes, and". Improvisation as it is used today (audience participation theater, auditioning for film and television, playwriting, improv for social consciousness) will be part of this class.

In addition, an introduction to Shadow Puppetry as a unit will help students not only physically make and perform shadow puppets, but use improv for scenes to make their own creations come to life!

Each class will begin with an improv game/warm up and will close with one!

Prerequisite: None.

DIGITAL FILMMAKING: WRITING, ACTING IN, AND PRODUCING SHORT OR FULL LENGTH FEATURE FILMS

5 Credits (#59624) Open to Grades 9-12

This new course offering is designed for all students interested in film and video production. From concept to storyboard to production elements and cinematography, this course is a true hands-on experience. The course will also examine the historical roots of film and study the films that have had a major impact on the industry. Contributions of famous directors (Charlie Chaplin, Buster Keaton, Orsen Welles, D. W. Griffith, Alfred Hitchcock, Stanley Kubrick, Stephen Spielberg, Spike Lee, Christopher Nolan) will be viewed, analyzed and discussed. Students will learn elements of production including writing original scripts, creating a storyboard, creating a production staff, choosing locations, casting actors, the role of the casting director, and filming their original works. The course would also present guest speakers from the film industry.

Prerequisite: None

MATHEMATICS

In order to address the individual needs of students at Chelmsford High School, the mathematics program offers a wide range of courses which vary in content and level of difficulty. All courses will be taught using a variety of instruction strategies and appropriate, available technology. Various forms of assessment will also be used in all classes. All courses will be 10 credit full year courses except where noted. In order to be sure to select the most appropriate course, students are urged to confer with their current mathematics teacher, mathematics coordinator and/or guidance counselor. All students who would like to move up must have the recommendation of their current teacher and should have an A+ in the current course

INTRODUCTION TO ALGEBRA – Level 3

10 Credits (#11033), Grade 9

This course is designed for ninth grade students who successfully completed 8th grade mathematics. All students will be actively engaged in problem solving, reasoning, connecting, and communicating as they continue to focus on mathematical concepts and skill development. Topics that will be investigated in the course will include:

- Properties of Real Numbers
- Solving and Graphing Linear Equations and Functions
- Writing, Graphing, and Solving Linear Inequalities
- Systems of Linear Equations

Students will be required to keep an organized notebook and homework will be given on a daily basis. This course will also emphasize the investigation and solution of real world problems.

ALGEBRA I – H, H2, Level 3

10 Credits (#12213, #12223, #12233), Grade 9

This Common Core State Standards Algebra I course covers Expressions, Equations, and Functions; Solving, Writing, and Graphing Linear Equations and Inequalities; Systems of Equations and Inequalities; Exponential Functions; Polynomials and Factoring; Quadratic Equations; Data Analysis; and Probability. Students will be required to keep a notebook, read and interpret the algebra text and some independent work. Emphasis will be placed on investigating and solving real world problems that will include open-ended and open-response questions to assist in preparing students for the MCAS exam. Since the course will advocate and encourage the proper use of technology, the purchase of a TI-nSpire CAS CX graphing calculator is strongly recommended.

TRANSITIONS FROM ALGEBRA TO GEOMETRY—Part 1, Level 3

10 Credits (#12333), Grade 10

This course is designed for tenth grade students who have successfully completed Introduction to Algebra in the ninth grade. All students will be actively engaged in problem solving, making connections, and communicating as they continue to focus on mathematical concepts, skill development, and geometric reasoning. Topics that will be investigated in the course will include:

- Exponential Functions and Sequences
- Polynomial Equations and Factoring
- Quadratic Equations and Functions
- Radical Functions and Equations
- Data Analysis and Displays

Students will be required to keep an organized notebook and homework will be given on a daily basis. This course will emphasize the investigation and solution of real world problems, including open response questions that will assist in preparing the students for the MCAS exam.

TRANSITIONS FROM ALGEBRA TO GEOMETRY—Part 2, Level 3

10 Credits (#12433), Grade 10

This course is designed for tenth grade students who have successfully completed Introduction to Algebra in ninth grade. This course should be taken simultaneously with Transitions from Algebra to Geometry-Part 1. All students will be actively engaged in problem solving, making connections and communicating as they continue to focus on mathematical concepts, skill development, and geometric reasoning. Topics that will be investigated in the course will include:

- Basics of Geometry
- Segments and Angles
- Parallel and Perpendicular Lines
- Triangle Relationships and Special Right Triangles
- Congruent Triangles
- Quadrilaterals
- Similarity
- Polygons
- Area, Surface Area and Volume
- Circles

Students will be required to keep an organized notebook and homework will be given on a daily basis. The investigation and solution of real world problems, including open response questions that will assist in preparing the students for the MCAS exam will be emphasized in this course.

GEOMETRY – H, H2, Level 3

10 Credits (#13213, #13223, #13233), Grade 10

All levels (Geometry—H, Geometry—H2, and Geometry) will cover similar topics but the depth and pace of coverage will be adjusted according to the students' abilities, background, and needs. The Geometry H course focuses more heavily on proof-writing than the other levels of geometry offered. This course is designed to develop geometric thinking starting with the visual and progressing to the analytical, then developing concepts inductively and finally moving to deductive reasoning by using a variety of activities and investigations. Students will work in a variety of settings and configurations to continue the development of mathematical thinking and problem solving skills. They will use the language of geometry to study and form conjectures about geometric figures and concepts in both 2 dimensional and 3 dimensional space, as well as apply their knowledge to practical, real-life problems, which involve measurement, formulas, inductive reasoning, and deductive reasoning. This course can be taken simultaneously with Algebra II. Since the course will advocate and encourage the proper use of technology, the purchase of a TI-nSpire CAS CX graphing calculator is recommended.

Prerequisite for Honors: Algebra I H a grade of 85%.

ALGEBRA II – H, H2, Level 3

10 Credits (#14213, #14223, #14233), Grades 10 + 11

This Common Core State Standards Algebra II course covers Linear Functions, Quadratic Functions, Complex Numbers, Polynomial Functions, Rational Exponents and Radical Functions, Exponential and Logarithmic Functions, Sequences and Series, Trig Ratios, and Probability. Students will be required to keep a notebook, read and interpret the algebra text and some independent work. Emphasis will be placed on investigating and solving real world problems that will include open-ended and open-response questions to assist in preparing students for the MCAS exam. Since the course will advocate and encourage the proper use of technology, the purchase of a TI-nSpire CAS CX graphing calculator is strongly recommended.

Prerequisite for Honors: Algebra I H grade of 85%, Algebra 1 H2 grade of 95% or higher and the recommendation of your teacher.

ADVANCED ALGEBRA – Level 3

10 Credits (#13633), Grade 11+12

This course is specifically designed for students who have successfully completed Algebra II, Level 3. All students will be actively engaged in problem solving, reasoning, connecting and communicating mathematically as they study the following topics: Matrices and Determinants, Powers, Quadratic Functions and Inequalities, Complex Numbers, Polynomial Functions, Rational Functions, and Exponential and Logarithmic Functions. Students will be required to keep an organized notebook, read and interpret the algebra text and do some independent work. Emphasis will be placed on investigating and solving real-world problems that will include open-ended and open-response questions.

Since this course will advocate and encourage the proper use of technology, the purchase of the TI-nSpire CAS CX graphics calculator is strongly recommended.

TOPICS FROM COLLEGE ALGEBRA – Level 3

10 Credits (#14333), Grade 11

This course is specifically designed for the student who successfully completed the Transitions from Algebra to Geometry I & II courses. Students will be engaged in problem solving, reasoning, connecting and communicating as they study algebra topics that include linear, quadratic, absolute value, and exponential functions, while analyzing data related to these functions. Students will expand their working knowledge of polynomials, powers, roots, radicals and equation solving. Students will be introduced to trigonometry. Students will be required to keep an organized notebook. Emphasis will be placed on algebraic topics that will prepare students for SAT's and an introductory college mathematics course.

COLLEGE ALGEBRA & TRIGONOMETRY – Level 3

10 Credits (#16133), Grades 11 + 12

This course is designed for college bound students who are not considering math or science-related majors. This course will continue the job of building more algebraic skills which will require good work and study habits. Explorations into logarithms, analytic geometry, and trigonometry will be included. The emphasis will be on the application of various mathematical techniques and obtaining accurate results. This course should help the student to be successful with required college math courses. A scientific calculator will be necessary.

Prerequisite: Advanced Algebra (#13633) or Algebra II H2 (#14223)

PRE-CALCULUS—H

10 Credits (#15213), Grade 11

Honors Pre-Calculus is designed to cover those topics essential to the study of calculus and it will complete the student's preparation to meet the requirements for the SAT II Math II Exam. Students taking this course will pursue an in-depth study of functions which are used to model the data we encounter when solving real world problems. There is special emphasis on exponential, logarithmic, and trigonometric and inverse trigonometric functions as well as sequences and techniques in data analysis. Additionally, students will learn how to graph in the polar coordinate plane. The Ti-nSpire CAS CX calculator will be used regularly to enhance and facilitate the understanding of solutions to problems. Students will learn how and when to use available technology, but will also be made aware of its limitations.

Prerequisite: Algebra II H with a grade of 85% or higher or Algebra II H2 with a grade of 95% or higher and Teacher Recommendation

PRE-CALCULUS H2

10 Credits (#15223), Grade 11 + 12

This course will provide students an applications-oriented, investigative mathematics curriculum. The curriculum will emphasize functions and how they can be used as models for real world behavior. Linear, exponential, logarithmic, periodic, polynomial and trigonometric functions will be investigated with the use of graphing calculators, computers, and data collection devices. How and when to use technology as well as its limitations will be discussed. Graphing calculators (TI-nSpire CAS CX) will be used on a daily basis in

class and for homework.

Prerequisite: Advanced Algebra H (#13613) or Algebra II H or H2 (#14213, 14223)

INTRODUCTION TO STATISTICS – H2

10 Credits (#15423), Grade 11 + 12

This full-year course is designed for students who have successfully completed Algebra II. The course will introduce students to statistical reasoning and methods that are relevant in the fields of medicine, business, education, political science, psychology and entertainment. Topics will include design of experiments and sampling techniques, data analysis and displays, probability and counting principles, discrete probability distributions, normal probability distributions, confidence intervals, and hypothesis testing. Students will be required to keep an organized notebook, read and interpret the textbook, and do independent work. Emphasis will be placed on investigating and solving real world problems that will include open response questions for a variety of applications.

Prerequisite: Algebra II H or H2 (#14213, 14223)

AP STATISTICS

10 Credits (#15413), Grade 11 + 12

Advanced Placement Statistics is a yearlong course for students who are interested in studying statistics in depth. The AP Statistics course will prepare students to take the AP Statistics exam. Emphasis will be given to real-world applications in a variety of disciplines, including medicine, business, education, political science, psychology, sports, and entertainment. Major topics will include:

- Exploring Data – observing patterns and departures from patterns
- Sampling and Experimentation – planning and conducting a study
- Anticipating Patterns – producing models using probability theory and simulation
- Statistical Inference – estimating population parameters and testing hypotheses

Students will be required to keep an organized notebook, read and interpret the textbook, and do independent work. Homework will require students to identify appropriate methods for solving problems, show detailed work to support their answers, and provide thorough explanations of their results. In communicating results to problems, particular attention will be given to the proper use of statistical vocabulary and accurate explanations of statistical concepts and methods.

The TI Nspire CX CAS graphing calculator is used for this course. Students will also use statistical software to practice and strengthen their understanding of statistical concepts. In addition to frequent assessments that include both multiple choice and open response type questions, there will be 1-2 projects per term. Projects will provide students an opportunity to gain hands-on experience and make connections between different parts of the course.

Prerequisite: Algebra II H with a grade of 80% or higher or Algebra II H2 with a grade of 95% or higher and Teacher Recommendation

Note: Visit College Board Advanced Placement online to see a complete list of topics.

ADVANCED MATHEMATICAL DECISION MAKING – Level 3

10 Credits (#18534), Grade 12

Advanced Mathematical Decision Making (AMDM) is a mathematics course for high school seniors that builds on and extends what students have learned in Algebra and Geometry courses. The course focuses on real-world application of the mathematics learned. It covers a range of mathematics topics including: analyzing numerical data, conducting, critiquing, and communicating statistics, modeling mathematical data and relationships, and mathematical decision making in finance and budgeting. Students will reinforce these skills as they study new topics in mathematics in relevant and engaging contexts. The course also helps students develop college and career skills such as collaborating, conducting research, and making presentations.

CALCULUS COURSES

CALCULUS 1—H2

10 Credits (#16523), Grade 12

This is a problem driven course. Practical, real world problems considered from a geometrical, numerical, and algebraic point of view guide this course. In this context students study differential calculus. Since this course will advocate and encourage the proper use of technology, the purchase of a TI-nSpire CAS CX graphing calculator is strongly recommended as a way of helping students to think mathematically and to connect their learning to the real world.

CALCULUS 1 - H

10 Credits (#16513), Grade 12

Honors Calculus is a year-long course for students who have a thorough knowledge of algebra, geometry, analytic geometry, and the properties of functions. Students will receive an introduction to the differential and integral calculus of elementary functions, including algebraic, trigonometric, exponential functions and their inverses. Concepts will be pursued from multiple points of view, with algebraic, geometric, and numerical approaches given to the understanding of the concepts of calculus and their applications. It will be taught predominantly without the use of a calculator. This course will prepare a student to take Calculus I at any college or university. Students in this course must have successfully completed Pre-Calculus Honors or its equivalent*.

*Exceptional performance of Pre-Calculus-- H2 with written recommendation of their Pre-Calculus teacher and completion of a summer mathematics packet.

AP CALCULUS (AB)

10 Credits (#16313), Grade 12

Advanced Placement Calculus is a year-long course for students who have a thorough knowledge of algebra, geometry, analytic geometry, and the properties of functions. Students will receive an introduction to the differential and integral calculus of elementary functions, including algebraic, trigonometric, exponential functions and their inverses. Additional topics include L'Hôpital's Rule, integration by parts, slope fields, rotational volume, and solving differential equations. Concepts will be pursued from multiple points of view, with algebraic, geometric, and numerical approaches given to the understanding of the concepts of calculus and their applications. The level of theory and rigor is that prescribed by the Advanced Placement Program of the College Board, and the use of graphing technology is required. This course will prepare a student to take the Calculus AB test.

Prerequisite: Pre-Calculus—Honors(#15213), Teacher Recommendation and Completion of a summer work is required for all students.

Note: Visit College Board Advanced Placement on-line to see a complete list of topics.

AP CALCULUS (BC)

10 Credits (#16413), Grade 12

Advanced Placement Calculus (BC) is a year-long course for students that have a thorough knowledge of algebra, geometry, and the properties of functions. Students will complete the above course description for AP Calculus (AB). AP Calculus (BC) builds upon and extends the concepts explored in Advanced Placement Calculus (AB). Topics covered include the calculus of vector and polar functions, logistic differential equations, integration by partial fractions, and Newton's method. Additionally, series and polynomial approximations, including Taylor series and test for convergence, will be a major area of study. This course will prepare a student to take the Calculus BC test. Students who take the Calculus BC test will also receive a Calculus AB score.

Prerequisite: Pre-Calculus—Honors(#15213), Teacher Recommendation and Completion of a summer work is required for all students.

Note: Visit College Board Advanced Placement on-line to see a complete list of topics.

COMPUTER SCIENCE COURSES

COMPUTER APPS (SEMESTER) – H2

5 Credits (#17524), Grades 10, 11, 12

This is a project-based course. Students work on projects with detailed instructions, teacher demonstrations and video tutorials. The emphasis of study is to develop computer skills that are important for academic, personal, and job success. In this course, you will learn the basics of Java programming to generate numeric and graphical output. Then, you will learn to design and develop real, downloadable apps for Android devices using MIT App Inventor for Android devices. We will explore how computer science can help us improve the world, and in your final project, you will collaboratively develop an app that helps other people. In this way, student learning will be associated closely with their interests and grounded in their schools, their homes, and their communities.

This course will be fun, and it will also be very challenging. You will need to learn to try different solutions and seek help from your teammates and online resources. Through this process, you will become a great problem solver.

Students will complete between 25 – 30 projects in one semester. There is rarely any homework, quizzes or tests. There is a final project that students will work on the last three weeks of the semester. No programming experience necessary. This course is considered a practical art.

Prerequisite: None

COMPUTER PROGRAMMING IN “C” – H2

10 Credits (#17723), Grades 10, 11, + 12

This course is a project based course designed to provide students with an introduction to the processing of information by the computer, computer logic, memory, input/output processing, and programming in the C language. This course emphasizes the programming problem-solving process, problem organization, algorithms, coding, debugging and the elements of good programming style. Programming problems will include a wide variety of numeric and non-numeric applications. No prior programming experience necessary. This course is considered a practical art. *Prerequisite: None*

AP COMPUTER SCIENCE A

10 Credits (#17513), Grade 11 + 12

This course prepares students for the AP Computer Science A exam by emphasizing object-oriented programming methodology through problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction. The course will cover Object-Oriented Program Design, Program Implementation, Program Analysis, Standard Data Structures, Standard Algorithms, and Computing in Context. This course is considered a practical art.

Prerequisite: Completion of Computer Programming in “C”, teacher recommendation and summer work

WELLNESS (PE/FCS/HEALTH)

PHYSICAL EDUCATION

Grade 9 Required

PLEASE CHOOSE 1 OF THE FOLLOWING FRESHMAN PHYSICAL EDUCATION CLASSES:

TEAM GAMES 1

5 Credits (#77124)

This class will provide students with opportunities to enjoy participating in traditional team sports and games (i.e., basketball, capture the flag, soccer, ultimate Frisbee, floor hockey, mat ball, flag football, team handball, etc.). In this class the curriculum is designed to help students develop positive self-esteem with regard to their physical skills and knowledge of the rules/strategies of games so that they will choose to remain physically active beyond graduation. A great deal of emphasis is placed upon demonstrating good sportsmanship and character qualities, practicing appropriate behaviors and developing the skills necessary to participate in these games. This class will also include an introduction to personal fitness with a focus on learning about the basics of strength and conditioning.

WELLNESS ACTIVITIES 1

5 Credits (#77224)

This class is designed to improve muscular strength, endurance, flexibility, posture, balance and relaxation techniques. Students will gain a beginner understanding of yoga postures, benefits associated with yoga along with the benefits, organization, implementation and evaluation of a balanced aerobic fitness program utilizing walking as the primary activity. This course will also include cooperative games, elementary games and an introduction to personal fitness with a focus on learning about the basics of strength and conditioning.

NET GAMES 1

5 Credits (#77324)

This class will focus on sports/activities that use a net. This course will be centered on the sports of badminton, pickleball, volleyball and tennis. A great deal of emphasis is placed upon demonstrating good sportsmanship and character qualities, practicing appropriate behaviors and developing the skills necessary to participate in these sports. This class will also include an introduction to personal fitness with a focus on learning about the basics of strength and conditioning.

RECREATIONAL GAMES 1

5 Credits (#77424)

This class is for students interested in participating in less competitive activities and have tremendous value as lifelong pursuits. Typical activity choices include traditional favorites such as tennis and badminton as well as some of our non-traditional favorites which would include bocce, Frisbee, golf, beach volleyball, fitness walking, etc. This class will also include an introduction to personal fitness with a focus on learning about the basics of strength and conditioning.

Grade 10 Required

PLEASE CHOOSE 1 OF THE FOLLOWING SOPHOMORE PHYSICAL EDUCATION CLASSES:

TEAM GAMES 2

5 Credits (#77824)

This class will provide students with opportunities to enjoy participating in traditional team sports and games (i.e., floor hockey, basketball, volleyball, team handball, etc.). In this class the curriculum is designed to help students develop positive self-esteem with regard to their physical skills and knowledge of the rules/strategies of games so that they will choose to remain physically active beyond graduation. A great deal of emphasis is placed upon demonstrating good sportsmanship and character qualities, practicing appropriate behaviors and developing the skills necessary to participate in these games. Students will also have the opportunity to obtain a two-year American Heart Association's Heart Saver First Aid CPR AED Provider certification.

Prerequisite: Passing grade in Freshman Physical Education Class

WELLNESS ACTIVITIES 2

5 Credits (#77924)

This class is designed to improve muscular strength, endurance, flexibility, posture, balance and relaxation techniques. Students will gain a more in depth understanding of yoga postures, benefits associated with yoga, along with the benefits, organization, implementation and evaluation of a balanced aerobic fitness program utilizing walking as the primary activity. This course will also include cooperative games, elementary games and a two-year American Heart Association's Heart Saver First Aid CPR AED Provider certification.

Prerequisite: Passing grade in Freshman Physical Education Class

RECREATIONAL GAMES 2

5 Credits (#77624)

This class is for students interested in participating in less competitive activities and have tremendous value as lifelong pursuits. Typical activity choices include traditional favorites such as tennis and badminton as well as some of our non-traditional favorites which would include Frisbee, golf, beach volleyball, fitness walking, pickleball, elementary games, etc. Students will also have the opportunity to obtain a two-year American Heart Association's Heart Saver First Aid CPR AED Provider certification.

Prerequisite: Passing grade in Freshman Physical Education Class

ELECTIVES - Grades 11 & 12

COMPETITIVE TEAM GAMES

5 Credits (#76204)

This is an elective option for juniors and seniors who enjoy participating in team sports (basketball, capture the flag, soccer, ultimate Frisbee, mat ball, floor hockey, etc.). In Competitive Team Games the curriculum is designed to help students develop positive self-esteem with regard to their physical skills and knowledge of the rules and strategies of games so that graduates will choose to remain physically active beyond graduation. A great deal of emphasis is placed upon demonstrating good sportsmanship and character qualities, becoming a knowledgeable spectator, practicing appropriate behaviors for co-ed physical activities, and developing the skills necessary to participate in both competitive and/or recreational activities. *Prerequisite: Passing grade in Freshman and Sophomore Physical Education Class*

INTRODUCTION TO ATHLETIC TRAINING

5 Credits (#77524)

The purpose of this class is to prepare students in skills used in the fields of Sports Medicine/ Athletic Training. The course includes the history of the athletic training profession, ethics, proper recording of injuries, taping, and principles of athletic training. The content includes, but is not limited to, roles and responsibilities of team members, emergency and non-emergency procedures, anatomy and physiology, injury evaluation, equipment and modalities of rehabilitation, injury and disease prevention, and protective equipment.

Prerequisite: Passing grade in Freshman and Sophomore Physical Education Class

UNIFIED PHYSICAL EDUCATION

5 Credits (#77724)

Unified physical education is an elective course designed for students interested in working with students who have special needs. Throughout the course, students will work one-on-one with students who have cognitive and physical disabilities in an active setting. The physical education curriculum will be taught by the physical education instructor, which will be assisted by students working one-on-one with these students as a support to help guide them through the following lifetime activities: cooperative games, locomotor skills and patterns, striking, throwing, short and long handed implements, and fitness. Students in this course will learn how to provide a positive movement learning experience to students with special needs; increase their knowledge on different disabilities; learn strategies to support students in the development of movement skills in the areas of gross motor patterns, manipulative skills, striking skills, and fitness; and help foster a positive learning and social environment for students with special needs.

Prerequisite: Passing grade in Freshman and Sophomore Physical Education Class

FAMILY AND CONSUMER SCIENCES

All Family and Consumer Sciences Courses are aligned with the Massachusetts Health Curriculum Frameworks.

Family and Consumer Sciences courses prepare students for multiple roles in the home, work and the community as well as offer training for many diverse professions including day-care worker, babysitter, and with further education, a preschool, elementary, middle school, or high school teacher. By coordinating classroom theory with hands-on experience, students develop and enhance their creative skills, and their problem-solving skills necessary for successful living now and in the future. All Family and Consumer Science courses are aligned with the Massachusetts Health Curriculum Frameworks. Each of these courses is considered a practical art.

Grades 9, 10, 11, & 12

EXPLORING EARLY CHILDHOOD 1—H2

5 Credits (#67024)

This semester course combines classroom instruction with hands-on participation working with children in the Lion's Den Preschool (the in-house preschool) and with school-age children in the Extended Day Program at Harrington School in the morning. Theory of Child Development is studied throughout the course, including the physical, social, emotional, and cognitive development of children from age three to twelve. With knowledge gained in the classroom, students have the opportunity to create and develop developmentally appropriate activities for the young children they will be working with. Students also have the opportunity to explore careers in this field. Students who are 18 years old will be asked to fill out a C.O.R.I. form and provide photo identification before they begin working with the young children. This course is considered a practical art.

Grades 10, 11, & 12

EXPLORING EARLY CHILDHOOD 2— H2

5 Credits (#67424)

This semester course is a sequel to Exploring Early Childhood 1. Students will continue to work with children in the Lion's Den Preschool (the in-house preschool) and with school-age children in the Extended Day Program at Harrington School in the morning. Again, theory of Child Development is studied throughout the course, including the physical, social, emotional, and cognitive development of children from age three to twelve. However, pregnancy, prenatal development, and the birth process are discussed at great length. Students will have the opportunity to simulate parenthood in this course. Students will also have the opportunity to plan an entire day in the Lion's Den Preschool by creating several developmentally appropriate activities for the preschool children. Students who are 18 years old will be asked to fill out a C.O.R.I. form and provide photo identification before they begin working with the young children. This course is considered a practical art.

Prerequisite: Exploring Early Childhood 1. Successful completion of this course and portfolio preparation will allow students to apply for college credit at Middlesex Community College.

Grades 11, & 12

EXPLORING EARLY CHILDHOOD 3/DIRECTED STUDY — H2

10 Credits (#67623)

This year-long advanced course is a continuation of Exploring Early Childhood 1 and 2. This course gives the high school student a more comprehensive understanding of the day-to-day operations of a preschool, kindergarten, elementary or middle school classroom. Throughout the course, students work as teacher assistants with a mentor teacher within the school system. With the help of the mentoring teacher, each student will be expected to teach at least six lessons to the young students they are working with. Students will also do independent research on early childhood theorists. The final assessment of the course is the completion of a portfolio. Students who are 18 years old will be asked to fill out a C.O.R.I. form and provide photo identification before they begin working with the young children. This course is designed for students pursuing a career working with children. This course is considered a practical art.

Prerequisite: Exploring Early Childhood 2 and Teacher Recommendation.

HEALTH EDUCATION

Grade 9 Required Course

LIFE MANAGEMENT SKILLS – H2

5 Credits (#73024)

This Health Education course is required of all freshmen. This course is designed to assist students in making positive choices related to physical, mental/emotional, and social health. Topics of this exciting course include: health in the United States (past, present, and future concerns), mental health, mental health disorders, dealing with stress in a positive way, common disease prevention, time management strategies, addictive behaviors, human sexuality and healthy relationship responsibilities, and positive plans for living healthy in the future. Consistent points of interest include self-concept, respect, responsibility, positive communication and actions, and safety. This course will help build the life skills necessary to make wise choices related to personal health and the health of others.

A positive parent permission slip will be required for the Human Sexuality portion of the course.

Jr/Sr. Required Course*

****This Health Education graduation requirement will start with the Class of 2019. These courses can still be taken as elective courses outside of this graduation requirement. Please choose 1 of the two following health education courses listed below to fulfill the graduation requirement.***

REALITY CHECK 2.0 – H2

5 Credits (#75024)

Students will become empowered with the tools necessary to make healthy lifestyle choices. They will find the answers to: How do I turn gaining knowledge about basic health practices into the power to control my future? How do I gain balance in my life – time managed days vs. over stressed? How do I use available resources to create a personal plan to perform at my optimum level?

This course will focus on the issues and challenges that young adults face today. Students will analyze their personal health choices and risks based on their decision making practices. They will find answers to: How do I communicate effectively? How do I recognize and avoid addictive behaviors and substances? What do I need to understand in order to build healthy relationships with both my peers and adults? How do I utilize factual information regarding basic human sexuality and responsible decision making to make healthy and safe choices?

Prerequisite: Passing grade in Life Management Skills Class

THE POWER OF CHOICE – H2

5 Credits (#66524)

Do you wonder how to “Fuel the Teen Machine”? Students interested in becoming empowered with the tools necessary to make healthy lifestyle decisions will benefit from this course. You will find the answers to: How do you gain nutritional balance to maintain the energy for family, school, friends, and....life? How do you detect myth from fact in choosing the components of your diet? How do you use current resources to create your personal plan to perform at your optimal level? The POWER OF CHOICE is yours!

Prerequisite: Passing grade in Life Management Skills Class

BUSINESS EDUCATION & MEDIA

Business Education & Media courses at Chelmsford High School provide students with useful, life-long skills obtained through courses in Business, Media and Family & Consumer Science. Students will expand 21st Century skills, be prepared for college and further their personal growth.

BUSINESS EDUCATION

The Business Education department's faculty seeks to provide all students with the proper 21st century tools to meet their future goals. These college preparatory course offerings provide a solid foundation for finance, economics, business, information literacy and entrepreneurship. Creativity, critical thinking, problem solving, communication, and collaboration are skills not only central to our business education programming but are called for by Massachusetts and Federal educational and business leaders. We endeavor to serve our students by offering a curriculum that combines the key elements of academic and 21st Century themes, while exposing students to today's global economic concepts. We seek to utilize today's technology to explore the vast world of business, develop expertise, and to provide a foundation for further collegiate study. We also offer membership in Distributive Education Club of America (DECA.org) and Banking Internships with Workers Credit Union.

INTRODUCTION TO BUSINESS LAW-H2

5 Credits (#61224) Open to Grades 10-12

This course provides an overview of the legal, regulatory and ethical environment in which business decisions are made and their effect on us as citizens. The course exposes students to a brief history of our legal system and a variety of criminal and civil concepts, then focuses on contracts and employment law. Contract law establishes the ground rules that each of us use to define our private rights and duties. In addition, students will gain an understanding of the rights and responsibilities they have and the protections given them by our legal system in the workplace. This course will develop the ability of each student to read and reason critically. Students in this Introduction to Business Law course are also eligible for DECA.

Prerequisites: None

MODERN BUSINESS FUNDAMENTALS—H2

5 Credits (#62024) Open to Grades 9-12

This introduction to business course will introduce students to the major disciplines of business in the 21st century through the use of hands-on, enjoyable, and challenging activities that apply the key skill areas in business. During this course students focus on real life business concepts through the use of online curriculum, simulations, and games. Current topics are a brief introduction to other courses in the business program such as: Economics, US and Global Business Environments, Entrepreneurship, Marketing, Business Law, Personal and Business Finance, Leadership, and Management. Students will have the opportunity to design and operate their own small business and create a matching business plan. Students will use the new online text Principles of Business 8th Edition (2012) with additional accompanying online business activities. Students in this course are also eligible for DECA.

Prerequisites: None

MEDIA LITERACY FOR THE 21ST CENTURY—H2

5 Credits (#62124) Open to Grades 9-12

Gathering, interpreting and communicating information are key skills for everyone's success. With the advances in technology and the amount of information available to students, literacy has a whole new definition. Through the Internet, Facebook, Twitter, cell phones, iTunes, TV, and streaming media, we are constantly bombarded with someone's message. In this course, students develop information and media literacy skills and begin to understand how to transform the process of media consumption into an active and critical process. Students will learn the responsibilities that come when they use the power of communication technologies. They will become aware of how all messages are constructed, how to determine who created it,

and for what purpose. This enables the student to make wise choices to protect their privacy and their digital identity.

Prerequisites: None

ACCOUNTING 1— H2

5 Credits (#62424) Open to Grades 9-12

Accounting 1—H2 is a one semester course open to all students. Students will explore the fundamental concepts of Financial Accounting. While traditional pencil and paper methods are not abandoned, high emphasis is placed on computerized Accounting practices. Students will complete a variety of short and long term projects using *Aplia Online Working Papers* and customized Microsoft Excel templates. Accounting Students are now eligible for DECA competition.

Prerequisites: None

PERSONAL FINANCIAL LITERACY-H2

5 Credits (#61424) Open to Grades 9-12

In today's unstable economic and financial climate, it is essential that students become financially literate citizens who will understand the fundamental concepts of financial security today and in the future. They will develop knowledge, skills, and confidence to begin assuming responsibility for their financial future. Students will develop critical thinking skills with respect to financial planning concepts as they relate to their own individual situations. Topics will include:

- Education and Employment
- Financing a car loan
- College Financing
- Credit Cards and Debit Cards
- Budgeting
- Saving and Investing Basics
- Impacts of Credit Use
- Consumer Decision Making
- Insurance

Students will take part in a variety of realistic experiences throughout the semester including the H&R Block Virtual Business Personal Finance Simulation as well as a customized Investopedia stock market game. Through our partnership with Worker's Credit Union, banking professionals will engage the students in several interactive presentations. Financial Planning students are eligible for DECA competition.

Prerequisites: None

MARKETING —H2

5 Credits (#65024) Open to Grades 9-12

A college oriented course designed to cover key topics such as: the role of marketing in our economy; consumer behavior; market planning; the development of the marketing mix; market segmentation; pricing strategies; selling and advertising. Discussions, case studies, oral presentations, and writing assignments will be a part of the required coursework. Computer simulation programs will be used to enhance student understanding in multiple areas. Students are eligible for and are encouraged to participate in DECA and compete with other students in specific areas of study they are interested in: concert/event promotion, fashion buying, displaying and showcasing. Students will explore the determination of target markets, the psychological influences that cause people to buy, and the appropriate advertising methods used to reach the appropriate audiences. Students will be encouraged to participate in DECA competitions and events where they will have a chance to successfully apply their knowledge in a variety of academic and hands-on settings.

Prerequisites: None

SPORTS AND TRAVEL MARKETING—H2

5 Credits (#61724) Open to Grades 9-12

Sports and Travel Marketing is a course for students interested in the field of marketing. Students will learn to apply basic marketing fundamentals to the diverse fields of Fashion/Retail Management, Sports & Entertainment Marketing, and Travel & Tourism Management with emphasis on the advertising methods used in each industry. The concept of product, price, place, and promotion will be applied to topics such as: hotel and restaurant management, airlines and cruises, vacation packages, theme parks, professional and intercollegiate athletics, concert/event promotion, fashion buying, displaying and showcasing. Students will explore the determination of target markets, the psychological influences that cause people to buy, and the best advertising methods used to reach the appropriate audiences. Computer simulation programs will be used to enhance student understanding in multiple areas. Students will be encouraged to participate in DECA competitions and events where they will have a chance to successfully apply their knowledge in a variety of academic and hands-on settings.

Prerequisites: None

MANAGEMENT—H2

5 Credits (#65424) Open to Grades 9-12

This semester course introduces basic functions and how organizations/businesses are owned, managed, and controlled. The managerial roles of planning, leading, organizing and controlling provide the framework that course materials are built around. Areas of concentration include legal and ethical considerations in management, decision-making and communication skill development, and leadership principles. Computer simulations are utilized to enhance student understanding. Students are eligible and encouraged to participate in DECA competitions and events where they will have a chance to successfully apply their knowledge in a variety of academic and hands-on settings.

Prerequisites: None

BANKING INTERNSHIP

5 Credits (#61104) Open to Grades 11-12

Application process as explained below must be followed.

Students will learn daily banking policies and practices and apply what they have learned by working at the Chelmsford High School branch of Workers Credit Union. Students will be encouraged to participate in the MSBA (Mass School Bank Association) Conference where they will have a chance to apply their knowledge in product development, marketing and banking bowl trivia events. This conference is held every spring in Boston. In addition, seniors taking this course will be eligible to participate in the MSBA Scholarship Program with a chance to win one of three \$500 scholarships. Students in the Banking Internship course are also eligible for DECA.

Prerequisites: None

Course Requirement

Participants in this internship must be recommended by members of the Business Department after demonstrating interest in and ability in the field of business and must submit a Workers Credit Union application.

INNOVATION, LEADERSHIP & COMMUNICATION (DECA) - H

10 Credits (#62213) Open to Grades 11-12

This year long honors course curriculum is structured on the principles of marketing and entrepreneurship while emphasizing the techniques and principles of human relations, leadership and business communication both oral and written.

Students will work with outside groups as well as other groups within Chelmsford High School such as the Alumni group and Town of Chelmsford. Students will engage in business ventures, community service, group discussions, individual or group projects and presentations. They will use the business concepts they learned in class and apply them in real world business situations. Through the use of technology, students will enhance their presentation and problem-solving skills. Students will exhibit their understanding of the curriculum at the District 5 DECA Competition and Massachusetts DECA competition. Students are required to participate

in activities that begin in June of the previous year and continue through the following year. Activities will take place evenings and weekends.

Course Requirements:

- Students are required to join DECA, and participate in the District Conference.
- Students are required to complete the full year for 10 credits.
- Students are required to have successfully completed any two (2) Business Courses
- Instructor permission.

MICROSOFT OFFICE CERTIFICATION I + II - H2

5 Credits (#61524, #61624) Open to Grades 9-12

Demonstrate that you have the skills needed to get the most out of Microsoft Office by earning a Microsoft Office certification in a specific Office program. Master the Office 2010 Word, PowerPoint or Excel in this hands-on course where instructor demonstrations and direction guide you through the tips and techniques of optimal use of these software packages. While it is not required, students can take the optional Microsoft Office certification test (for an additional fee) at the completion of the course if they wish or they can just learn the programs for use in school or future career.

Prerequisites: None

FASHION AND RETAIL MARKETING – H2

5 Credits (Course #63124) Open to Grades 9-12

This H2 level course is ideal for students considering a career in fashion, design, and merchandising, retailing or related areas or for any student who wishes to develop a new skill set. Students will coordinate fashion displays, conduct fashion trend research, consumer behavior, plan promotions and deal with buyers and manufacturers. Student will also analyze consumer behavior in stores and the difference and benefit in a strong store design. Using target markets for sports teams and fashion designers, students will design a new article of clothing to match the client's needs. Students will plan and organize community based fashion related activities and have the option of participating in the DECA series of competitive events. DECA eligible course.

Prerequisites: None

COMMON SENSE ECONOMICS – H2

5 Credits (Course #63224) Open to Grades 10-12

This course will teach students the basics of economics so that it will help them make better personal choices and improve their understanding of our complex global world. Through the use of primary readings, videos and project based learning, students will learn to make wiser choices as citizens, as well as better choices with regards to careers, consumption and saving. We'll look at how personal wealth is created in a market economy and how government policy making affects personal wealth and the economy in general. Lastly, students will gain insight into personal financial decision making. Students in this Common Sense Economics course are also eligible for DECA.

Prerequisites: None

MEDIA

The following courses can be applied to either Fine Arts or Practical Arts graduation requirements.

COMMUNICATION/MEDIA 1

5 Credits (#81002) Open to Grades 9-12

Communication/Media 1 is project based and includes direct instruction as well as experience in producing and TV broadcasting. The topics include:

- Overview of Mass Media (Radio, TV, Internet)
- News Media
- Broadcasting of Other Events (Elections, Olympics, etc.)
- Pod Casting
- Impact and Effect of Advertising on Media

- The roles of PBS vs. Commercial TV
- Ownerships of Various Media
- Public Service Announcements
- Introduction to Multi-camera Production
- Visual Effects from the Fine Arts Angle
- Subject Lighting
- Conducting and Taping Interviews
- Journalism

Prerequisites: None

MEDIA INTERNSHIP

5 Credits (#81201) Open to Grades 9-12

Students learn to broadcast over cable TV by taping and editing CHS football game footage. Classwork involves writing and conducting interviews of players and coaches which they broadcast during the game. This course will also involve broadcasting from the game sites which is done outside of class several times. Students will meet with the instructor in small groups onsite at the CHS football games to produce the broadcast.

Prerequisites: None

ENGLISH AS A SECOND LANGUAGE

ENGLISH AS A SECOND LANGUAGE (ESL)

5 Credits (#93204, 93304, 93404, 93504), Open to Grades 9 – 12

This course is designed to provide support to students with limited English language proficiency. Emphasis is placed on the World Class Instructional Design and Assessment (WIDA) standards of speaking, listening, reading and writing and academic language development. Course materials will include a content and multi-cultural literature based program that is aligned to the Common Core State Standards (CCSS). Emphasis is placed on speaking and pronunciation, listening and differentiating common and uncommon sounds as these affect meaning, reading for understanding and writing with an academic purpose. Annual ACCESS testing will occur as a measure of progress and to determine English Language Proficiency levels. This course may require multiple periods to meet state guidelines as determined by placement testing. May be repeated as required for credit. May fulfill an English requirement for students with little or no English language proficiency. *Prerequisite: Teacher recommendation*

READING

READING FOR HIGH SCHOOL

5 Credits (#08804)

Students taking ENGLISH 9 are required to take WRITING FOR HIGH SCHOOL (#07304) and READING FOR HIGH SCHOOL (#08804).

The primary goal of this course is to act as an intervention designed to support students who may struggle with reading in the content areas of Social Studies, Science, and English at the high school due to below average reading skills. The course will focus instruction on effective strategies such as identifying text structure and will aid in comprehension of content area reading. World History and Physical Science textbooks, along with study guides and secondary sources, will be utilized throughout the semester. Study skills designed to further understanding of the content will be part of the curriculum. In addition, comprehension in support of English classes will focus on poetry, short stories and novels and provide another level of support to students at risk of attaining the level of “Proficient” on the 10th grade ELA MCAS exam needed for graduation. Students take a pre and post assessment of their reading level as part of the course. A small amount of outside-of-class assigned reading is required for the course.

YOUNG ADULT LITERATURE – H2

5 Credits (#08034), Grades 9 - 12

Young Adult Literature is a course designed to expand a student's literal, interpretive, and evaluative comprehension skills. The curriculum features the top young adult literature books of the year, along with award winning young adult novels. The course also includes reading selections from non-fiction that supplement the novels with background information, and provide students with the opportunity to practice reading non-fiction text. Reading strategies that improve fluency and comprehension of fiction and non-fiction are incorporated into the class. Outside of class assigned reading is required.

CONTEMPORARY EXPLORATIONS IN READING - H2

5 Credits (#08524)

This course will be based on reading short contemporary news articles and informative pieces organized around trending topics. The focus of this class will address current events that influence society and are discussed in major debates. Through close reading, class discussion, and debate, students will improve comprehension skills, increase reading rate, and gain a deeper understanding of the world around them. Presentations on topics will be student generated and shared with the class. Students will use social media to communicate about the topics and comment on each other's ideas to extend the conversation.

READING SKILLS AND STRATEGIES

5 Credits (#08404), Grades 9 - 12

Reading Skills and Strategies is a course that explicitly teaches reading strategies that improve fluency and comprehension of fiction and non-fiction to struggling readers. Award winning novels and short reading selections are the focus of the curriculum. The course will focus instruction on effective strategies such as identifying text structure and reading strategies that improve fluency and comprehension of fiction and non-fiction. Reading Skills and Strategies is intended for students who have previously taken Reading for High School, or who struggle with comprehension. Students who have not yet met proficiency levels on the MCAS are also recommended.

SCIENCE & TECHNOLOGY/ENGINEERING

SCIENCE

The Science Department offers instruction at three academic levels. Level 1 Honors courses are by teacher recommendation only. The recommendation is based upon performance in both science and math. The student should also have exhibited a sincere interest in science or mathematics. Level 1 Honors courses are for the self-motivated and academically mature students. It is assumed that the Level 1 Honors science student is also in Level 1 Honors math course. Level 2 (H2) courses are for college bound students. Level 2 Honors science students should also be enrolled in, at least, a level 2 math course. Any student intending to go to a four year college, no matter what career goal, should take Level 2 or higher science courses.

PHYSICAL SCIENCE—H 10 Credits (#21013), Grade 9

This activity-based course is divided into two areas of study. Concepts covered in basic physics during the first two terms of the year include: scientific methods; measuring and graphing motion; forces; vectors; Newton's laws of motion; impulse, momentum and energy. Concepts covered in basic chemistry to build a solid foundation for the biochemistry required in Biology H includes properties and classification of matter; atomic structure; the periodic table; atomic and formula masses; and chemical reactions and equations. Students in this course will be expected to design valid scientific experiments, collect and analyze data, and formulate appropriate conclusions. Students need to have honors level math capability including graphing skills and the ability to use algebraic equations in order to accurately analyze lab data and correctly solve word problems. Honors students are expected to demonstrate good organizational skills, efficient time management, and independent study skills. On an average night, students in this course should expect to spend 20-30 minutes on homework.

PHYSICAL SCIENCE—H2 10 Credits (#21023), Grade 9

This activity-based course provides a foundation for future study of biology, chemistry, and physics. Students are expected to master basic laboratory skills as they study topics in physics and chemistry. The course begins with an introduction to scientific methods and metric units of measurement. Physics topics taught during the first two terms include the study of motion; distance/time graphing; the relationship between forces and motion; momentum; and energy. Students also explore every-day applications of Newton's Laws of Motion. During the chemistry term, students participate in laboratory activities as they study the properties of matter, phases and phase changes, the structure of the atom, differences between elements, compounds and mixtures, and interactions between particles in forming chemical bonds and participating in chemical reactions. Individual and group projects are assigned throughout the course. Students are assessed independently and as active contributors to laboratory team activities and group presentations to the class. On an average night, students in this course should expect to spend 10-20 minutes on homework.

AP BIOLOGY 10 Credits (#22013), Grades 10, 11, 12

This second year Biology course will consist initially of a review and enrichment of the major concepts from first year Biology. This will be followed by a fast-paced, intensive study of selected topics in Biology as set forth by the College Board. Included among these are, but not limited to: plant and animal growth and development; embryology; cellular physiology; genetics; animal structure; biological systems and relationships. The course emphasizes the unifying themes in biology, showing the connections between the different areas of study. AP Biology is designed for highly motivated science students who intend to pursue a science related major in college. Students in this course should be prepared for some independent learning due to the volume of material covered. In addition to in-class discussions, laboratory experimentation, and independent learning, students will have an opportunity for peer share learning. The course will also emphasize techniques in preparation for the AP Biology exam in May.

Students will be required to complete summer reading and a project prior to the beginning of the academic year. Homework Requirements: Students are expected to read chapter material prior to in-class discussions. Nightly homework will average 1 to 2 hours.

Recommended: concurrent enrollment or credit in a chemistry course.

BIOLOGY H

10 Credits (#22413), Grades 9 + 10

This course is designed to give students an in-depth understanding of the basic principles of biology, from the cellular basis of life to complex interactions of organisms in their environments. Frequent laboratory exercises, designed to correlate with text materials, provide students with opportunities to learn and use techniques and equipment associated with biological research. Independent reading, research and writing assignments extend learning beyond the classroom. This course is designed for well disciplined, highly motivated students. Students can expect nightly reading assignments of 10-15 pages in a college level text book, an average of 1-2 hours per night.

Prerequisite: Recommendation of Earth Science or Physical Science teacher; concurrent enrollment in Honors level math is recommended.

BIOLOGY—H2

10 Credits (#22423), Grade 10

This course is designed to provide a college preparatory level of understanding in biology. There are six major topics that are covered during the semester: cell-structure and function; evolution; genetics; ecology; chemistry of the cell and human body systems. Frequent laboratory investigations are given to correlate with the materials for each unit or topic. Students should expect nightly homework assignments equivalent to 5-8 pages of reading or a small written assignment (30-45 minutes per night)

Recommended: Level 2 math course taken concurrently

BIOLOGY I

10 Credits (#22433), Grade 9

This freshman level course is the first in a two year Biology program designed to give students a basic understanding of the scientific processes of biology. Emphasis is geared toward the successful completion of the MCAS test in biology. Laboratory investigations enrich the concepts for each unit. All units are based upon the required MCAS standards for science competency. Students should expect 20-30 minutes of homework for practice and reinforcement most nights. Students enrolled in this class will be enrolled in Biology II in the following academic year.

Prerequisite: Recommendation of Earth Science teacher.

BIOLOGY II

10 Credits (#22633), Grade 10

This sophomore level course is designed to continue to give students a basic understanding of the scientific processes of biology. Emphasis is geared to the successful completion of the MCAS test in biology. Laboratory investigations enrich the concepts for each unit. All units are based upon the required MCAS standards for science competency. Students should expect 20-30 minutes of homework for practice and reinforcement most nights. Students enrolled in this course, who have not passed a science MCAS test, will take the Biology MCAS test in June.

Prerequisite: Completion of Biology I.

ANATOMY AND PHYSIOLOGY—H

10 Credits (#23013), Grade 11 + 12

This biology elective is an academically rigorous course that is designed to provide a background for those students anticipating study in medical or health fields in the future, or for students with an interest in how the human body functions. Topics include: anatomical terminology, histology, and an examination of the structure, function and disease of body systems. The text is written at a college reading level and many college

level lab activities are conducted. The lab activities require motivated and independent students. All students are required to be active participants in a cat dissection for this course. Students will learn how to use a stethoscope, blood pressure cuff, spirometer, and other equipment in the lab. Homework will average around one hour per night.

Recommended Background: Successful completion of Honors or H2 Biology.

AP CHEMISTRY

10 Credits (#24013)

After a review and enrichment of major concepts from first year chemistry, this second year Chemistry course provides an intensive study of selected topics in chemistry. Included among these are: nuclear chemistry and organic chemistry; reaction kinetics, acid/base equilibrium; thermodynamics; and electrochemistry. The student must be self-motivated and industrious. There are extensive homework assignments and frequent laboratory reports to write that will require 1-2 hours of work each day. Much of class time will be spent in the lab with time allotted for answering questions. This is a full year course. Students will be required to complete chemistry work over the summer prior to the beginning of the school year.

CHEMISTRY—H

10 Credits (#24213), Grades 10 + 11

Honors Chemistry is a full year course created for students who have demonstrated a sincere interest in the sciences. It is critical that students be able to independently use algebra skills in the context of the chemistry curriculum. Students will be responsible to assume high academic initiative for their progress in the course. The course requires extensive reading and diligent homework preparation. The integrated laboratory section of the course involves both intensive independent and/or collaborative work. Students are expected to be well versed in research skills and writing skills and able to apply their algebra knowledge to unique problems. The course is intended to give an in-depth and experiential understanding to the fundamental principles involved in inorganic chemistry. Daily homework is estimated to be 1 to 1-1/2 hours and on occasion 2 hours.

Recommended: *Students are concurrently enrolled in Honors level math*

CHEMISTRY—H2

10 Credits (#24223), Grades 10 + 11

This course is designed for the student who is seeking college preparatory credit in chemistry. The student is expected to keep up with the daily assigned readings and do the daily homework which can vary from 30-60 minutes for each day. The course is deliberately interwoven with a related laboratory. The assigned lab reports will utilize the student's written, verbal and math skills from other disciplines. The in-class independent and collaborative exercises are geared to help the student reach the basic fundamentals of inorganic chemistry by utilizing their algebra skills. The student's grade will be a compilation from a variety of evaluations including tests, reading quizzes, lab reports, presentations, and other independent and collaborative exercises.

Recommended: *Students are concurrently enrolled in H2 level math*

CHEMISTRY – Level 3

10 Credits (#24233), Grade 11

This course is designed for the student who is seeking college preparatory credit. The student is expected to keep up with the daily assigned readings and do the daily homework which can vary from 15-30 minutes for each day. The course is deliberately interwoven with related laboratory. The assigned lab reports will utilize the student's written, verbal and math skills from other disciplines. The in-class independent and collaborative exercises are geared to help the student reach the basic fundamentals of inorganic chemistry by utilizing their algebra skills. The student's grade will be a compilation from a variety of evaluations including tests, reading quizzes, lab reports, presentations, and active participation in the program.

AP PHYSICS 1

10 Credits (#25213), Grade 11 + 12

This is an in-depth, mathematically rigorous, course in physics that is equivalent to a first semester college course in algebra-based Physics. The course is designed to prepare students for future study in the core science areas (biology, chemistry or physics), mathematics or other professional fields such as pre-med, pre-dental, veterinary study or engineering. It is also designed for all science majors and other students wishing to demonstrate their ability to meet the challenge of an advanced placement course. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. Projects and lab work play an important role in this course. Homework will be approximately one hour per night and will average 4 days per week. Students may be required to complete physics work over the summer prior to the beginning of the school year.

AP PHYSICS 2

10 Credits (#25013), Grade 12

This is an in-depth, mathematically rigorous, course in physics that is equivalent to a second semester college course in algebra-based Physics. The course is designed to prepare students for future study in the core science areas (biology, chemistry or physics), mathematics or other professional fields such as pre-med, pre-dental, veterinary study or engineering. It is also designed for all science majors and other students wishing to demonstrate their ability to meet the challenge of an advanced placement course. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. Projects and lab work play an important role in this course. Homework will be one hour per night and will average approximately 4 days per week. Students may be required to complete physics work over the summer prior to the beginning of the school year.

PHYSICS H

10 Credits (#25113), Grade 11 + 12

This course is an intensive year-long study of the physical laws of nature. Theories will be developed concerning experimental data in the areas of mechanics, fluid mechanics, oscillations and waves, thermodynamics, electricity and magnetism, optics, and modern physics. Laboratory exercises will provide data for analysis and verification of physical laws. It is assumed that the student will be adequately prepared in Algebra, Geometry and Trigonometry. For more information, students are invited to browse through the text, chat with the instructors and sit in on several classes.

PHYSICS—H2

10 Credits (#25223), Grade 11 + 12

This course is designed for students going on to some form of higher education as non-science majors; however, students should have an interest in science. Topics will be explored conceptually with a secondary emphasis on higher level mathematical interpretation. Topics include kinematics, dynamics, energy, momentum, electricity and magnetism, general wave properties, light and sound. Projects and Lab work are an important role in this course. Students should expect 30-60 minutes of homework per class meeting including 5 minutes to review notes and observations from the day's activities.

PHYSICS

10 Credits (#25233), Grade 12

Each quarter, this senior level course will focus on one core area including electricity, plumbing/HVAC/water systems, automotive and sports science. Physics is a "hands on" class that investigates our everyday world by constructing models and performing tests upon them. Students will develop critical thinking skills using deductive reasoning. Not more than simple algebra calculations will be used in this course. Students should expect between 30 and 45 minutes of homework per class meeting including 5 minutes to review notes and observations from the day's activities.

ENVIRONMENTAL SCIENCE

10 Credits (#22533), Grade 12

This is a full year lab based elective course designed for seniors who intend to go to college as non-science majors. The course is divided into two general topic areas: abiotic (non-living) and biotic (living) environmental factors. Within these topic areas, the course focuses on ecosystems, material cycling, human and environmental influences, succession, and environmental problems. Students will demonstrate mastery of the concepts by addressing authentic issues that affect the world today through completion of a variety of group and individual projects, presentations, and other collaborative exercises.

This course is for senior students only.

AP ENVIRONMENTAL SCIENCE

10 Credits (#26013), Grade 12

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Coursework is designed to prepare students for the AP Environmental Science Exam in May. Students in this course should be prepared for some independent learning due to the volume of material covered.

Homework Requirements: Students are expected to read chapter material prior to in-class discussions, complete study guides, practice exams, and complete lab reports. Nightly homework can average 1 to 2 hours.

Prerequisites: Successful completion of at least a level 2 biology course and a level 2 chemistry course prior to enrolling in AP Environmental Science. Students are required to calculate algebra-based math problems, involving scientific notation and dimensional analysis, *without the use of a calculator*.

Summer homework will be required; see the instructor for resources before the end of the school year.

BIOTECHNOLOGY

5 Credits (#22124), Grade 10, 11, 12

This second year Biology elective provides students with basic biotechnology laboratory skills in order to introduce them to biotechnology concepts, in addition to the business aspect of the industry. A “hands-on” laboratory course, it focuses on widely used biotechnological techniques and theoretical application in biotech industry standards including biological molecule manipulation, transformation and identification. Students will learn techniques that apply to biological drug applications, bioinformatics, and Good Lab Practices (GLP), such as sterile technique and maintaining a lab notebook.

MYTHBUSTERS

5 Credits (#22224) H2, Grade 11, 12

A science (elective) course utilizing project-based instruction that resembles the popular television series of the same name. Eight to ten myths/projects are evaluated for validity using scientific inquiry following Next Generation Science Standards. Students apply their knowledge of biology and physical sciences as well as explore new principles of physics and engineering. For each myth/project, students ask questions, perform research, design and conduct experiments, analyze data and determine the plausibility of their myth or challenge. Results are conveyed through short video vignettes (Adam and Jamie style!) or PowerPoint presentation that share data and results with the class. Students are expected to work in varied teams of 2-4 members, the ability to work in a group environment is essential.

TECHNOLOGY/ENGINEERING

The technology courses explore and investigate the nature of technology systems and their practical applications in engineering industries. Students are introduced to science, math and engineering concepts as they relate to design applications in technology. Students learn problem-solving techniques through the engineering design process. They also will learn new skills in drawing and modeling in the project work. Grades are based on student performance in related theory, lab work, homework, presentations and general conduct and effort. Certain projects may require lab fees depending on student needs and availability of materials. Each of these courses is considered a practical art under our graduation requirements.

FURNITURE CONSTRUCTION TECHNOLOGY – H2

10 Credits (#69223), Grade 9 - 12

This course is designed to give students hands-on learning opportunities to gain basic skills operating tools and machines to implement and construct furniture and or modular projects in the Technology shop. 21st Century manufacturing technology, material processing and measurement system theory concepts will be integrated. Students will evaluate furniture design criteria of the past, present and future. They will learn technical drawing techniques; solve geometric layouts, scale, proportion and perspective drawing. There will be opportunities for students to work and contribute in collaborative groups as well as individual project work. Understanding and adhering to Industrial Safety Standards is a primary requirement for each student. Both the student and parents must sign a safety contract for participation in this course to help ensure a personal commitment to safety procedures. Grades will be based on signing the safety contract and student conduct as well as class participation, project work, technical drawings and design, written tests that include vocabulary and measurement computation and industrial concepts in current manufacturing practice. Some homework will be required.

INDUSTRIAL TECHNOLOGY AND FURNITURE DESIGN 1 – H2

10 Credits (#69123), Grade 9 - 12

This course is intended to cover a variety of concepts and systems within four major areas of technology engineering, which include: manufacturing, communications, transportation and energy. Project work will be done in the technology shop and the CAD lab. The related theory covers simple machines, power and energy systems, fluid mechanics, and electricity principles and technology. Skills will be developed by using the design process, plus the proper and safe use of tools and machines. Students can expect assessments including chapter work, tests, quizzes, research papers, hands-on projects, CADD drawings and 1-2 hours of homework a week

INDUSTRIAL TECHNOLOGY AND FURNITURE DESIGN 2 – H2

10 Credits (#69723), Grade 10 - 12

This course is a continuation of Industrial Technology Engineering Design 1 course. Students are expected to explore more advanced methods of design and construction. One engineering research project outside of class and a PowerPoint presentation of research is required. Design drawings and project work will continue to progress from the introductory level. Challenges with a variety of materials and ideas requiring more complex designs and drawings will be the ultimate goal.

Prerequisite: Industrial Technology and Furniture Design 1(#69123)

INDUSTRIAL TECHNOLOGY AND FURNITURE DESIGN 3 – H2

10 Credits (#69824), Grade 11 - 12

This course is a continuation of Industrial Technology Engineering Design 1 course. Students are expected to explore more advanced methods of design and construction. One engineering research project outside of class and a PowerPoint presentation of research is required. Design drawings and project work will continue to progress from the introductory level. Challenges with a variety of materials and ideas requiring more complex designs and drawings will be the ultimate goal.

Prerequisite: Industrial Technology and Furniture Design 2

ARCHITECTURAL DRAWING AND DESIGN 1 – H2

10 Credits (#69523), Grade 9 - 12

This course is designed to give the student basic knowledge of Architectural Drafting and House Design. It includes a study of lot selections, elevation plans, floor plans, construction details, specifications, etc. Problem solving is stressed throughout the course, along with Computer Aid Design (CAD). Students can expect assessments including chapter work, tests, quizzes, research papers, CADD drawings and 1-2 hours of homework a week. (*See Articulation Agreement between area colleges and Chelmsford High School*)

ARCHITECTURAL ENGINEERING DRAWING AND DESIGN 2 – H2

10 Credits (#69623), Grade 10 - 12

This course is designed as an advanced continuation of Architecture 1 or Technology & Engineering Design. A combination of architectural models, engineering drawings and design concepts will be explored in greater depth. Problem-solving, design process and presentation of ideas will be stressed. The curriculum will cover product design and development, power point presentations, research of new technologies, house design, computer modeling, and construction drawings with a specific focus on new trends in green construction, alternative energy, and new materials. Students can expect assessments including chapter work, tests, quizzes, research papers, CADD drawings and 2-3 hours of homework a week.

Prerequisite: Architectural Drawing and Design 1(#69523)

ARCHITECTURAL DRAWING AND DESIGN 3 - DIRECTED STUDY

10 Credits (#69923), Grade 11 + 12

This course is designed as an advanced continuation of Architectural Drawing and Design 2. Students will work in an independent setting, working to solve design related problems of an advanced nature. Residential as well as commercial construction techniques and materials will be explored. New trends in modern architecture and design will be a focus.

Prerequisite: Architectural Engineering Drawing and Design 2(#69623)

ROBOTICS – H2

5 Credits (#69724), Grade 9 - 12

Robotics is a one semester course that focuses on creative problem solving and machine behaviors. The robots are built with VEX Clawbots and are programmed in ROBOTC. It is assumed that most students will have basic programming experience. Each class will be presented with the similar components and programming exercises, but the challenges that students will solve will vary from term to term. The general types of exercises will include: following a wall or a line, knocking things over, picking up and moving objects, and identifying colors of objects. The challenges will be inspired by real world problems that robots face—search and rescue, handicapped assistance, moving of hazardous waste, warehouse management, etc. This course may be used for Practical Arts credit.

PLTW: INTRODUCTION TO ENGINEERING DESIGN - H2

10 Credits (#25323) Open to Grades 9-12

This full year Science course is ideal for students who want to dig deeper into the engineering design process, applying math, science, and engineering standards to hands-on projects. Students work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work. The Project Lead the Way (PLTW) courses engage students in hands-on activities, projects and problems, empower them to develop in-demand knowledge and skills, and inspire them to reimagine and see themselves as successful in STEM fields.

Prerequisites: None

PLTW: PRINCIPLES OF ENGINEERING — H2

10 Credits (#25423) Open to Grades 9-12

In this full year Science course students are engaged in challenging problems, exploring a broad range of engineering topics including mechanisms and automation, then apply what they know to take on challenges like designing a self-powered car. Students develop skills in problems solving, research, and design skills while learning strategies for design process documentation, collaboration, and presentation. The Project Lead the Way (PLTW) courses engage students in hands-on activities, projects and problems, empower them to develop in-demand knowledge and skills, and inspire them to reimagine and see themselves as successful in STEM fields.

Prerequisites: None

SOCIAL STUDIES

The Social Studies program at Chelmsford High School is designed to assist students in becoming informed citizens, fully aware of the need for ensuring the dignity and worth of the individual, personally involved in improving the society they have inherited, and capable of recognizing the interdependence of all peoples. The goals of the program are developed through a variety of semester-length and full-year courses. The content of these courses draws upon the various social science disciplines. These courses develop skills necessary in gathering, analyzing and evaluating information. A student should attempt to construct a balanced program from the social studies offerings over the four years at Chelmsford High School. In addition to satisfying graduation requirements, a student will want to select courses from history, social sciences, and interdisciplinary electives. In planning a program, consideration should be given to the individual's learning style, interests, strengths and weaknesses. Thirty credits of Social Studies are required for graduation from Chelmsford High School. *Students must pass World History II, United States History I and United States History II to meet the requirements for graduation from Chelmsford High School.*

WORLD HISTORY II - H

10 Credits (#32413), Grade 9

This honors course challenges students to explore world history, geography, and related studies from the French Revolution to the present, using both inquiry and narrative approaches. This course requires more extensive reading and has a great emphasis on analytical writing. Students will be expected to write at least one major research paper. Skills enhanced in this course will help prepare students for further Honors and/or Advanced Placement work in social studies. Students who are enrolled in World History II Honors their freshman year are required to complete a summer reading assignment (posted on the district website), prior to attending school in September of their freshman year.

WORLD HISTORY II—H2, LEVEL 3

10 Credits (#32423, #32433), Grade 9

This course surveys world geography, history, and related studies from the French Revolution to the present. Students will focus on a thorough review of the social, economic, religious, scientific and technological factors that have shaped world history since the 1790s. Instruction includes the use of text, secondary and primary source materials designed to develop inquiry, interpretation, and critical thinking as well as a variety of print and electronic instructional materials. This course requires analytical writing.

UNITED STATES HISTORY I — H

10 Credits (#32513), Grade 10

In United States History 1—H, students briefly review European exploration and colonization of the New World as well as the colonial period. Students examine the historical and intellectual origins of the United States during Revolutionary and Constitutional eras. Students study the basic framework of American democracy and the basic concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War, and Reconstruction. This course requires more extensive reading and writing activities. Skills enhanced in this course will help prepare students for the Advanced Placement United States History course in Grade 11. In the current CHS curriculum, United States History 1-H is the equivalent course to United States History Advanced Placement 1.

UNITED STATES HISTORY I H2, LEVEL 3

10 Credits (#32523, #32533), Grade 10

In United States History 1, students briefly review European exploration and colonization of the New World as well as the colonial period. Students examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students study the basic framework of American

democracy and the basic concepts of America government in order to develop a deeper understanding and appreciation of civics. Additionally, students will study America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil war, and Reconstruction. This course requires analytical writing and is designed to instill in the student an understanding and appreciation of his or her heritage. A variety of resources including videos, records, primary sources and simulations are used in this course.

AP UNITED STATES HISTORY

10 Credits (#33013), Grade 11

The Advanced Placement course in American history is a course that will provide students in their junior year with the analytic skills and facts necessary to deal critically with problems and materials in American history. Students will be prepared for intermediate and advanced college courses by the demands of the advance placement course, which are equivalent to those of full-year introductory college courses. Students will learn to assess historical materials--their relevance to a given interpretive problem, their reliability and their importance--and to weigh the evidence and interpretations presented in historical scholarship. A major research paper is required.

UNITED STATES HISTORY II H2, LEVEL 3

10 Credits (#33523, #33533), Grade 11

In United States History II, students analyze the causes and consequences of the Industrial Revolution and America's growing role in international relations. Students study the goals and accomplishments of the Progressive movement and the New Deal. Students also learn about the various factors that led to America's entry into World War I and World War II as well as the consequences of World War II for American life. Finally, students study the causes and course of the Cold War, important economic and political changes during the Cold War, such as the Civil Rights movement, and recent events and trends that have shaped modern-day America. This course requires analytical writing. *Students must have successfully completed US History I.*

SOCIAL STUDIES ELECTIVES

AP AMERICAN GOVERNMENT AND POLITICS

10 Credits (#38113), Grade 11 + 12

This Advanced Placement course in American Government and Politics is designed to give students a critical perspective on government and politics in the United States of America. It involves the study of general concepts used to interpret American politics and the analysis of specific case studies. It requires familiarity with various institutions, groups, beliefs and ideas that make up the American political reality. Students will be prepared for intermediate and advanced college courses by making demands upon them equivalent to those of full year introductory college courses. Students will be prepared to take the Advanced Placement Exam in American Government and Politics.

AMERICAN HISTORY THROUGH FILM- H2

5 Credits (#39124), Grade 12

This H2 course is for seniors interested in the portrayal of events of American History on the big screen. This course will examine Hollywood feature films and historical dramas as historical evidence. During the course, students will view movies on a span of events from the inception of the United States to present day. The Standards from the Massachusetts State Curriculum Frameworks and the Common Core Standards are an integral component of this course. Students are expected to utilize research, comparative analysis, and critical thinking skills as they determine the value of each film to the American understanding of past events. The continued development of discussion, debate and writing skills will be a central part of the course. Students will research historical events in the United States using primary and secondary sources to have a better understanding of the events they see portrayed in the films. Students will utilize and write film reviews and

critical commentaries related to the films. Students will be expected to produce comparative essays in which they identify the specific events and consequences of those events with the stories and myths presented in the films.

COMMON LAW AND TRIAL PROCEDURES I—H

10 Credits (#39313), Grade 11 + 12

Common Law and Trial Procedures will provide students the opportunity to learn about the fundamentals of the American judicial system and how it can impact their lives in ways they might not otherwise imagine. The course will further students' understanding of the law, court procedures, civil liberties and the American legal system. It will also increase proficiency in basic life skills, such as listening, public speaking, rote memorization, reading, and analytical reasoning. Students are required to think independently and develop their advocacy skills regardless of which side of an issue is being presented. Most importantly, the course will promote better communication and cooperation between the student, Chelmsford High School, and the legal profession. Students who take Common Law & Trial Procedures will be required to participate in the Massachusetts Bar Association's Mock Trial program. This unique experience will heighten the student's consciousness of law-related professions and the academic studies which lead to those professions. Many schools in the state participate in this competition-based program, including well-known educational facilities from the private sector.

There is an application process to be considered for enrollment in this course. Please see the Social Studies Department Coordinator or Mr. Cole for the application and information, including deadlines.

COMMON LAW AND TRIAL PROCEDURES II - H

10 Credits (#39413), Grade 12

The course will provide students the opportunity to expand their knowledge about the fundamentals of the American judicial system and how it can impact their lives in ways they might not otherwise imagine. The course will further students' understanding of the law, court procedures, civil liberties and the American legal system. It will also increase proficiency in basic life skills, such as listening, public speaking, rote memorization, reading, and analytical reasoning. Summer reading is required in this course. Students are required to think independently and develop their advocacy skills regardless of which side of an issue is being presented. Most importantly, the course will promote better communication and cooperation between the student, Chelmsford High School, and the legal profession. Students who take Common Law and Trial Procedures II will be required to participate in the Massachusetts Bar Association's Mock Trial program. This unique experience will heighten the student's consciousness of law-related professions and the academic studies, which lead to those professions. Many schools in the state participate in this competition-based program, including well-known educational facilities from the private sector. *Common Law and Trial Procedures II is available to seniors who have taken CLTP I during their junior year.*

THE HOLOCAUST AND GENOCIDE STUDIES: A STUDY IN HUMAN BEHAVIOR-H2

10 Credits (#38423), Grade 11 + 12

This course, open to Juniors and Seniors, will provide students with an opportunity to study events in Germany before, during, and after World War II that relate to the attempted extermination of the Jews. Appropriate print materials, films, and guest speakers will be used to help the students understand the causes of and the nature of the Holocaust. A sociological approach will allow students to see how individuals and small groups were influenced by man's inhumanity to man. Comparisons will be made with other events and situations. It is hoped that students will learn to recognize and move actively to eliminate factors that create a climate which allows racism or genocide in any form to occur.

INTERNATIONAL RELATIONS—H

10 Credits (#38813), Grade 12

This Honors level course is for seniors interested in the United States and its role in international affairs. Students will attain a global perspective and understanding of international issues including the rise of nations, colonialism, and government practices. Students will examine world events such as environmental concerns, coups, treaties, peace accords, genocides, natural disasters, failed states, terrorism, zones of chaos, and

resource wars. Through lively dialogue and debate, students will analyze and attempt to resolve conflicts and determine the role of the United States in global affairs. Students appropriate for this course should enjoy group discussions, independent research, and the complexity of international issues. Although the course is designed for seniors, juniors in excellent academic standing may also enroll in the course.

LEGAL RIGHTS AND RESPONSIBILITIES - LEVEL 3

5 Credits (#36034), Grade 10, 11, 12

This is a practical law course which deals with the most basic principles of individual rights and the judicial process as it affects the daily life of a student. It is designed to acquaint students with various aspects of law such as criminal law, juvenile law, drug laws and the court system and how it works. Attention will also be given to correctional institutions, and their effectiveness. The major part of this one-semester course will focus on a student's individual rights and responsibilities as they affect him/her today. It will also include relevant films, guest speakers and field trips to local courts or correctional institutions.

ADVANCED PLACEMENT PSYCHOLOGY

10 Credits (#37013), Grade 12

This college level course is designed to introduce students to the biological and theoretical foundations of Psychology. The course will cover material ranging from the historical roots of this social science to the anatomical structure and function of the brain and sense organs. Emphasis will be placed on investigative research, analysis, interpretation, and writing skills. Students will explore the concepts that today's psychologists are continuing to investigate. Students will be expected to take on the demands of a college level course, including additional reading assignments during the summer and throughout the school year. Students are required to purchase a copy of Lauren Slater's "Opening Skinner's Box" and read the book prior to the first class meeting in September. Test taking and writing skills will be addressed throughout the course to prepare students for the Advanced Placement Psychology Exam in May.

PSYCHOLOGY I-H2

5 Credits (#36824), Grade 11 + 12

This course for juniors and seniors is designed to introduce students to the biological and theoretical foundations of psychology. The course will encourage students to develop analytical skills, conduct research, investigate the mind-body connection, analyze the concepts of consciousness, evaluate the theories of personality, develop an understanding of psychological disorders, evaluate the role and effectiveness of treatments, and analyze the theories of intelligence. Students will be expected to demonstrate their understanding of psychology through various projects, discussions, and assignments.

PSYCHOLOGY II-H2

5 Credits (#36922), Grade 11 + 12

This semester 2 course allows students who have successfully completed Psychology I to expand their knowledge in this discipline. The course will cover such topics as, sensation and perception, motivation and emotion, learning, human development, and personality. This course provides an in depth study of current psychological issues. Emphasis is placed on research, analysis, interpretation, and writing skills. Students planning to major in the social sciences in college should consider taking this course. *This course is open to students who have completed Psychology I.*

SOCIOLOGY-H2

5 Credits (#36424), Grade 11 + 12

Sociology is strongly recommended for college-bound juniors and seniors. It is designed to aid students in understanding today's dynamic and rapidly changing world. This course has been developed to show the complexity of social life with its interconnections between social events and conditions. It includes a study of major social institutions, socialization, social stratification and the relationship of the personality problems of youth to these social forces. Through a series of experiments and research projects, students explore some examples of the sorts of problems sociologists study and their methods of solving them.

SPEECH AND DEBATE – H and H2*(Practical Art)*

5 Credits (#34011, #34021), Grade 9 - 12

Semester I. This Honors course is open to freshman through seniors. This course is designed to introduce students to Speech and Debate. This course is for those students who want to learn how to speak effectively and develop strong analytical skills, not only in speaking but also in writing. The skills developed in these events transfer into business, public relations, TV and radio, theater, law and government. Students will explore the common elements of both speech and debate events: the basics, the structure of speech, rules of the variety of events, the selection, development, and delivery of either a debate case or speech pieces, the practice of delivery and the presentation of their selection. Students **MUST** compete in at least three Massachusetts Speech and Debate League sanctioned tournaments. One tournament must be in speech and one in debate. The last tournament should be in an event of their choice, either speech or debate. The course will start with an examination of Public Forum Debate, and then move into an examination of Speech events. In Speech there are a variety of events to explore: Humorous Interpretation, Dramatic Interpretation, Prose and Play Reading, Poetry, Impromptu, Duo Interpretation, Children's Literature, Original Oratory, Declamation, Extemporaneous Speaking, Radio Broadcasting, and Student Congress.

AP WORLD HISTORY

10 Credits (#32313), Grade 9 - 12

The purpose of the AP World History course is for students to develop greater understanding of how the world changed over time. It considers specific events like Columbus landing in the Americas or the Mongol take-over of Asia and looks to consider and analyze their effects. Student understanding of change is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course also emphasizes comparison of various regions of the world. Social, political, environmental, and cultural themes provide organization to the course, along with consistent attention to contacts among societies that form the core of World History as a field of study.

SPECIAL EDUCATION

RESOURCE AND LEARNING CENTER

LITERATURE AND LANGUAGE I – Grade 9

10 Credits (#92033)

LITERATURE AND LANGUAGE 2 – Grade 10

10 Credits (#92133)

Literature and Language 1 & 2 offers students with special needs a holistic, language-based instruction that integrates reading, writing, vocabulary, listening, communication, and critical thinking skills. Classic popular and literary works, including short stories, essays, plays, novels, and novellas are used as the foundation for skills instruction. Opportunities are provided for individualized instruction, cooperative learning, and the development of language-related peer interaction skills. Individual class presentations allow each student to develop essential public speaking skills. Integrated into each of the units are grammar lessons, structured systematic multi-sensory writing methodologies, test-taking strategies, reading strategies, and vocabulary. Vocabulary development supports both the reading material as well as appropriate words for essay composition with regards to character development. Technology is incorporated into the learning environment (word processing, graphic organizers, audio books), and the instruction is diversified to meet the individual learning style and needs of each student. *Teacher recommendation required*

LITERATURE AND LANGUAGE 3 – Grade 11

10 credits (#92533)

LITERATURE AND LANGUAGE 4 – Grade 12

10 credits (#92733)

Literature and Language 3 & 4, like Literature Language 1 & 2, offers students with special needs with a holistic, language based instruction that integrates reading, writing, vocabulary, listening, communication, and critical thinking skills. American Literature is the focus, as in English 11.

Integrated into each of the four course units are grammar lessons, structured systematic multi-sensory writing methodologies and reading and test –taking strategies. Technology is incorporated into the learning environment (word processing, graphic organizers, audio books), and instruction is diversified to meet the individual learning style and needs of each student. *Teacher recommendation required*

STUDY SKILLS FOUNDATIONS

10 Credits (#91301, #91302)

The purpose of this course is to provide a comprehensive study skills curriculum to students. The course applies theory and practice from many academic disciplines and is designed so that students develop study skills to improve academic and work performance, based on their learning styles. They are provided several application opportunities based on self-assessments in topics such as time management, memory, oral communications, reading, writing, note taking, critical thinking, test taking and research techniques. Through an assessment process, students will gain a clearer, more realistic picture of where they are on the educational ladder and what they need to do in order to grow and succeed. Students enter their next level class motivated, prepared to work, and ready to take charge of their educational journey. *Teacher recommendation required*

STUDY SKILLS

10 Credits (#91001, #91002)

Study Skills is a special education course for recommended students with specific learning needs as determined through the Special Education Team Evaluation Process. The purpose of this course is to provide specifically designed instruction to address the student's areas of difficulty. The student will learn organizational skills and study skill strategies to address areas of weakness. Transition planning, time management, memory strategies, communication, reading, writing, math and test taking strategies will be taught, reviewed, and reinforced through the application of learned strategies in the student's regular education curriculum. *Teacher recommendation required*

TRANSITIONS 1

5 Credits (#92204)

Transitions 1 is designed to meet the needs of special education students who require support in generalizing strategies and information that will aid in their transition from high school to suitable post-secondary education, training and/or employment. This course will emphasize the following transitional services: pragmatic language, social and communication skills, organization, self-advocacy skills, vocational as well as travel training. The program is aimed primarily at juniors and seniors who are unclear about available career, work, and/or educational options or are indefinite about post-high school plans. The program will develop self-assessment techniques for students relative to lifestyle and career goals, and examine college and community resources available to attain these goals. *Teacher recommendation required*

TRANSITIONS 2

5 Credits (#92304)

Transitions 2 continues to build on the skills learned in Transitions 1, and is designed to continue to meet the needs of special education students who require support in generalizing strategies and information that will aid in their transition from high school to suitable post-secondary education, training and/or employment. Transitions 2 will further emphasize the following transitional services: pragmatic language, social and communication skills, organization, self-advocacy skills, vocational as well as travel training. Upon successful completion of the course, students will be able to describe the components of a successful lifestyle; identify their internal and external motivating drives; identify their personal preferences, interests, strengths and weaknesses; formulate meaningful and attainable goals; develop a detailed plan of action for success in college and life; identify obstacles that hinder post-secondary success; and describe techniques for overcoming obstacles in college and life.

Prerequisite: Transitions 1 & Teacher recommendation required

WORLD LANGUAGE

To address the challenges of living in a global society, the World Language Department offers classes that develop and refine communication skills, promote intellectual curiosity, and broaden cultural awareness. During each course within a target language sequence, students are expected to master specific linguistic and cultural proficiencies which embody the three modes of communication: interpersonal, interpretive, and presentational. A variety of instructional strategies, visual and print media sources, and technology tools are used to recreate an authentic learning environment. As students advance through a language sequence, they are introduced to some of the history and literature associated with their selected language and they begin to use critical thinking skills to make connections between different countries and cultures. Active participation in class discussion and completion of assignments beyond classroom instruction are essential aspects to being successful and achieving proficiency in another language. To prepare our graduates to become citizens of the world, students at Chelmsford High School are required to study two sequential years of language, are strongly recommended to study a third and fourth year, and are encouraged to study an additional language.

FRENCH 1—H2

10 Credits (#41023), Grades 9-12

This introductory course is designed to expose students to the language and cultures of the French-speaking world. Students will develop basic proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In highly structured and contextualized situations, students will learn to ask and answer simple questions as they communicate about themselves, their families, and their friends. They will hold basic conversations about school, food preferences, fashion trends, and vacation plans, and they will respond to written prompts about their daily lives and responsibilities. There is a strong emphasis on vocabulary acquisition and verb conjugation at this level. French will be used as much as possible during classroom instruction.

It is recommended that students who choose French 1-H2 on the course selection sheet also make an alternative language selection. For incoming Grade 9 students who studied French in middle school, participation in this course is by teacher recommendation.

FRENCH 2

10 Credits (2H - #41313; 2H2 - #41323), Grades 9-12

This level is designed for students who have successfully completed Grade 8 French at the middle school level or introductory French at Chelmsford High School. Students will continue to develop proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In structured and culturally contextualized situations, students will use the language practically and creatively to describe, gather and clarify information, and express opinions. Students will converse and write about topics relating to holiday gatherings, food preparation, daily routines, and academic choices. They may discuss and analyze the fairytales of Charles Perrault. Students will continue to expand their vocabulary base and increase their knowledge of verb conjugation and timeframe. Class will be conducted primarily in French.

Participation in the Honors level is by teacher recommendation.

FRENCH 3

10 Credits (3H - #41513; 3H2 - #41523), Grades 10-12

This intermediate level is designed for students who have successfully completed French 2. Students will continue to develop proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In more open-ended and culturally relevant situations, students will use the language practically and creatively to complete a variety of tasks relating to childhood memories, entertainment, and healthy lifestyles. To expand the number and type of situations in which students can function using the language, students will continue to broaden their vocabulary base and expand their knowledge of verb tense and conjugation to express events in the past, present, and future. Students will read and discuss typical childhood antics in the stories of *Le petit Nicolas*. They may analyze excerpts from the works of Marcel Pagnol

as well as select fables by La Fontaine. Class will be conducted in French.

Participation in the Honors level is by teacher recommendation.

FRENCH 4

10 Credits (4H - #42013; 4H2 - #42023), Grades 11-12

This intermediate level is designed for students who have successfully completed French 3. Students will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In open-ended and culturally contextualized situations, students will narrate and discuss, question and debate, and reach consensus on topics which explore the question of individual identity in relation to society. Themes to be explored include education and career choices, current events, advertising and the media, art and technology, and health. Students will watch select audiovisual clips, discuss news articles, and analyze authentic literary sources spanning several centuries. Vocabulary acquisition will be guided by topics discussed in class and grammar explanations will highlight exceptions. Class will be conducted exclusively in French.

Depending on enrollment requests, French 4H may be offered concurrently with AP French Language and Culture and/or French 4H2 may be offered concurrently with French 5H2. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. French 4H prepares students to take AP French Language and Culture as a senior. Participation in the Honors course is by teacher recommendation.

FRENCH 5— H2, Grade 12

10 Credits (#42423)

This course is designed for students who have successfully completed French 4-H2. Students will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In open-ended and culturally-relevant situations, students will continue to improve their creative and practical use of the language. They will investigate and debate topics relating to politics, the arts, the environment, and social relationships. Students will continue to increase their vocabulary base and expand their knowledge of French grammar to allow them to function in a variety of new situations. This course will be conducted exclusively in French.

Depending on enrollment requests, this course may be offered concurrently with French 4-H2. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances.

AP FRENCH LANGUAGE AND CULTURE

10 Credits (#42913), Grade 12

This course is designed for students who have successfully completed French 4 Honors. This course will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. Elaborating upon themes studied in previous courses, students will continue to explore the question of identity and how it is conveyed across a range of domains including politics and government, family and ancestry, literature and music, and the environment. Students will watch select film clips, analyze fiction and non-fiction texts, and interpret data. They will evaluate and synthesize information from a variety of print and media sources and will respond verbally and in writing to culturally-contextualized concepts, themes, and ideas introduced in class. AP French Language and Culture is the equivalent of a third year college conversation and composition class. This course prepares to take the AP French Language and Culture exam at the end of senior year. This course will be conducted exclusively in French.

Depending on enrollment requests, this course may be offered concurrently with French 4 Honors. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. Participation in this course is by teacher recommendation.

LA LITTÉRATURE FRANÇAISE À TRAVERS LES ARTS DU SPECTACLE – H2

5 Credits (#42524), Grades 11-12

This semester course is for students who have successfully completed French 3 and who wish to continue building proficiency in the target language via the three modes of communication: interpersonal, interpretive, and presentational. Students will learn about theatrical and cinematographic genres and techniques as well as

increase their knowledge of the lives and contributions of well-known French authors, playwrights, and cinematographers. They will watch and analyze modern-day French musicals and films and compare them to their literary equivalents. Students will consider the challenges of adapting literature to the stage or screen. Works studied may include *l'Avare* (Molière), *Notre Dame de Paris* (Hugo), *le Petit Prince* (Saint Exupéry), and *Le Dîner de cons* (Veber). This course will be conducted exclusively in French.

This course does not count towards the two-year language graduation requirement. It will count towards induction requirements for French Honor Society if two semester-based electives are taken prior to or at the time of induction into the society. It may be taken in conjunction with or independent of 'La France à travers le cinéma'.

LA FRANCE À TRAVERS LE CINÉMA – H2

5 Credits (#42624), Grades 11-12

This semester course is for students who have successfully completed French 3 and who wish to continue building proficiency in the target language via the three modes of communication: interpersonal, interpretive, and presentational. Students will explore French pop culture and personas through classic and contemporary film as they increase their knowledge of film genres and well-known French cinematographers. This course will be conducted exclusively in French.

This course does not count towards the two-year language graduation requirement. It will count towards induction requirements for French Honor Society if two semester-based electives are taken prior to or at the time of induction into the society. It may be taken in conjunction with or independent of 'La Littérature française à travers les arts du spectacle'.

SPANISH 1—H2

10 Credits (#43023), Grades 9-12

This introductory course is designed to expose students to the language and cultures of the Spanish-speaking world. Students will develop basic proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In highly structured and contextualized situations, students will learn to ask and answer simple questions as they communicate about themselves, their families, and their friends. They will hold basic conversations about their homes, favorite restaurants, fashion preferences, and vacation destinations, and they will respond to written prompts about their daily lives and responsibilities. There is a strong emphasis on vocabulary acquisition and verb conjugation at this level. Spanish will be used as much as possible during classroom instruction.

It is recommended that students who choose Spanish 1-H2 on the course selection sheet also make an alternative language selection. For incoming Grade 9 students who studied Spanish in middle school, participation in this course is by teacher recommendation.

SPANISH 2

10 Credits (2H - #43313; 2H2 - #43323; 2 - #43333), Grades 9-12

This level is designed for students who have successfully completed Grade 8 Spanish at the middle school level or introductory Spanish at Chelmsford High School. Students will continue to develop proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In structured and culturally contextualized situations, students will use the language practically and creatively to describe, gather and clarify information, and express opinions. Students will converse and write about topics relating to daily routines, healthy lifestyles, and residential life. They may discuss and analyze authentic legends from a variety of Spanish-speaking regions. Students will continue to expand their vocabulary base and increase their knowledge of verb conjugation and timeframe. Class will be conducted primarily in Spanish.

Participation in the Honors level as well as in the level 3 course is by teacher recommendation.

SPANISH 3

10 Credits (3H - #43513; 3H2 - #43523; 3 - #43533), Grades 10-12

This intermediate level is designed for students who have successfully completed Spanish 2. Students will continue to develop proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In more open-ended and culturally relevant situations, students will use the language practically and creatively to complete a variety of tasks relating to childhood memories, shopping, and the

environment. To expand the number and type of situations in which the students can function using the language, students will continue to broaden their vocabulary base and expand their knowledge of verb tense and conjugation to express events in the past, present, and future. Students may read and discuss excerpts from select short stories and novels. Class will be conducted in Spanish.

Participation in the Honors level as well as in the level 3 course is by teacher recommendation.

SPANISH 4

10 Credits (4H - #44013; 4H2 - #44023), Grades 11-12

This intermediate level is designed for students who have successfully completed Spanish 3. Students will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In open-ended and culturally contextualized situations, students will narrate and discuss, question and debate, and reach consensus on a variety of topics which relate to social relationships, education, government, and technology. Students will consider a variety of authentic text sources and watch select film and video clips. Students will continue to build their vocabulary and expand their knowledge of verb tenses and other grammatical topics relevant to the themes discussed in class. Class will be conducted exclusively in Spanish.

Depending on enrollment requests, Spanish 4H may be offered concurrently with AP Spanish Language and Culture and/or Spanish 4H2 may be offered concurrently with Spanish 5H2. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. Spanish 4H prepares students to take AP Spanish Language and Culture as a senior. Participation in the Honors course is by teacher recommendation.

SPANISH 5—H2

10 Credits (#44423), Grade 12

This course is for students who have successfully completed Spanish 4-H2. Students will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. In open-ended and culturally-relevant situations, students will continue to improve their creative and practical use of the language. They will investigate and debate topics relating to personal relationships, family ancestry, career formation, and the media. Students will continue to increase their vocabulary base and expand their knowledge of Spanish grammar to allow them to function in a variety of new situations. This course will be conducted exclusively in Spanish.

Depending on enrollment requests, this course may be offered concurrently with Spanish 4-H2. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances.

AP SPANISH LANGUAGE AND CULTURE

10 Credits (#44913), Grade 12

This course is designed for students who have successfully completed Spanish 4 Honors. This course will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. Students will read and analyze selected literary excerpts and be exposed to authentic resources to increase their knowledge of Spanish language, history and culture. Students will learn to evaluate and synthesize information from a variety of media sources. Students will respond verbally and in writing to culturally-contextualized concepts, themes, and ideas presented in class. AP Spanish Language and Culture is the equivalent of a third year college conversation and composition class. This course prepares students to take the AP Spanish Language and Culture exam at the end of senior year. This course will be conducted exclusively in Spanish.

Depending on enrollment requests, this course may be offered concurrently with Spanish 4 Honors. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. Participation in this course is by teacher recommendation.

EL CINE: LA HISTORIA Y LA POLÍTICA EN EL MUNDO HISPANO— H2

5 Credits (#44524), Grades 11-12

This semester course is for students who have successfully completed Spanish 3 and who wish to continue building proficiency in the target language via the three modes of communication: interpersonal, interpretive,

and presentational. Students will expand their knowledge of historical and political events and personas in the Spanish-speaking world by watching and analyzing modern-day films and documentaries. This course will be conducted exclusively in Spanish.

This course does not count towards the two-year language graduation requirement. It will count towards induction requirements for Spanish Honor Society if two semester-based electives are taken prior to or at the time of induction into the society. It may be taken in conjunction with or independent of 'El Cine: La Cultura Pop'.

EL CINE: LA CULTURA POP – H2

5 Credits (#44624), Grades 11-12

This semester course is for students who have successfully completed Spanish 3 and who wish to continue building proficiency in the target language via the three modes of communication: interpersonal, interpretive, and presentational. Students will explore Spanish pop culture and personas through classic and contemporary film as they increase their knowledge of film genres. This course will be conducted exclusively in Spanish.

This course does not count towards the two-year language graduation requirement. It will count towards induction requirements for Spanish Honor Society if two semester-based electives are taken prior to or at the time of induction into the society. It may be taken in conjunction with or independent of 'El Cine: La Historia y La Política del Mundo Hispano'.

LATIN 1—H2

10 Credits (#46023), Grades 9-12

This course is designed to introduce students to the essential structures and vocabulary of written Latin. Students will learn the inflections, rules of syntax, and vocabulary needed to comprehend and translate culturally-relevant Latin passages. To increase knowledge of English grammar and vocabulary, students will review derivatives and make grammatical comparisons between the two languages. Students will be introduced to the history, culture, and mythology of ancient Rome as they begin to consider how Roman civilization has influenced Western civilization.

It is recommended that students who choose Latin 1-H2 on the course selection sheet also make an alternative language selection.

LATIN 2— H 2

10 Credits (#46223), Grades 10-12

This course is designed for students who have successfully completed Latin 1. Students will continue to expand their vocabulary and begin to learn complex grammar structures as Latin passages become increasingly difficult. To expand knowledge of English grammar and vocabulary, students will continue to review derivatives and make grammatical comparisons. Reading and translation skills will be strengthened as students continue to explore Roman culture through the introduction of authentic Latin texts.

LATIN 3

10 Credits (3H - #46413; 3H2 - #46423), Grades 11-12

This level is designed for students who have successfully completed Latin 2. Students will continue to build their vocabulary base and strengthen their grammar skills by reading and translating both adapted and unadapted selections from Latin prose texts such as speeches, letters, philosophical treatises and histories by authors including Caesar, Cicero, Pliny the Younger, and Petronius. Understanding literature in its historical, political, and social contexts will be emphasized. Vocabulary acquisition and advanced grammar topics will be guided by class readings.

Depending on enrollment requests, Latin 3 may be offered concurrently with Latin 4. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. Participation in the Honors course is by teacher recommendation. Students enrolled in the Honors course will be expected to independently complete additional assignments.

LATIN 4

10 Credits (4H - #46613; 4H2 - #46623), Grade 12

This course is designed for students who have successfully completed Latin 3. Students will continue to build their vocabulary base and strengthen their grammar skills by reading and translating both adapted and unadapted poems. Poets to be studied may include Catullus, Vergil, Ovid, Martial, and the *Carmina Burana*. Students will analyze meter, rhetorical devices, and figures of speech. They will also consider Greek influences on Roman poetry. Understanding poetry in its historical, political, and social contexts will be emphasized. Vocabulary acquisition and advanced grammar topics will be guided by class readings.

Depending on enrollment requests, Latin 4 may be offered concurrently with Latin 3. Alternative curriculum choices and rotating course syllabi will be offered in such circumstances. Participation in the Honors course is by teacher recommendation. Students enrolled in the Honors course will be expected to independently complete additional assignments.

GUIDANCE

Questions about course selections and/or levels for students in the ***Class of 2021*** should be directed to the counselors at the student's middle school.

| | | | |
|------------------------|-----------------------|--------------|--------------------------------|
| McCarthy Middle School | Ms. Jessica Visinski | 978-251-5122 | visinskij@chelmsford.k12.ma.us |
| Parker Middle School | Ms. Mellissa MacIsaac | 978-251-5133 | macisaacm@chelmsford.k12.ma.us |

Questions about course selections and/or levels for students in the ***Classes of 2018, 2019, and 2020*** should be directed to the student's counselor at the high school. Counselor assignments are according to the student's last name and house assignment at Chelmsford High School (978) 251-5111:

| | | | |
|-----------------|-------------|----------------------|-----------|
| Emerson House | A through K | Ms. Mariclare O'Neal | Ext. 5522 |
| Emerson House | L through Z | Ms. Kara Kelley | Ext. 5519 |
| Hawthorne House | A through K | Ms. Tammy Leary | Ext. 5585 |
| Hawthorne House | L through Z | Ms. Christine Lima | Ext. 5603 |
| Whittier House | A through K | Ms. Jennifer Orsini | Ext. 5547 |
| Whittier House | L through Z | Ms. Jamie Hill | Ext. 5560 |

DEPARTMENT COORDINATORS

Curriculum-related questions should be directed to the corresponding Department Coordinator (978) 251-5111 at the following extensions:

| | | | |
|---|----------------------|-----------|-----------------------------------|
| English | Stephanie Quinn | Ext. 5521 | quinns@chelmsford.k12.ma.us |
| Fine & Performing Arts | Christina Whittlesey | Ext. 5602 | whittleseyc@chelmsford.k12.ma.us |
| Guidance | Thomas Wright | Ext. 5601 | wrightt@chelmsford.k12.ma.us |
| Mathematics | Matthew Beyranevand | Ext. 5552 | beyranevandm@chelmsford.k12.ma.us |
| Physical Education, Family and Consumer Science, Health | Kathryn Simes | Ext. 5553 | simesk@chelmsford.k12.ma.us |
| Practical Arts: Business & Media | Marilyn Sweeney | Ext. 5639 | sweeneym@chelmsford.k12.ma.us |
| Reading and ESL | Lori McDermott | Ext. 5546 | mcdermottl@chelmsford.k12.ma.us |
| Science and Technology/Engineering | Matthew Beyranevand | Ext. 5552 | beyranevandm@chelmsford.k12.ma.us |
| Social Studies | Stephanie Quinn | Ext. 5521 | quinns@chelmsford.k12.ma.us |
| Special Education | Nicole Loveland | Ext. 5584 | lovelandn@chelmsford.k12.ma.us |
| World Language | Barbara Taha | Ext. 5520 | tahab@chelmsford.k12.ma.us |

PROGRAM OF STUDIES ~ 2017 – 2018

Practical Arts Courses



PROGRAMMING COURSES

| | | | | |
|----------------------------------|------------|--------|---------------------|---|
| Computer Programming In “C” – H2 | 10 Credits | #17723 | Grades 10, 11, + 12 | <i>Prerequisite: None</i> |
| Computer Apps Semester) – H2 | 5 Credits | #17524 | Grades 10, 11, 12 | <i>Prerequisite: None</i> |
| AP Computer Science A | 10 Credits | #17513 | Grade 11 + 12 | <i>Prerequisite: Completion of Computer Programming in “C” and Teacher Recommendation</i> |

FAMILY AND CONSUMER SCIENCES

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|---|------------|--------|-------------------|--|
| Exploring Early Childhood 1— H2 | 5 Credits | #67024 | Grades 10, 11, 12 | <i>Prerequisites: None</i> |
| Exploring Early Childhood 2— H2 | 5 Credits | #67424 | Grades 10, 11, 12 | <i>Prerequisite: Exploring Early Childhood 1. Successful completion of this course and portfolio preparation will allow students to apply for college credit at Middlesex Community College.</i> |
| Exploring Early Childhood 3/Directed Study — H2 | 10 Credits | #67623 | Grade 11 + 12 | <i>Prerequisite: Exploring Early Childhood 2 and Teacher Recommendation.</i> |

BUSINESS EDUCATION

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|--|------------|--------|--------------|---|
| Introduction to Business Law-H2 | 5 Credits | #61224 | Grades 10-12 | <i>Prerequisites: None</i> |
| Modern Business Fundamentals—H2 | 5 Credits | #62024 | Grades 9-12 | <i>Prerequisites: None</i> |
| Media Literacy For The 21st Century—H2 | 5 Credits | #62124 | Grades 9-12 | <i>Prerequisites: None</i> |
| Accounting 1— H2 | 5 Credits | #62424 | Grades 9-12 | <i>Prerequisites: None</i> |
| Personal Financial Literacy-H2 | 5 Credits | #61424 | Grades 9-12 | <i>Prerequisites: None</i> |
| Marketing —H2 | 5 Credits | #65024 | Grades 9-12 | <i>Prerequisites: None</i> |
| Sports And Travel Marketing—H2 | 5 Credits | #61724 | Grades 9-12 | <i>Prerequisites: None</i> |
| Management—H2 | 5 Credits | #65424 | Grades 9-12 | <i>Prerequisites: None</i> |
| Banking Internship | 5 Credits | #61104 | Grades 11-12 | <i>Application process as explained below must be followed. Prerequisites: None</i> |
| Innovation, Leadership & Communication Deca) - H | 10 Credits | #62213 | Grades 11-12 | <i>Prerequisites: None</i> |

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|---|-----------|----------------|--------------|----------------------------|
| Microsoft Office Certification I + 2 - H2 | 5 Credits | #61524, #61624 | Grades 9-12 | <i>Prerequisites: None</i> |
| Fashion And Retail Marketing – H2 | 5 Credits | #63124 | Grades 9-12 | <i>Prerequisites: None</i> |
| Common Sense Economics – H2 | 5 Credits | #63224 | Grades 10-12 | <i>Prerequisites: None</i> |

MEDIA

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|-----------------------|-----------|--------|-------------|----------------------------|
| Communication/Media 1 | 5 Credits | #81002 | Grades 9-12 | <i>Prerequisites: None</i> |
| Media Internship | 5 Credits | #81201 | Grades 9-12 | <i>Prerequisites: None</i> |

TECHNOLOGY/ENGINEERING

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|---|------------|--------|---------------|---|
| Furniture Construction Technology – H2 | 10 Credits | #69223 | Grade 9 – 12 | <i>Prerequisites: None</i> |
| Industrial Technology and Furniture Design 1 – H2 | 10 Credits | #69123 | Grade 9 – 12 | <i>Prerequisites: None</i> |
| Industrial Technology and Furniture Design 2 – H2 | 10 Credits | #69723 | Grade 10 – 12 | <i>Prerequisites: Industrial Tech Design 1 – H2</i> |
| Industrial Technology and Furniture Design 3 | 5 Credits | #69824 | Grade 12 | <i>Prerequisite: Industrial Tech Design 2 – H2</i> |
| Architectural Drawing And Design 1 – H2 | 10 Credits | #69523 | Grade 9 – 12 | <i>Prerequisites: None</i> |
| Architectural Engineering Drawing And Design 2 – H2 | 10 Credits | #69623 | Grade 10 – 12 | <i>Architectural Drawing and Design 1 – H2</i> |
| Architectural Drawing And Design 3 & 4 - Directed Study | 10 Credits | #69923 | Grade 11 + 12 | <i>Prerequisite: Teacher recommendation</i> |
| Robotics – H2 | 5 Credits | #69724 | Grade 9 - 12 | <i>Prerequisites: None</i> |
| PLTW: Introduction to Engineering Design - H2 | 10 Credits | #25323 | Grade 9 - 12 | <i>Prerequisites: None</i> |
| PLTW: Principles of Engineering – H2 | 10 Credits | #25423 | Grade 9 - 12 | <i>Prerequisites: None</i> |

English

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|-----------------|------------|---------|----------------|----------------------------|
| Journalism | 5 Credits | # 07024 | Grade 10 – 12 | <i>Prerequisites: None</i> |
| Public Speaking | 5 Credits | # 07704 | Grades 10 - 12 | <i>Prerequisites: None</i> |
| AP Seminar | 10 Credits | #06113 | Grade 11 | <i>Prerequisites: None</i> |

Social Studies

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|-------------------|-----------|---------|----------------|----------------------------|
| Speech and Debate | 5 Credits | # 34021 | Grades 10 - 12 | <i>Prerequisites: None</i> |
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